MOH Emergency Response Frame work MOH/ERF

Executive Summery

KSA face a broad range of emergencies resulting from various Hazards and differing in scale, complexity and international consequences. These emergencies can have extensive political, economic, social and public health impacts, with potential long-term consequences sometimes persisting for years after the emergency. They may be caused by natural disasters, conflict, disease outbreaks, food contamination, or chemical or radio-nuclear spills, among other hazards. They can undermine decades of social development and hard-earned health gains, damage hospitals and other health infrastructure, weaken health systems and slow progress towards the Millennium Development Goals (MDGs). Preparing for and responding effectively to such emergencies are among the most pressing challenges facing the Kingdom government.

MOH has an essential role in Public health risk management, in assessing, mitigate, early detection, timely respond, and ensuring recovery of the health system and community

The purpose of this Emergency Response Framework (ERF) is to clarify MOHs roles and responsibilities in this regard and to provide a common approach for its work in emergencies. Ultimately, the ERF requires MOH to act with urgency and predictability to best serve and be accountable to populations affected by emergencies.

First, the ERF sets out MOHs core commitments in emergency response which are those actions that MOH is committed to delivering in emergencies with public health consequences to minimize mortality and life-threatening morbidity by leading a coordinated and effective health sector response.

Second, the ERF elaborates the steps MOH will take between the initial alert of an event and its eventual emergency classification, including event verification and event risk assessment.

Third, the ERF describes MOHs internal grading process for emergencies including the purpose of grading, the definitions of the various grades, the criteria for grading, and the steps to remove a grade.

Fourth, this paper describes MOHs Performance Standards for emergency response: specific deliverables with timelines for completion that are used by MOH to measure its performance.

Fifth, the ERF outlines MOHs four critical functions during emergency response: leadership, information, technical expertise and core services.

Sixth, the ERF states the role of MOHs National emergency Committee (NEC) during emergency response, particularly related to the optimal use of resources, the monitoring of the implementation of relevant procedures and policies, and the management of MOHs internal and external communications.

Finally, three essential emergency policies which will optimize MOHs response are detailed: the surge policy, the Health Emergency Leader policy and the no regrets policy.

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2. Background

Over the decade 2001–2010, an average of more than 700 natural and technological emergencies occurred globally every year, affecting approximately 270 million people and causing over 130 000 deaths annually.1 Twenty-five per cent of these emergencies, and 44 per cent of these deaths, occurred in less developed countries with limited capacities to prepare for and respond effectively to emergencies. These statistics do not include the high levels of mortality and morbidity associated with conflict-related emergencies. According to the World Bank, over 1.5 billion people – one quarter of the world's population – live in countries affected by violent conflict

Over the same time period, risks to public health have increased due to globalization, and international travel and trade. Such risks might be transmitted by people (e.g. SARS, influenza, polio, Ebola), goods, food, animals (e.g. zoonotic disease), vectors (e.g. dengue, plague, yellow fever), or the environment (e.g. radio-nuclear releases, chemical spills or other contamination).

A mass-casualty event is defined as an incident in which emergency medical services are overwhelmed by the number and severity of casualties (i.e. an event that exceeds the healthcare capabilities of the response). The increased frequency of mass casualty events worldwide emphasizes the importance and role of health systems in the overall cycle of disaster preparedness, risk mitigation, response and recovery.
Whether due to natural hazards, accidents or deliberate acts of violence, mass-casualty events occur worldwide. However, some geographical areas or regions have peculiar characteristics that increase their vulnerability to certain types of mass-casualty events. For instance some countries may experience recurrent natural disaster (e.g. earthquakes and severe weather events) due to their geographic location; others may be prone to mass causality events because of their frequent hosting of mass gatherings. In the later context, the Kingdom of Saudi Arabia (KSA) is very relevant as it annually hosts millions of Muslims from over 180 different countries during the Hajj and Umrah mass gatherings. These events are prone to health risks with mass causality outcomes including accidents, disease outbreaks, stampedes as well as terrorist activities.[1] For instance, Hajj has witnessed examples of such events including the 2015 crane accident, the 1987 meningococcal disease outbreak, the 1997 fire, the 1979 Grand Mosque invasion and a number of stampedes in the 1990s and 2000s including the recent 2015 incident, and Floods which is 7 out of the top 10 major emergency events during Hajj season since 1900.

Adequate preparedness for mass causality events could save lives, alleviate suffering and reduce the associated socio-economic impact and stress on the health system. To achieve this, a systematic and comprehensive approach is required to address the gaps in the preparedness capabilities of health systems. This includes the development of a "Mass Causality Management Plan" as per the World Health Organization's (MOH) recommendation.

The World Health Assembly resolutions (2005) reiterated the importance of preparedness and urged member states to formulate national emergency preparedness plans that give attention to public health including health infrastructure. Here, we present a framework to develop a national preparedness and management plan to strengthen the health system in KSA to address and respond to unexpected mass-casualty events .

Although the causes of mass causality events may vary significantly, the National emergency response plan should have an "all-hazard approach" discouraging the establishment of vertical planning mechanisms while recognizing that each type of mass causality event requires a specific area of technical expertise. This is because different mass causality events invariably result in similar problems and responses requiring similar systems and types of capacity. The need to manage information and resources (including human resources), as well as to maintain effective communication strategies, is in essence the same regardless of the cause of the event (e.g. stampede, fire, flood etc).

3: Purpose of Emergency Response Frame work:

The purpose of the Emergency Response Framework is to clarify MOH's roles and Responsibilities in emergency response and to provide a common approach for MOH's work in emergencies. Recognizing that the principles of emergency management apply to all emergencies, MOH has developed the ERF to describe its core commitments, grading process, Performance Standards, critical functions, role of the NEMT, essential Policies for optimizing its response, and Emergency Response Procedures in all Emergencies with public health consequences.

Ultimately the ERF requires MOH to act as **one entity** with urgency and predictability to best serve and be accountable to girls, boys, women and men affected every year by the public health consequences of emergencies

3.1. Critical assumptions for successful implementation of the ERF

Successful implementation of the ERF requires:

- sufficient risk reduction and preparedness capacities;
- institutional readiness of MOH
- Sufficient and sustainable core funding for the above;
- Sufficient and timely response funding;
- Timely integration of the different HIS systems, into unified reporting system

- the MOH Emergency Committee(NEC) is activated for minister of health consultation .
- Every effort will be made to continue routine work during the crisis period.
- In the event of simultaneous emergency crises, SM will appoint a corresponding number of Event Managers. Reporting to the Chief of emergency Operation (CEO).
- Health inter ministerial, inter agency coordination platform activated , with regular joint activities

4: Role of MOH in emergency management

Civil defense is the assigned National authority for emergency management as per The Council of Ministers' Resolution No. (9), dated on (01/16/1387 AH) has approved a proposal to establish the Civil Defense Council.
The Civil Defense System has been issued by Council of Ministers Resolution No. (25), dated on (23/1/1406 AH).

