REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

Public Health Emergency Operations Center Handbook

August 2023

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ACRONYMS

AAR	After Action Review/Report
CAP	Corrective Action Plan
CD	Communicable Diseases
CDC	Centre for Disease Control
CFE	Contingency Fund for Emergency
CS	Command System
DG	Director-General
DMS	Disaster Management System
DRM	Disaster and Risk Management
EOC	Emergency Operations Center
ERP	Emergency Response Plan
ESU	Epidemiological Surveillance Unit
GPS	Geographic Positioning System
ICS	Incident Command System
IHR	International Health Regulations
IM	Incident Manager
IMS	Incident Management system
LSID	Lebanese Society of Infectious Diseases
MOA	Ministry of Agriculture
MOPH	Ministry of Public Health
MOE	Ministry of Environment
NCDC	National Communicable Diseases Committee
PHE	Public Health Emergency
PHEIC	Public Health Emergency of International Concern
PHEOC	Public Health Emergency Operations Centre
PMC	Prime Minister Cabinet
PPE	Personal Protective Equipment
RHGUH	Rafic Hariri General University Hospital
RRA	Rapid Risk Assessment
RRT	Rapid Response Team
SITREP	Situation Report
TOR	Terms of Reference
VPN	Virtual Private Network
WHO	World Health Organization
WR	WHO country representative

1. Introduction

Public health emergencies arising from public health threats and man-made disasters continue to be major concern in the Eastern Mediterranean Region. Countries in the region are investing in country preparedness measures and Lebanon is no exception. Therefore, the Lebanese Ministry of Public Health established a Public Health Emergency Operations Center (PHEOC) that plays a critical role in preparing for and responding to public health emergencies to fulfill the International Health Regulations (IHR) obligations.

A Public Health EOC (PHEOC) serves as a hub for coordinating the preparation for, response to and recovery from public health emergencies. The preparation includes planning, such as risk and resource mapping, development of plans and procedures, and training and exercising; while the response includes all activities related to investigation, response and recovery. The PHEOC also serves as a hub for coordinating resources and information to support response actions during a public health emergency and enhances communication and collaboration among relevant stakeholders.

The framework for a Public Health Emergency Operations Centre (PHEOC framework) provides high level guidance for establishing or strengthening a functional PHEOC. The framework defines "plans and procedures" as one of the key components of PHEOC and highlights that the PHEOC has different types of plans and procedures under the overarching national health emergency response plan. The PHEOC plans and procedures include: PHEOC handbook, event or hazard specific response and management plan, and Incident action plan.

This PHEOC handbook describes objectives of PHEOC, management, response coordination system, criteria and authority for activation, information management, communication from the PHEOC and procedures for operating a PHEOC. It will serve as the primary resource manual for PHEOC staff, containing necessary forms, role descriptions, Concept of Operations (CONOPS) and Standard Operating Procedures (SOPs).

1.1.Rational

The MOPH in Lebanon established a PHEOC to serve as nerve center for preparation and response to public health emergencies. This PHEOC handbook will be utilized by concerned MOPH staff and PHEOC members as a reference to guide PHEOC management and operations.

2. Purpose, Mission and scope

2.1.Purpose of the handbook

The purpose of PHEOC handbook is to provide step-by-step guidance for the management and operations of the MOPH PHEOC to prepare for and respond to public health emergencies (PHEs) in order to ensure optimal and effective use of the facility.
This includes:

a) day-to-day management and operations of the facility
b) procedures to follow to activate the PHEOC to coordinate the responses to PHEs
c) operations of the PHEOC during different levels of activation
d) organization of response and ensuring multi-disciplinary / multi-sectoral coordination
e) management of data and information for evidence-based decision-making
f) coordination of human, financial and material resources

2.2.Objectives of the PHEOC

Key objectives of PHEOC include:

a) Timely event specific operational decision making using the best available information, policy, technical advice and plans.
b) Communication and coordination with response partners
c) Collection, collation, analysis, presentation and utilization of event data and information

d) Acquisition and deployment of resources, including surge capacity services and material to support all PHEOC functions
e) Preparation of public communication and coordination with response partners to support audience awareness, outreach and social mobilization
f) Monitoring financial commitments and providing administrative services for the PHEOC.