Minister of health is the representative of health sector in the civil defense council and during emergency response he is the one mandated to manage all related health intervention and management as per Civil defense council decree: 12/2/0/4/DF, Dated: 24/3/1421 AH., and was reflected in the MOH strategic vision, and objectives for the national health strategic plan 2010-2020, as MOH will adopt the system of risk management

MOH has the national and international responsibilities under the International Health Regulations (IHR) (2005) have defined the obligations of countries to assess, report and respond to public health hazards, as;

(1) to build, strengthen and maintain the capacities required under the International Health Regulations (2005), and to mobilize the resources necessary for that purpose;
(2) to collaborate actively with other countries and MOH in accordance with the relevant provisions of the International Health Regulations (2005), so as to ensure their effective implementation;
(3) to provide support to developing countries and countries with economies in transition if they so request in the building, strengthening and maintenance of the public health capacities required under the International Health Regulations (2005);
(4) to take all appropriate measures for furthering the purpose and eventual implementation of the International Health Regulations (2005) pending their entry into force, including development of the necessary public health capacities and legal and administrative provisions, and, in particular, to initiate the process for introducing use of the decision instrument

5. MOH structure for emergency management

5.1. Current MOH governance structure:

A) MOH is the one of the largest MOH in the middle east and Arab region, it has a central governance structure hosting all technical and enabling directorates, located in Riyadh
B) MOH has 20 health directorate at the main 13 region /province, with Director general reporting to Minister of health, each HDG host relevant department

C) No fiscal separation between central and local level, but all policy plans, monitoring is central tasks, while executive tasks mainly stay with Municipal level, the emergency response is tasked to the directorate general for medical field team and emergencies which the custodian for emergency planning and response, including hajj season emergencies
D) Hajj management is led by the preparatory committee at MOH/national level, including a committee for emergency services, and each committee need to address the emergency needs in its hajj plan
E) Existing coordination platform is focusing in monitoring on the preparatory activities, and information sharing including plans.

5.2 Proposed structure and its related functions:

Emergency is every one responsibilities, coordinated by specific department, to ensure coordinated team work for planning, testing, implementing, auditing emergency work , has a holistic view of health emergencies, beyond medical emergency services
National level will remain tasked for policy, strategies, planning for support , surge capacity
While the Provincial level will be focusing on field monitoring, verification, responding and monitoring emergency operation at its geographical scope, and identifying needs for support

Planning process has to be jointly between all relevant MOH and partners at both levels, and jointly between both national and Provincial level according to scope of work for each

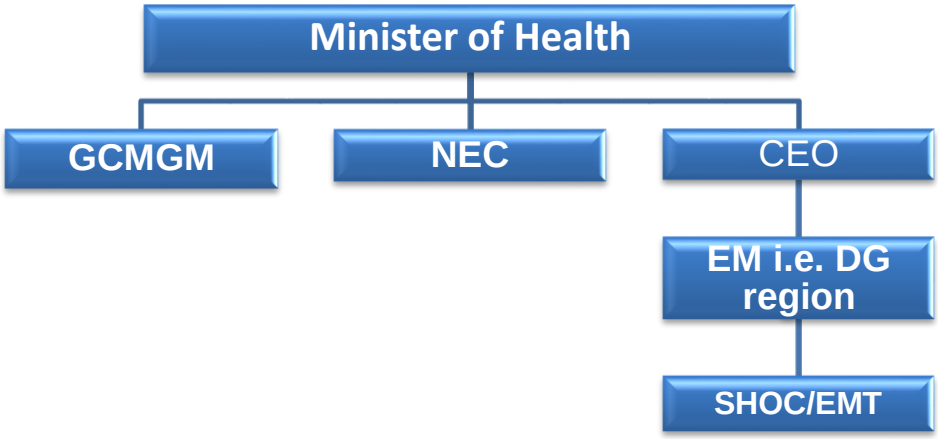
ICP has to be pre identified and will informed to all MOH entities, in a systematic way
And emergency management system need to;

- Based on country wide risk assessment
- Host the capacity to address the needs for different events simultaneously
- Keeping a national wide scope for monitoring and support for emergency events
- Clear ICS including all levels and relevant entities in MOH

- Define coordination platform
- Clear accountability framework for health emergency

The following section is **a proposed** structure and incident management system;

IMS: at National Level



A) Minister of Health is the accountable level for the health sector Performance , at time of emergency Minister of health remain the overall responsible level , and his/her function will be :

- *give policy advice and guidance;*
- *keep National level governing bodies informed where appropriate; and*
- *Represent health in events such as conferences and media interviews.*

B) Deputy minister :*serve as the* ***Chief of emergency operation*** *(CEO) and the executive manager of emergency event management:*

- *The overall responsible executive manager of emergency (all MOH reports to CEO in all related issues of the emergency event),*
- *Final approval level for all communication*
- *Approving the media briefing and talking points*
- *Briefing the NEC and Minister on the incidents ,*
- *Approving the MOH a message to national authorities expressing regret for the incident and brief on MOH support;*
- *Ensuring the implementation of the NEC decisions and follow up with relevant Departments and Program directors;*
- *establishing the communications system and line of contact with all relevant partner at national and international level*
- *contact un Civil defenses) to determine the security situation and event updates*
- *contact the Embassy of the relevant country to update on the event impact and if support needed to retrieve causalities .*
- *review arrangements for participating in joint un assessment missions with Civil*

defense ;

- *ensure the activation and implementation of the emergency SOP with high priority and urgent procedures to MOH/Admin divisions.*

C) Deputy Minister for Curative service: *is the executive director of the business continuity of the MOH , including the day to day tasks of the DMPH*

***D) National Emergency Committee (NEC**) is*

- *make operational policy decisions on behalf of the Minister;*
- *Emergency events grading*
- *provide specific strategic, administrative and technical guidance to the Operations Manager;*
- *authorize the (re) assignment of MOH staff and allocation of MOH resources to the emergency;*
- *Conduct an evaluation of operations and make recommendations for the improvement of the preparedness of the MOH, including undertaking a regular review of this SOP.*

Members of the NEC

Chair: Deputy Minister.

- *Deputy Minister of Public Health (DMPH)*
- *Chairman , Hajj Preparatory Committees,*
- *Deputy Minister for Curative section (DMC)*
- *Deputy Minister for Planning……..*
- *Deputy Minister for medical supplies……*
- *Deputy Minister admin and finance……..*
- *Deputy Minister Health work force……*

Invited member (invitation as required by the events)

- *Head of Saudi Red Crescent*
- *Head of Medical section, National Guard ministry*
- *Ministry of information representative (Deputy minister level)*
- *Ministry of Finance (Deputy minister level*
- *Minister of Municipality Deputy minister level*

- ***Ad hoc** members as needed to certain expertise*

Activation: The NEC is composed permanently of the above members in person , an Minister admin circular is the announcement of the NEC, members and functions.

Venue: NEC meeting is at the meeting room of emergency department of the MOH first tower at 3th. Floor

Chair: CEO/MOH is reporting and updating the MOH.
CEO is the link to the EM and NEC

NEC Meetings:

Initial meeting of the National Emergency Committee

After CEO briefing on what is known of the incident, the NEC will address the following issues:

- the role of MOH in this incident, the immediate objectives of MOH and the scope of the initial actions; (Approve the **CONOPS**)
- **appointment of a event Manager** (in most cases this will be either DG OF REGION or OR others e.g. in a chemical or radiological emergency);
- Assignment of other roles and tasks to selected technical. And admin staff; to ensure the support to the event management and business continuity at the MOH.
- allocation of resources needed to meet the immediate objectives, and discussion of constraints to meeting the objectives;
- the need for additional information to facilitate MOH decision making processes;
- the need to recall staff from duty travel or home leave;
- the need for other Regional staff to travel to support the event and/or other national tasks;
- the need for MOH staff to participate in joint GOVERNMENT ASSESSMENT missions;
- the need for *ad hoc* members to join the NEC;
- Establish a meeting schedule.

Subsequent meetings

Subsequent meetings of the NEC will:

- review information received;
- evaluate the current status of the operation;
- review the strategic approach;
- review the goals, objectives, targets and outputs of the MOH operation;
- review indicators for monitoring MOH work;
- discuss policy, managerial and technical issues arising or anticipated;
- Identify material to be disseminated through the internet and other media.

These meetings shall take place regularly, preferably at end of each day, but may also be called at any time should an urgent decision be needed.

E) Global center of Mass Gathering Medicine (GCMGM)

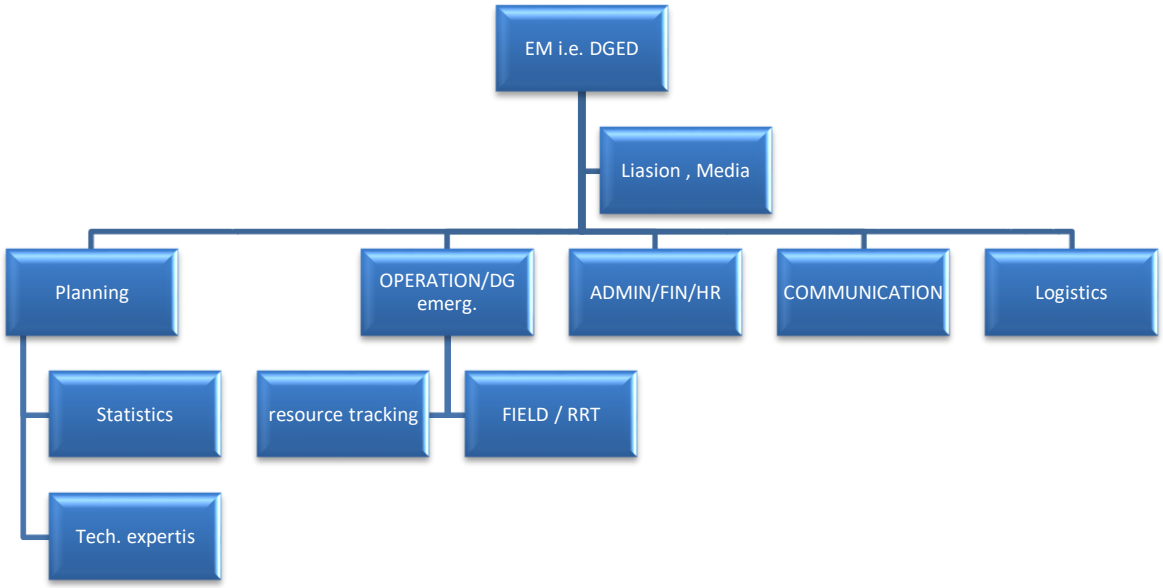
a. Ensure institutional readiness including: evidence based plans and policy reflected in EMS
b. Monitoring the relevant plans testing and updating
c. Conduct strategic health risk assessment
d. Scan and monitor for any emerging Public health risk, and event risk assessment
e. Monitoring MOH performance standards
f. Ensure post event debriefing and documentation of lesson learned
g. Advice the plans updates based on lesson learnt and best practice

F) Event Manager (EM):

a. Appointed by MOH on an admin circular
b. Usually is the DG at the region unless special event as Pandemic when infectious disease DG is appointed
c. TOR at the job action card section

EMT at National/Regional level :

Same function , level will be according to the event grads as Grade 1 and 2 will be performed at Regional level, only in Grade 3 will be at National level



6. Strategic Health Operations Centre:

The Strategic Health Operation Centre (SHOC), is **a Coordination, Command, and control** center designed to facilitate collaboration and problem solving in order to reduce adverse health effects of major public health crisis and better improve health outcomes in countries. The SHOC both virtually and physically supports MOH Operations at National levels in responding to crises in public health. As part of the ongoing development of MOH capacity and processes to co-ordinate alert and response, the Strategic Health Operations Centre (SHOC) provides a vital capacity to respond rapidly and effectively to the health emergency events

SHOC Objective

"To provide a facility for an emergency team,/ disease surveillance and outbreaks team and key decision makers to ensure effective coordination direction and control, updated Situation assessment, informative priority establishment, and reliable resource management, to operate in the event of a major public health emergency situation of any nature."

SHOC Purpose

Objectives of a SHOC:

The objectives of any EOC , must fit its purpose. Both the outcomes, and the costs of managing an event must be considered in setting the objectives.

Objectives may include:

- Timely, event-specific operational decision-making using the best available information, policy, technical advice and plans
- Communication and coordination with response partners
- Collection, collation, analysis, presentation and utilization of event data and information
- Acquisition and deployment of resources, including surge capacity, services and material to support all EOC functions
- Preparation of public communications and coordination with response partners to support audience awareness, outreach and social mobilisation
- Monitoring financial commitments and providing administrative services for the HEOC.

SHOC functions

Primary function of National Level SHOC is related to the events grading results as;

- support, monitor, supervise , MOH performance in emergency response , and support the regional level event response and management (Regional EOC) in Grade 1, 2,
- while working as CCC for Grade 3 events

SHOC is tasked to:

The five essential functions are:

- **Management** – responsible for overall operation of incidents or events (including coordinating risk communication and liaison with other agencies)
- **Operations** – at the field level, this function provides direct response to the incident or event; at higher levels, it provides coordination and technical guidance
- **Planning** – collection of data, analysis, and planning of future actions based on the likely course of the incident and the resources available for the response
- **Logistics** – this function acquires, tracks, stores, stages, maintains, and disposes of material resources required for the response. It also provides services in support of the response, such as health services for responders
- **Finance and administration** – cash flow management; tracking of material and human resource costs; budget preparation and monitoring; and production and maintenance of administrative records.

SHOC Structure:

- SHOC Business owner: DM.
- Event Manager: is DG or the relevant staff nominated/delegated by CEO based on the nature of the event
- SHOC team: a fixed event support team (proposed below) will be a full time tasks to support the event management team according to each event structured to full fill the SHOC function based on the event.

6.1.Structure of National SHOC :

The operational structure of the SHOC is based on the IMS and its five functional areas. These should be modular and scalable, capable of being elaborated on, expanded and adapted to particular types of emergencies, from tactical to strategic level. The amount of time and activity committed to each function, and whether external assistance is required for any function, will vary with the scale, context and type of emergency.

Responses to public health emergencies often require specific public health functions, such as preventive and curative public health interventions and services, and technical guidance. A separate branch for public health function may be established under the operations or planning sections, or attached to the management staff. The assigned location will depend on the focus and scientific and technical input.

Most small-scale emergencies or incidents are managed at the site of the emergency by the designated person in charge (an incident manager or commander). This person may establish a site-level command post. Most of the activities and decisions taken at the site level are for the direct management of human and material resources to address the situation; this is typically referred to as the 'tactical' level. Although the command post is not strictly speaking a SHOC, it is part of the EOC system and should follow the EOC five-function model. Often, all of the five functions in such a scenario are carried out on-site by one person, or by a few people working as a small team. In the latter case, the team should be led by the most qualified, senior or experienced person, or by the person with legally designated leadership authority.

In larger emergencies, field-level responders may require additional resources, coordination, guidance or policy direction to support their response activities. A temporary or permanent site-support SHOC can be activated to provide the necessary management, planning, operations, logistics, finance and administrative support. The site-support SHOC provides operational support, policy and technical guidance to site-level command posts. It also coordinates and expedites resource requests from field site(s); undertakes strategic planning during long events; and manages off-site activities, including engaging key partners in decision processes. This level is typically referred to as the 'operational' level.

6.2.Roles and tasks associated with the functional sections:

6.2.1 Management staff

The management staff is responsible for:

- Overall operation of the SHOC

- Determining coordination of response activities and partners
- Liaison with assisting agencies (i.e. those providing their own tactical resources) and cooperating
- agencies (those providing external support)
- Public communication
- The safety of responders
- Situation reporting to senior organizational leadership and getting direction from senior leadership
- Resource mobilization

Complex public health emergency management requires consistency and continuity of action and effort among all partners. To that end the management section should promote:

- Understanding of the missions, mandates, capabilities and capacities of participating agencies
- Understanding of the contextual factors of an event for a common operating picture
- Creation of common outcome measures
- A common vision, goals, and objectives
- Coordination of actions.
- Essential roles of the management staff include those of incident manager, SHOC facility manager, and
- public communication officer. These are detailed below.