2.3.Scope of PHEOC

The scope of PHEOC depends on the purpose for which the PHEOC is created. A PHEOC integrates traditional public health services into an emergency management model. It supports and is a component of existing national disaster management authorities or entities. The PHEOC, as a public health oriented EOC, must be part of a comprehensive program of public health emergency preparedness, planning and capacity building. Such a program includes, but is not limited to:

a) Prevention and mitigation of hazards
b) Enhancing readiness by planning for and stockpiling response resources
c) Establishing related institutional and technical capacities and capabilities (e.g. laboratories, community clinics, and rapid response teams)
d) Implementing public health surveillance programs
e) Enhancing environmental health programs
f) Engaging communities
g) Training staff and validating plans

3. Target audience

The handbook is intended to be utilized by PHEOC staff to guide the PHEOC operations and management including decision procedures for activation and deactivation and procedures to follow under each activation level. In addition, responders who coordinate response to outbreaks and other public health emergencies will use this document.

4. Laws and regulations on PHEOC

PHEOC should be adopted by a national law, decree, or in the easiest way by a ministerial decision. This legal document will authorize and legitimize the PHEOC and govern its activities. It also describes briefly the authority the PHEOC has to manage public health emergencies, authority for activation and deactivation, authority and mechanism for availing funding for sustaining the PHEOC and emergency response etc.

5. Strategic risk assessment

As per the Lebanese National Contingency Plan (2015), the risks scenarios rating for Lebanon are described in Tables 1 and 2.

Table 1. Risks scenarios rating for Lebanon

Disaster category	Threat	Risk (scale 1 to 5, 1 unlikely 5 very likely)
Natural disaster	Earthquake	3
	Tsunami	1
	Fire	4
	Flood	3
	Heat wave/snow storm	2
Man-made	Internal conflict	4
	External conflict	4
	Chemical/Biological/Radio-Nuclear leak	3
Outbreaks	Air borne	4
	Water Sanitation borne	4
	Vaccine preventable	3
	Other	

Table 2. What epidemic diseases to expect and when in emergencies

Main risk factor	Main epidemic disease of concern	Timing after onset of risk factor (window to act)	Resources Gaps
Flooding Intense rainy season Temperature abnormalities	Malaria Dengue fever Rift valley fever	At least one month	Human ressources, vector surveillance, shelters, electric power, sustainability of WASH activities…
Movement of people from non-endemic into disease-endemic region	malaria	At least one month	Human resources, vector surveillance shelters, electric power, decentralization of the treatment
Dry season	meningitis	About two weeks	Prophylactic treatment for some types
Insufficient water Contaminated water Poor sanitation	Cholera Shigella Rotavirus	Around two weeks	Sustainability and decentralization of diarrheal kits, Enhancing WASH activities
Overcrowding	Measles Meningitis	Around two weeks	Prophylactic treatment for some types of meningitis
Poor nutrient intake	Measles Cholera Shigella Rotavirus	About one to two months	Ensure target population is properly vaccinated for measles Enhancing WASH activities
Interruption of Routine vaccination	Measles, mumps, rubella, polio	A few months	Ensure target population is properly vaccinated
Pandemics	Influenza, SARS, MERS-CoV, Ebola,etc…	Global	Sustainability of enough stock of Antivirals, PPEs

6. Core components of PHEOC

The key components that make a PHEOC functional, as highlighted in the EOC framework are:

- **a.** Plans and procedures: These include an ERP for the health sector (which includes the intended operation of the IMS and PHEOC), an EOC facility plan and a plan for continuity of operations.
- **b.** Physical infrastructure: the EOC facility can either be purpose-built or housed in a multi-purpose space. It should be physically and environmentally secure, accessible and survivable in any emergency, and with adequate space for its staff. It must contain both open common areas and closed work spaces. A business continuity plan, or continuity of operations plan, should be developed and practiced.
- **c.** Information and communication technology (ICT) infrastructure: ICT enables internal and external telecommunications and all aspects of information management required to carry out the daily operations of an EOC. Telecommunications systems, including but not limited to mobile and satellite telephony with short messaging functionality and high frequency amateur or professional radio capabilities, are necessary to support real-time communications. In addition, workstation computers are required, with connections to a local area network with internet and electronic mail capabilities.
- **d.** Information systems and data: The goal of an effective EOC information system is to increase the availability, accessibility, quality, timeliness, and usefulness of emergency operations data. An information system must support all the functions of the EOC and should respect the principles of data security, privacy, and confidentiality.
  It is strongly recommended to create a VPN (Virtual private network) where all stakeholders can access, update and share information related to the EOC at all times.
- **e.** Human resources: successful operation of a PHEOC requires competent, trained staff. A roster should be maintained for each position within the EOC. The roster should have sufficient numbers to maintain PHEOC operations around the clock.

Meeting minimum requirement for each component enables the PHEOC run according to minimum standards as stipulated in the IHR joint external evaluation.