6.2.2. Event manager

- The CEO will appoint an Incident Manager (sometimes called a coordinator, or director) to be in charge of the management section. A public communication officer, a risk manager, a safety officer and liaison officers from cooperating agencies can be positioned to provide direct support to the event manager. At the site level, the person responsible for the management function is often called the 'incident commander' / " Event Manager.

6.2.3.EOC facility manager

The EM will also appoint a SHOC facility manager (as distinct from the incident / Event manager).
The facility manager is responsible for the operation and maintenance of the SHOC, ensuring that all of its functionality, systems, hardware, software and staff support tools are well-maintained and operational when needed, and that designated personnel have access to training to support their effectiveness.
A larger, permanent facility will usually have a team of technical personnel working with the SHOC facility manager and providing management and support for information systems, telecommunications, geospatial information systems (GIS) and security.

6.2.4.Public communication officer

Public communication is critical in public health emergency management. The public communication officer is responsible for:

- Interaction with a variety of audiences and media
- Advocacy (supporting risk awareness and social mobilisation)

- Developing communication products.

6.2.5. Planning section:

The planning section is responsible for:

- Aggregating and processing data
- Developing and communicating operational information
- Predicting the probable evolution of events
- Developing objectives, strategies and action plans
- Identifying the technical expertise that is needed.

At site level, much of the planning function is concerned with the assignment of available human and material resources to achieve maximum effect. At an off-site support PHEOC, planning activities tend to be concerned with different issues, such as mapping of capacities and functionality of all health resources, and tasking and deployment of newly acquired resources in order to contain the event.

Responsibility for analysis of data during epidemiological investigations can be placed with the planning or operations sections, in order to develop operational objectives for responders and maintain situational awareness within the SHOC.

6.2.6. Operations section

The operations section is responsible for using resources to respond directly to the event. At a site-support SHOC level, the operations function is responsible for coordination and technical guidance of all response operations, and for implementing an existing or improvised response plan to support the site-level response. At site level, the operations function is all about direct response activities, such as:

- Vaccination
- Contact tracing
- Triage
- Treating and transporting sick/injured/deceased people
- Decontaminating people and premises
- Conducting disease surveillance and collecting epidemiological data
- Establishing emergency clinics and/or restoring functionality of damaged health infrastructure
- Other public health interventions
- Scaling up community outreach for health promotion and case management.

Response activities vary depending on the type, scale and impact of an event—as does the sub-structure of the operations section.

6.2.7. Logistics section

The logistics section is responsible for the acquisition, tracking, storage, staging, maintenance and disposition of the tactical and operational resources required to respond to the event. These may include:

- Facilities
- Services (telecommunications equipment, furniture, food services, security, responder support, etc.)
- Monitoring food and water supplies;
- Disposal of solid, liquid and hazardous waste;

- Support personnel (information technology, clerical staff, ground transportation, etc.)
- Equipment (computers, radios, vehicles, personal protection equipment, etc.)
- Surge personnel
- Transportation and disposal services (patient transport, destruction of contaminated materials, removal
- and management of deceased persons).

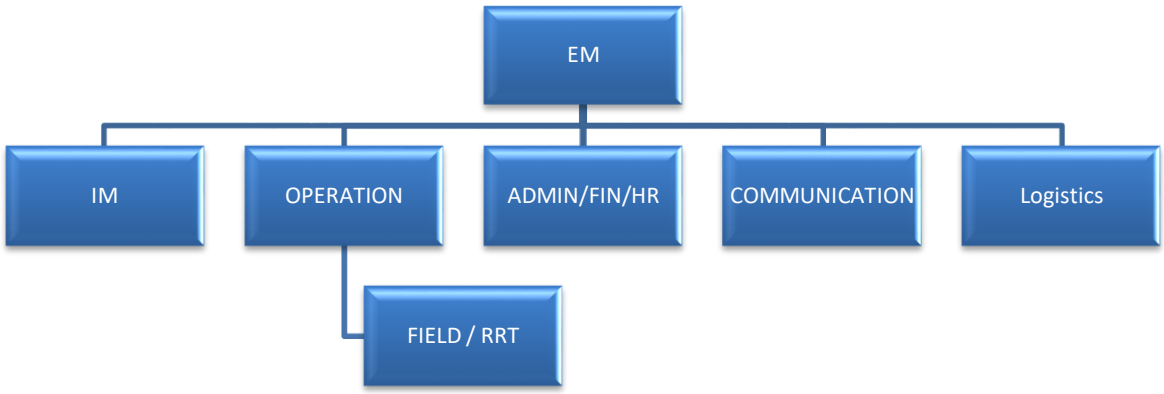
These services may also be provided by the operations section.

6.2.8. Finance and administration section

The finance and administration section is responsible for all financial activities and administrative tasks, which may include but are not limited to:

- Cash flow management
- Tracking of material and human resource costs
- Budget preparation and monitoring
- Production and maintenance of administrative records
- Processing of compensation claims
- Preparation of procurement contracts
- Incentive and insurance payments.

The finance and administration section chief should be routinely present and available in the SHOC to facilitate operations. Space within the SHOC should be provided for administrative record keepers. Additional finance and administration personnel may be located outside the SHOC.



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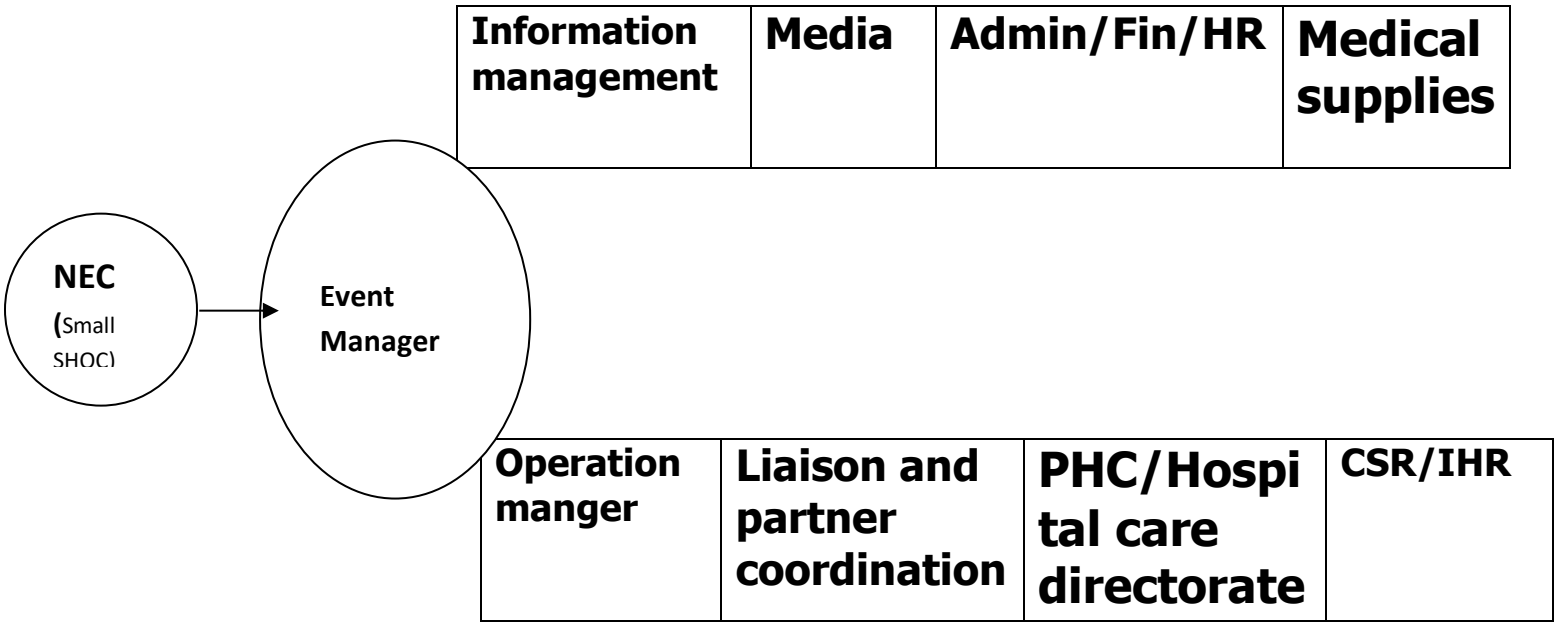
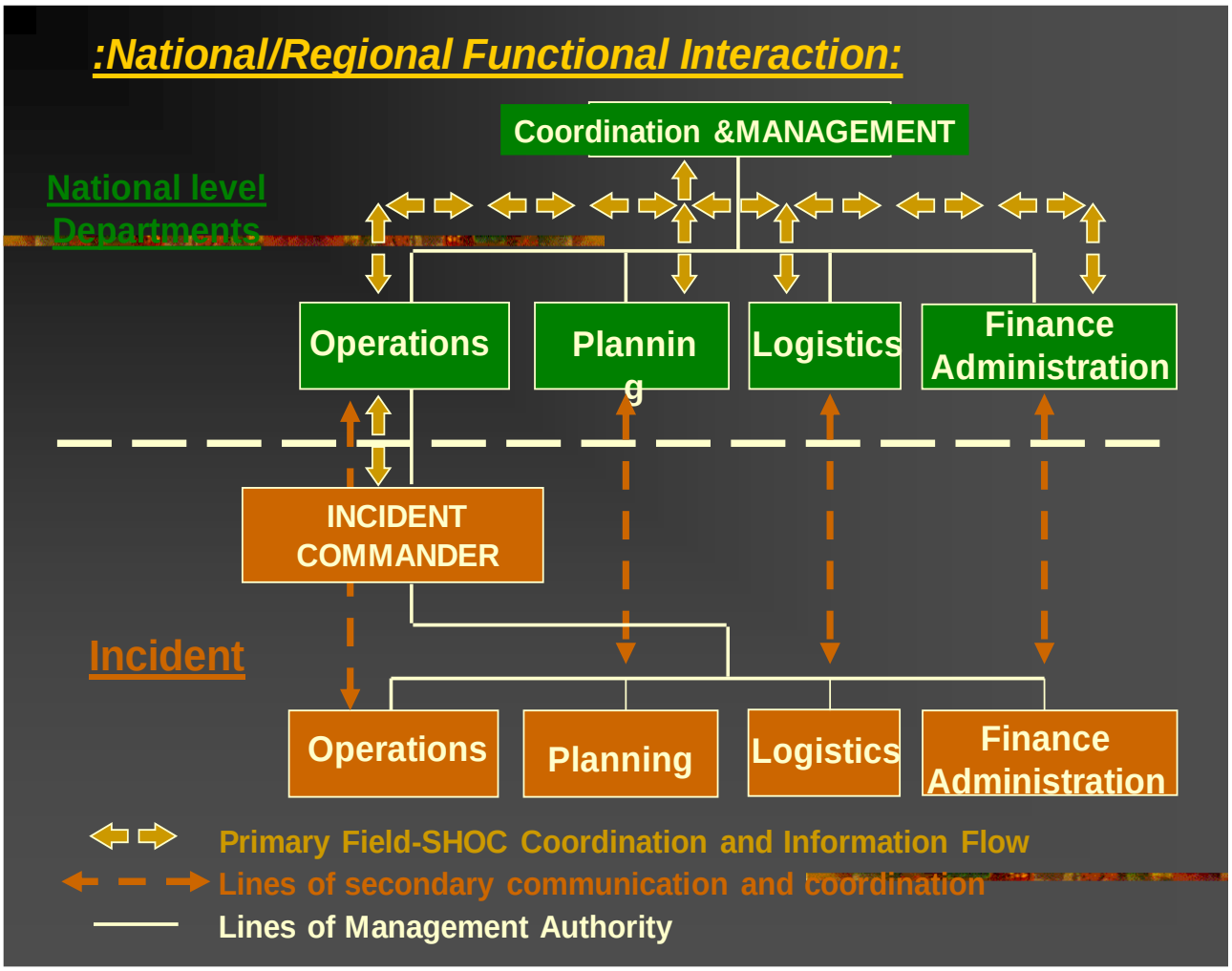
6.3.Seating arrangement in National MOH/SHOC



Regional Level SHOC

- Regional SHOC is a Command, Control, Coordination, and Communication (CCCC) event Management in Grade 1 and 2, and serve as operation coordination in Grade 3 for the region response operation
- Its structure is aligned to the National level one with full continuous communication between each function i.e. Planning of Regional and Planning at National level , directed through EM at both levels
- All activities, communication are registered at the SHOC log book for documentation and hand over, Auditing process


:National/Regional Functional Interaction:
Coordination &MANAGEMENT
National level Departments
Operations
Plannin g
Logistics
Finance Administration
INCIDENT COMMANDER
Incident
Operations
Planning
Logistics
Finance Administration
Primary Field-SHOC Coordination and Information Flow
Lines of secondary communication and coordination
Lines of Management Authority

7. Event detection and Verification

At Time of events of sudden onset:

I) Event alert could be raised by : DG of health at the regional level, Emergency department DG, Civil defense, Media

At Time of events of slow onset:

For slow-onset events, the trigger to conduct an event risk assessment may not always be obvious. In such cases, triggers to initiate or repeat a risk assessment include the following:

- **new information** available, e.g. through trend analysis of key health indicators in high-risk situation, and from surveillance early warning;
- **new developments,** e.g. escalation of scale, urgency or complexity, and political, social or economic changes;
- **new perceptions** e.g. headline news, government concern, UN agency or non governmental organization (NGO) statements

7.1. Event verification and event risk assessment

Once triggered, MOH/NEC will support the Health directorate at regional level to verify the event and assess the potential public health impact of the event , within (dependents on nature of the events) 1-24 hours, based on the following criteria:
a. **scale** (of the event): consider the number and health status of people affected (with attention to vulnerable and marginalized groups), proportion of population affected or displaced, size of geographical area/ Number of pilgrims affected, level of stress on health structures, post-event national health capacities, number of countries affected, extent of international disease spread, interference with international trade and travel, degree of deviation from the norm in the case of annual predictable events (e.g. seasonal outbreaks, annual floods or drought);
b. **urgency** (of mounting the response): consider the threat of or actual increase and degree of increase in mortality, morbidity, degree of transmissibility of pathogen, speed of international spread, case fatality ratio, degree of environmental or food contamination (chemical, radiological, toxic), speed of population displacement and potential for further displacement, intensity of natural disaster, potential for further communal or intrastate conflict, or for prolonged effects of a natural disaster (e.g. on-going rains causing prolonged flooding).

7.2. Using results from event risk assessments

1) If the event risk assessment suggests that the public health impact of the event is **negligible** or if no MOH further response (than existing health services) is required . MOH will:
a. issue any required communications to Member on National emergency committees. and to relevant in-country and global partners; immediately following the event risk assessment;
b. close the event.

2) If the event risk assessment suggests that the public health impact of the event has the **potential** to become significant in the future, MOH will:

a. classify the event as ungraded;

b. support the DG at regional level to conduct on-going monitoring and periodic follow-up. risk assessments; as required, but at least every 30 days; or till Hajj season is over until the event is graded or closed;

c. undertake relevant preparedness measures to mitigate the future impact of the event, commencing immediately following the event risk assessment;

d. develop/update sectoral contingency plans,
commencing immediately following the event risk assessment;

e. develop/update business continuity plans,
commencing immediately following the event risk assessment;

f. issue any required communications to national authorities and to relevant in-country and global partners, immediately following the event risk assessment.