Figure 1 illustrates the key components of PHEOC.

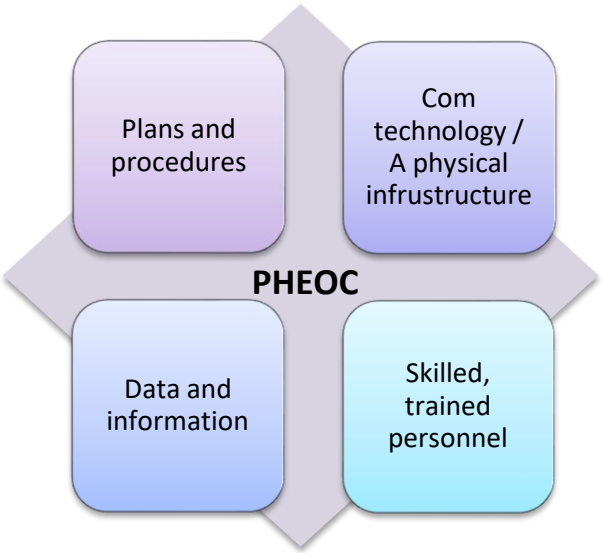

Figure 1. Core components of PHEOC

*Refer to Annex 3 of the PHEOC framework for details of the basic requirement of the key components.

7. Description of the PHEOC

7.1. Physical location:

The Public Health Emergency Operations Center is based at MOPH, Beirut, Bir Hassan, 4th floor.

7.2. Description of rooms and the function of each room:

- One secretary room: Secretary functions such as receiving and making calls, registration, printing documents…
- One main operation room (including small built in rooms: One for IT and multi-media functions
- One meeting room
- One Staff office with three desks
- Two sets of WCs for both females and males (located outside the PHEOC)

7.3. Technology:

Display screens (4 TV screens and one big display screen composed of 6 small screens) , computers (7 laptops) tele-communication facility, phones, 1 projector, and 1 smart board

It is important to note that the PHEOC can closely coordinate with the National DRM unit at the Prime Minister Cabinet at Grand Serail through the MOPH focal person at the National DRM unit, and therefore with High Relief Council (HRC), armed forces, the Civil Defense, the Lebanese Red Cross (LRC). The PHEOC is equipped with advanced Information and Communication Technologies (ICT) emergencies. The PHEOC is equipped with a DHIS2 system that allows flow of information from peripheral health units to the MOPH centrally.

7.4. Entrance authorization to the PHEOC:

Done by the MOPH.

7.5. Physical security:

5 surveillance cameras are present at the PHEOC: one outside the main entrance, 1 at the main room and one outside PHEOC

7.6. Capacity of the PHEOC:

The PHEOC can accommodate 40 participants (18 around the table) & 22 observers

7.7. Information management system:

An electronic information management system is being developed to be use for information sharing and management through usual internet and direct communication with Thuraya satellite.

7.8. Rest area:

There is a small rest area at the PHEOC.

7.9. Others:

Fire alarm present at the PHEOC. However, and despite the presence of smoke and fire detectors, it is better to consider establishing a whole built-in firefighting system.

8. Management of the PHEOC

Organizational location: The PHEOC falls directly under the DG of Public Health. Therefore, the manager of the PHEOC should report directly to the Director-General of the MOPH (Figure 3).