3) If the risk assessment suggests that the public health impact of the event might constitute an **emergency** requiring scaling up MOH response:

a. relevant MOH staff involved in the risk assessment will notify relevant Departments DG at national level

b. relevant Directors at MOH/National level. will convene a teleconference with NEC to review the results of the event risk assessment, determine if grading is necessary and, if so, grade the emergency within 2 hours of the event risk assessment for sudden-onset and within 24 h for slow-onset events;

C. MOH/CEO issues any required communications to national authorities and to relevant in country and global partners immediately following the event risk assessment for sudden-onset and 48h for slow-onset events.

Recording events

MOH/ Information management (GCMGM) will systematically record all events with current or potential public health impact, along with the results of the event risk assessment, in a registry and/or in Event Management System (EMS), immediately following the event risk assessment.

Closing events

An event is considered closed when the NEC determine
that a health response is (a) not required or (b) no longer required and that the internal emergency grade should be removed.

8. Purpose and parameters of grading:

Grading is <u>an internal</u> MOH process that is conducted to:

a. **inform** the MOH of the extent, complexity and duration of organizational and or external support required;

b. prompt all MOH entities at all levels to be ready to **repurpose** resources in order to provide support;

c. ensure that the health over all timely adequate support;

d. trigger MOH's Emergency Response **Procedures** and emergency policies;
e. **activate** emergency MOH (SOPs) and delegation of authorities
f. **expedite** clearance and dissemination of internal and external communications.

Whilst the following factors must be taken into consideration, grading is not directly dependent upon:
a. consultation with national health and emergency partners;
b. official requests for international assistance;
c. other international emergency classification processes such as those of the IHR (2005).

Grade definitions

the following grade definitions:
Ungraded/ Standby: an event that is being assessed, tracked or monitored by MOH but that requires no health response at the time.

Grade 1: a single or multiple low scale incidents / if communicable disease event no cross of outbreak threshold, with consequences that requires;
- a minimal MOH/ Regional level response or
- a minimal Sub-national level response.
- and/or external support required by the MOH is minimal.

The provision of national level support to the affected region is coordinated by the relevant department DG at national level .

Grade 2: a single or multiple events with moderate public health consequences (stress on health service delivery manageable at the regional level with surge from neighboring regions) that requires ;
- a moderate MOH response
- and/or moderate international health response.
- Organizational and/or external support required by the MOH is moderate.

An Emergency Support Team, run out at national level , coordinates the provision of support to the regional level .

Grade 3: a single or multiple in country event with substantial public Health consequences that requires:
- a substantial health system wide response
- and/or substantial international support.
- Inter sector and/or external support required by MOH is substantial.

An Emergency Support Team, run out at national level, coordinates the provision of support to the regional level.

Grading process

Grading occurs within 1-2 hours of completion of a risk assessment for a sudden onset event, and within 48 hours of an updated risk assessment for a slow-onset

event.

1) A Grade 1 may be determined by the DG at regional level and DG of department of emergency at national level without convening the NEC (with the expectation of minimal to national level support).
2) A potential Grade 2 or Grade 3 emergency must be referred to the NEC for grading.

Any member of the NEC may convene a teleconference to grade an emergency. However, the relevant Directors at national level MOH are part of the NEC are ultimately responsible for convening a NEC teleconference to consider (or reconsider) grading upon notification of the results of an event risk assessment.

If the event is considered to be a potential Grade 3 emergency, CEO may call for Minster of Health participation for NEC meeting/teleconference

A) The NEC determines the grade by reviewing the results of the event risk assessment (**Scale, urgency**) and by considering the following additional criteria:
a. **complexity**: consider the range of health consequences, including potential downstream public health consequences, concurrent emergencies, unknown pathogen or chemical/toxin, specialized technical knowledge and skills required, presence of non-state actors or anti-government elements, problems of relief access, issues of staff security, conflict, number of countries involved; and
b. **context**: consider the level of health systems resources, population vulnerabilities, public perception, reputational risk, degree of panic, level of preparedness and capacities of national authorities readiness to manage the emergency, and robustness of civil society coping mechanisms.

B) The grading decision takes **effect immediately** upon completion of the NEC grading teleconference, at which time the ERPs are activated and the timeline to deliver on MOH's Performance Standards begins.

C) In the case of grading a slow-onset emergency, the NEC, at the grading call, sets appropriate timeframes for delivery of the Performance Standards for that specific emergency.

D) The NEC ensures that the grading decision is transmitted to the Minster of Health, DG at regional level in a Grade 2 and Civil defense as national emergency authroity in a Grade 3.

E) The grading is announced officially throughout MOH by e-mail from the CEO in a Grade 2 and the Minster of health in a Grade 3, within 24 hours of the grading.

F) The NEC continue to monitor the situation and revise the grade as the situation evolves and as more information becomes available from both internal and external sources.

Removal of grade

Eventually, the NEC determines that the acute phase of the emergency has ended and an internal grade is no longer required. This is generally expected to happen within one week of the initial grading.

1) The removal of grade is announced by e-mail from the CEO
2) In some cases, when an emergency situation appears likely to continue for more than six weeks, the NEC may redefine the emergency as 'protracted' but decide to maintain NOH's repurposed staffing structure and Organization-wide support structure. These decisions would be included in the e-mail that announces the removal of grade

In such a case, the NEC would continue to

3) review the situation on a 2-weeks basis to make further decisions related to Staffing structure and support.

8. Code of activation

SHOC activation levels

Level 1: Monitoring Supporting daily operational and planning activities.
Level 2: Partial activation Some functional areas activated. Extended business hours.
Level 3: Full-scale activation All functional areas activated. Business hours extended up to 24/7.

The EMT and SHOC Management Team are in a constant state of readiness, prepared to support the escalation of MOH activities as required (Level 1).

The level of SHOC activation will depend on the nature and scope of the event or emergency. The determination of the appropriate level of SHOC activation, the required staffing level and the business hours necessary to manage an event or emergency is at the discretion of the Event Manager, in consultation with NEC.

The EMT organizational structure should be flexible enough to expand and contract as needed. EMT staff may be required to take on more than one function (role), as determined by the Scope and nature of the event, the availability of resources, and/or as assigned by the Event Manager.

Unstaffed required functions will be the responsibility of the next highest level in the EMT organization.

SHOC increase in activation level

The SHOC activation level increases when:

- NEC determines, based on incoming information, that the scale and extent of the crisis warrant an escalation in SHOC activation levels.

- The region authority ask for national level logistics, procurement, surge and fund-raising support.

The evolution of the crisis requires 24/7 monitoring, necessitating SHOC staff presence on weekends.

SHOC de-activation

The SHOC is de-activated when:

- EM determines, based on the level of activity in the SHOC and after Consultation with NEC, that the acute phase of the crisis over.
- The CEO confirms that a dedicated NEMT team is no longer required, SHOC staff returns to their normal offices, from where they continue to monitor the crisis

8.1. Activation Grades/Codes:

Hajj vulnerability profile and the ongoing Umra necessitate a clear understanding of the SHOC at the national level; also indicate a specific concept of operation as;

- **at time of normalcy (SHOC remain vigilant) ; YELLOW watch mode**

Example for Hajj prepardness

SHOC aim to ensure readiness to manage emerging events : to be activated by 1st Ramadan till end of Ramdan, then 20th Dho Qa.da till 20th Dho Hija by 21 Dho Quida it is the secretariat for the NEC

- SHOC continue the activities of information management , mapping ,
- Continuous monitoring the national, and international situation and potential risks (health intelligence)
- Verification of any potential events and grading
- MOH readiness data base management as; roster of expertise, medical supplies tracking
- training, drills, and simulation for the SHOC team ,EMT,NEC
- revising and updating the responses plans at the Regional level and possible scenarios
- joint contingency planning
- Conduct plan testing: live simulation, TXX, dry run

in this stat of activation (Code: yellow) the activities should continue on virtual bases with regular meeting at the premises

in this phase **the ICP**: is **DG/Preparatory Hajj committees** reporting to the team and Chief of Emergency Operation (DMPH)

- Planning, coordination, management function are tasked to Directorate of emergency
- Information management: Directorate of statistics.

Tasks shift Time:

00.00h, 21 Dho Quida EM tasks and authority shifted to DG/Mecca (unless nominated by CEO

Activation Code is : Orange

Work as physical venue for the national EMT in Grade 2, and 3 events management, in certain cases at grade 1 if DG of the relevant director request the activation of SHOC

Or any grade required national level inter sector coordination i.e. chemical hazard, and events with expected mortality 0f 100

- TOR :
  - Work as a support for the information management , and information sharing
  - Support for the planning of response by ensuring the involvement of the relevant unites and levels of the organization and regional bodies .
  - Ensuring smooth and timely mobilization of resources
  - Ensuring the deployment of requested HR on timely bases
  - Delivery of planned and requested supplies to support the operation and the intervention .
  - Liaise with various unites at HQ and RO to allocate fund and settlement of the expenses as per donors agreements

-**ICP: DG relevant directorate at MOH national level**

-Working arrangement: Physical presence of technical staff , information(statistics department) and communication officer

Virtual function of focal points of: Logistics, medical supplies, admin and finance

This Phase continue either till demobilization as in : event is under full control at regional level self-functioning, or to move to Code RED phase if further escalation of the same event is expected or already happening

II) an event graded as grade 3 by NEC, events (Pandemic, Nuclear event) , deterioration of grade 2 events. Inter sector national level coordination, with international concerns

-Activation Code: RED

-ICP: CEO

-Mechanism of activation: alert from DG and/or Emergency department DG to the business owner (CEO) as in Yellow, Orange state, in the conditions as RED the above reporters or/and the relevant unite as infectious disease department in Pandemic situation

-ICP will be the event Manager or nominate the relevant staff accordingly

- Working needs: full time activation with physical presence of all the functions

Activation with Code RED: alert all the stand-by roster expertise in the region, revision of in-house leave and mission schedules.

-**TOR**: Full range of tasks plus related specific tasks relevant to the event .

- this phase continue to official declaration of

when an event involve the **MOH national level (Structure or Function**) :

- **Activation Code: BLUE**
- Working Needs: an Alternative premises with full representative of all division led **by CEO**
- **TOR**: to ensure working continuity of critical functions at the DGs level
- This phase continue till the event is over or permanent transfer of the premises

MOH's Performance Standards in emergency response

- To ensure an effective and timely health sector response to reduce mortality, life threatening morbidity, and disability in the affected areas, with special attention to vulnerable and marginalized groups, and to assist the national efforts managing the emergency events. MOH will take the following action:

Within 60 Min (sudden onset), 12 Hours (Slow onset)

1. Event assessment (METHAN) report by the First responder, verified by the Operation commander dispatched to the scene **sent to Regional EOC,**
2. DG of the health regional authority, report immediately to CEO with his grading recommendation
3. The CE**O approved the grading and sending email to Minister, all NEC members, all Regional health directorate, Civil defence and relevant Municipality with declaration of emergency, and the designated Event Manager**
4. Repurpose the MOH regional staff and/or other relevant departments, mobilizing its existing staff to form the Emergency Response Team (ERT), to initially perform MOH's four critical functions in emergency response, and to deliver on the first Performance Standards, until the emergency grade is removed, or until the staff are replaced by newly arriving (deployed) staff.
5. Ensure a continuous MOH presence at the site of the emergency and make initial contact with local authorities and partners (or as soon as possible).
6. Negotiate access and clearances with the government (where relevant) on behalf of health sector partners i,e SRC (and then on-going).
7. Make widely available the preliminary health sector analysis based on the most recent event risk assessment.
8. Compile and produce the first situation report (using a standard format), media brief and other communications and advocacy products relevant to the emergency.(need CEO clearance)

Within 6 Hours (Sudden Onset):

9. Regional EOC monitor the situation and the response activities, reports hourly to National EOC, with clear identification of :
    a. Event type, impact, complexity, possible development
    b. Response activities and strategies
    c. Projected need for Surge : HR, Supplies, Equipment)
    d. Recommendation for Media brief
10. If the need at the scene and clearing causality projected to go beyond 5 hours; Regional commander to call EOC for first Surge deployment with priorities
11. Tactical commander to advice if further arrangement is needed for the treatment facilities and if need for inter-hospital referral
12. Event re-assessment by tactical commander in consultation with Operation commander with recommendation of event re-grading (down/ maintain)
13. In case of down grading or Code Green , EM to consult Civil defense and to report to CEO
14. EM to send email to CEO with recommended and declare green code

15. CEO to send out email to same mail list at declaration with the downgrades and Code green

Within 48 hours (Slow onset)

9. Adapt/strengthen surveillance and early warning systems for diseases and other health consequences in the affected area (or ensure its establishment within 14 days), and produce the first weekly epidemiological bulletin.

10. Establish and deliver emergency administrative, human resources, finance, grant management and logistics services (and then on-going).
11. Pre-qualified, experienced staff deployed in grade 3 emergencies to lead the MOH response activities.
12. Establish health coordination; conduct a health sector meeting; update the 4W matrix (a database of MOH is doing what where and when), and plan next steps.
13. Represent MOH and the health sector at meetings of the emergency national meetings
14. inter-sector coordination and other relevant sectors (such as defense, municipality, shelter (and then on-going).
.15 . Use preliminary health sector analysis to identify major health risks and health sector objectives and priorities for the first week, including potential downstream public health consequences.
16. Engage health sector partners to participate in a joint health assessment as part of a multisectoral process

Within 72 hours (Slow Onset)

15. Develop a flexible, short-term health sector response strategy and action plan, in collaboration with health partners that addresses health needs, risks and capacities, with appropriate preventive and control interventions,
for the first three weeks (and then review and update as required).
16. Develop, a funding appeal, if required to MoF (revise it at 30 days and as necessary thereafter).
17. Provide coordinated, specialized, international technical assistance as required, including logistics for implementation of prevention and control interventions (and then on-going).
18. Compile and produce a second situation report, media brief and other communications and advocacy products relevant to the emergency (and then on-going at least twice per week).
19. Monitor and share relevant information for decision-making on health indicators, using appropriate parameters of measurement, (and then weekly).
20. Monitor the response of the health sector and address gaps in implementation of prevention and control measures, service delivery (and then weekly).

Within 7 days

21. Make widely available the results of the joint health assessment
22. Lead the health sector in conducting an in-depth health-specific assessment (after day 7 and before day 10).
23. Develop a health sector transition strategy from response to recovery, in

collaboration with health partners.

Application of MOH's Performance Standards

- MOH's Performance Standards take effect upon grading an emergency.
- These Performance Standards apply for all graded emergencies.
- From the moment that MOH grades an emergency due to a sudden-onset event,
- MOH will deliver on the Performance Standards within respective timeframes described .
- From the moment that MOH grades an emergency due to a slow-onset event,
- MOH will deliver on the same Performance Standards, within emergency-specific timeframes designated by the NEC at grading.
- In some types of emergencies, an international response may be required in the absence of a country-level response (a multi-country event involving, for example, scattered cases of a severe unknown respiratory illness. Such a response may involve the repurposing of staff in relevant departments

Reporting on Performance Standards

MOH is committed to reporting annually against its Performance Standards. Internally, the relevant departments tracks and reports on the implementation of the Performance Standards in each graded emergency, and explains any case where a specific performance standard was deemed unnecessary for a particular emergency.

MOH's four critical functions in emergency response

To deliver on its core commitments and Performance Standards, MOH must fulfil four Critical functions in emergency response: leadership, information, technical expertise and core services.

The four critical functions are listed below.
• **Leadership**: provide leadership and coordination of the health sector response in support of the national and local authorities.
• **Information**: coordinate the collection, analysis and dissemination/communication of essential information on health risks, needs, health sector response, gaps and Performance.
• **Technical expertise/ Service provider**: provide technical assistance appropriate to the health needs of the emergency (including the provision of health policy and strategy, technical guidelines, standards and protocols, best practices, and implementation/strengthening of disease surveillance and disease early warning systems); MOH will work to ensure the provision of quality health services
• **Core services**: ensure logistics, field establishment, surge and human resources management, procurement and supply management, administration, and finance

Delivering on the four critical functions

- MOH is responsible for fulfilling these four critical functions, bringing in additional internal and external resources as required.

- staff responsible to delivers the four critical functions is called the Emergency Response Team (ERT).
- Depending on the situation, one or more staff or even teams may be required against each of the four critical functions, both at national and field level
- The ERT is normally led by the EM . However in Grade 3 emergencies, and sometimes in Grade 2 emergencies, an experienced and pre-qualified Health Emergency Leader is deployed to run the ERT, nominated by NEC
-The ERT is composed of repurposed MOH staff at regional level and, if required, additional deployed teams with expertise in the four critical functions.

Essential policies for optimizing MOH's emergency response

The application of three policies is essential to optimize MOH's response to Grade 2 and 3 emergencies by ensuring the rapid deployment of appropriate staff and resources with the full support of the Organization.

Surge policy

MOH mobilizes and rapidly deploys (surges) experienced professionals to join the field as part of the Emergency Response Team (ERT) to perform MOH's four critical functions in emergency response, as required. This is accomplished using an Ministry-wide, interregional surge mechanism consisting of qualified staff from throughout MOH's programmes, departments.

Recognizing the challenges of meeting surge requirements, MOH follows a two phased human resources surge process over three weeks. Prior to this surge, the Health directorate (HDG) first repurposes existing staff to form the initial ERT, and then identifies any remaining surge needs to complete the ERT.

In phase 1 (start-up: Surge Team 1), within 4 hours of grading, MOH surges Pre-identified, trained and experienced professionals from governorates HDG same region , and technical lead from National level on a no-regrets basis.

Surge Team 1 (ST1) members complement or replace existing Regional EMT staff members were repurposed for the response,

At the site of the emergency. Both ST1 and the repurposed HDG staff make up the ERT that works to deliver on MOH's four critical functions in emergency response. ST1 members are expected to work for a minimum of two weeks and a maximum of three weeks.

In Grade 3, and potentially in Grade 2 emergencies, a Health Emergency Leader / tactical advisor (HL) is deployed to run the ERT . The HL is expected to work in the HDG for a minimum of one week. Key positions for possible deployment in ST1 include a Health Emergency Leader (HL), Public Health Adviser, an Information Officer, an Epidemiologist, a Data Manager, a Communications Officer, and a Logistician.

In phase 2 (reinforcement/replacement: Surge Team 2), within 12 Hours in Sudden onset emergency , and two weeks in Slow onset from grading, MOH provides additional surge staff, from all over MOH, the Global Outbreak Alert and Response

Network (GOARN), or other entities holding pre-signed Letters of Understanding or Stand-By Agreements, to strengthen or replace the existing ERT

Surge Team 2 (ST2) members are expected to work for 12-24 Hours in sudden onset, and a minimum of 2 weeks and a maximum of 4 weeks, in slow onset including 2 hours (sudden onset) and a one week (Slow onset) overlap if replacing any outgoing members of the ERT.

Depending on the duration of these assignments, this phase may require progressive deployments to ensure full coverage of the four critical functions for the initial 6 weeks After grading.

Surge teams will follow The emergency Standard Operating Procedures and pre agreed job descriptions. Before deployment, they are provided with briefing and basic equipment.

MOH provides incentives for staff to volunteer to be part of surge. All MOH staff across the ministry and across the technical programmes with relevant expertise are expected to be part of an on-call surge team at least once a biennium.

Health Emergency Leader (Tactical Advisor) policy

In Grade 1 and most Grade 2 emergencies, the Emergency Management Team (EMT) is led by the DG at the regional level. In Grade 3 emergencies, and sometimes in Grade 2 emergencies, an experienced and pre-qualified Health Emergency Leader (HL) is deployed within 24 hours on a no-regrets basis to run the EMT, in support of the DG of the HDG.

The HL is directly responsible for all staff involved in the emergency, including existing HDG staff are repurposed to work on the emergency as well as those deployed to the field through surge. HL run the day-today work of the ERT to fulfil MOH's Performance Standards.

The HL is drawn from a pool of pre-qualified and experienced individuals from MOH have successfully performed leadership and management functions during major emergencies (as evaluated by both CEO and NEC), have undertaken refresher training on best practices in emergencies, know MOH's ERF and the IHR (2005).

As head of the ERT, the HL is accountable to the MOH through the CEO, The HL represents MOH in all coordination meeting at field level

The HL has delegation of authority and approval level for all expenditures of Outbreak and Crisis Response funding related to the emergency, and any other funding made available by the MOH.

No-regrets policy

At the onset of all emergencies, MOH ensures that predictable levels of staff and Funds are made available to the CEO, even if it is later realized that less is required, with full support from the Ministry and without blame or regret. This policy affirms that it is better to err on the side of over-resourcing the critical functions rather than risk failure by under-resourcing.

In terms of human resources, this policy facilitates the successful implementation of the surge policy and the Health Emergency Leader policy.

In terms of financial resources, this policy provides the Health Emergency Leader with the authority to spend up to SR 500 000 without having to obtain the normal MOH programmatic approvals in advance of expenditure. The financial procedures for accountability and documentation remain in place, as per the emergency Standard Operating Procedures. The SR 500 000 is drawn from either emergency response funding envelop at MOH or as direct envelop from MOF

This no-regrets policy applies to any expenditure incurred during the first three weeks of the response.

4. National Health work force Roster:

MOH as the lead government body for health emergency management , and tasked by Civil defense law to map health resources and share it with the National emergency authority (Civil defense) , corner stone of health system is the health task force and a unified system to manage the health task force need to be implemented , and adopt a national expert roster for core health work force to be available for deployment at emergency event, when the CEO and EM has a pre trained, roster for experts who are ready for deployment and work on slandered SOP and one emergency management system .

The Roster system could start on Phases : first year populated by MOH staff, to be expanded to all national health partner by year after

Emergency Department, CEO to approve the priority emergency management profile, with clear identification of requested, training working experience, skills, , the training department to ensure availability of the training programs, GCMGM, to manage the roster and monitor the maintenance of its member in terms of performance monitoring and training needs.

MOH will launch **a national expert roster** for the core capacity needed in emergency management as;

- emergency manager
- hospital manager

- field team leader
- information management/statistician
- public health/ epidemiologist
- Field epidemiology officer
- clinical staff: Surgeon/specialized surgery, antithesis,...etc
- laboratory technician
- Logistic and medical supply officer
- Medical engineering
- Forensic medicine
- Signed MOU with health partners and Privet sectors for scope of services, related liability, admin and finance frame work when needed

Based on the global changes in emergency profile, and diversity of threat, and the need for high caliber of expertise in highly specialized field as Roster for **subject matter expert** including regional, national, international experts in public health areas and rare specialties including management of chemical, biological incidents is equally needed to establish a virtual as well as deployment when needed capacity , based on a signed on call contract system between MOH, and specialized centers/ individual

This roster to be developed and managed by GCMGM in close coordination with the MOH relevant department , and be linked to SHOC Planning team

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