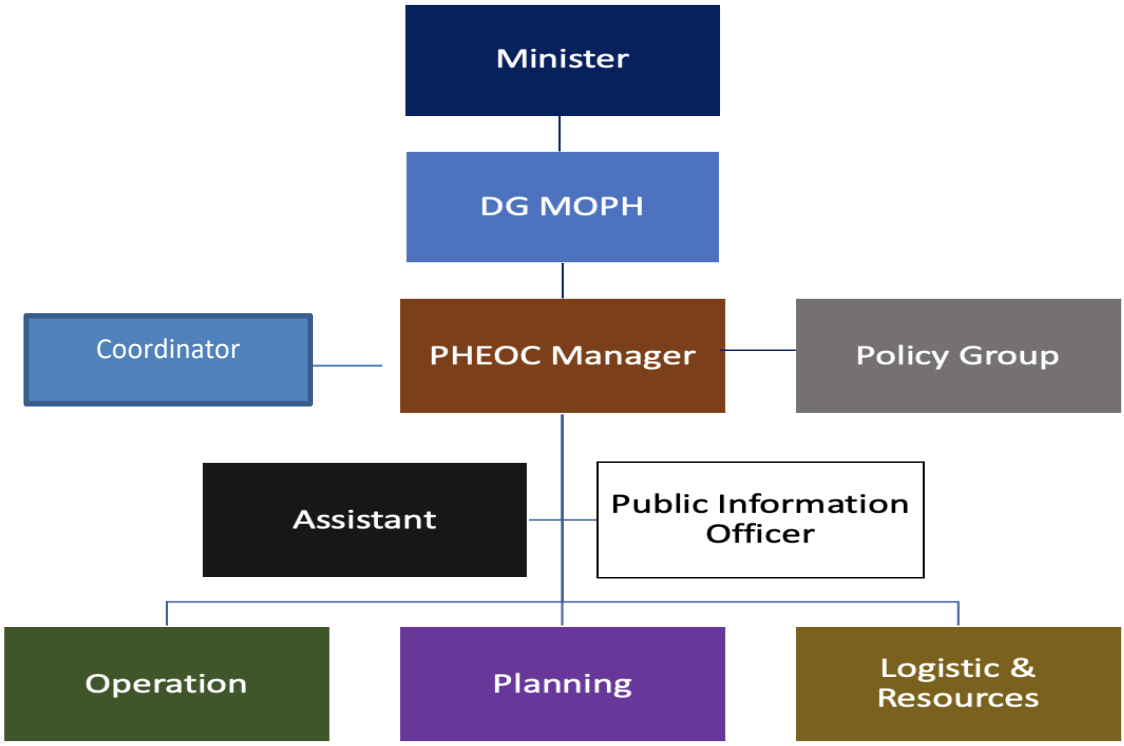

Figure 2. Organogram of the PHEOC (The number of Staff requested to run the PHEOC depends on the time (Watch, Alert or Response modes)

Users: when the PHEOC is not activated, the PHEOC might be used for conferencing, training and meetings. The PHEOC manager needs to define the users and put in place a system for requesting utilization of the facility. The request will be sent to the PHEOC by email or other means (eg. Online request form or phone call).
The following information should be provided when requesting reservation of the room

a) Purpose of usage
b) Date, time and duration
c) Resource to be used (videoconference, teleconference, meeting room, etc)
d) Number of locations to be connected
e) Number of persons expected to use the facility

The PHEOC manager needs to designate responsible person to coordinate this activity.

Access to the PHEOC: Access to the PHEOC is controlled. A registration log and sign-in sheet is placed by the entrance. A template is provided in the Annex 1. The PHEOC manager maintains a list of people with keys or access codes to the PHEOC. Users can access the PHEOC after receiving authorization from the MOPH. During activation of the PHEOC, regular meetings and calls may be cancelled and the PHEOC would be occupied by the IMS staff.

Regular facility check: To ensure that the PHEOC is always ready for activation, it is vital to carry out regular checks of the infrastructure and technology system to guarantee its continuous functionality. In Table 3, an example of schedule of facility check is detailed, in terms of what to be checked when and who is the responsible person.

Table 3. Schedule of EOC check

No.	Equipment	Frequency*	Date	Status	Remedy
1	PC 1(main)	Daily	11/12/2019	Working properly	
2	PC 2	Once/wk			
3	PC 3	Once/wk			
4	PC 4…	Once/wk			
5	Screen 1	Once/mo			
6	Screen 2	Once/mo			
7	Screen 3…	Once/mo			
8	Projector 1 …	Once/wk			
9	IT Server	Once/wk			
10	External phone line 1...?	Daily			
11	Internal phone line 1…?	Daily			
12	Photocopier?	Once/wk			
13	Fax?	Once/wk			
14	Camera 1…	Daily			
15	Etc				

(*) This is just an example and frequencies can be amended as needed.

Systems check checklist is provided in Annex 2.

The PHEOC manager may also call for call-down drills exercise to test facility functionality (see training and exercise section).

9. Concept of operations

The concept of operations, or CONOPs, describes how and when to engage different branches and levels of government as well as other partners (including international agencies) in the incident management system (IMS). It defines the intended operation of the entire emergency response system and describes:

1. The responsibilities of designated organizations at strategic, operational and tactical levels
2. The structure and organization of the overall response
3. Grading of the event to determine the necessary levels of response
4. The nature of escalating levels of response
5. How the components of the response work together.

The CONOPs is key to detailing how multi-sectoral and transnational coordination will work at the strategic, operational and tactical levels.

9.1. Staffing the PHEOC

The EOC has two types of staff: the permanent and surge staff.

9.1.1. Permanent staff

The permanent staff is responsible for the day-to-day operation of the PHEOC. These include PHEOC manager, leads of the key functional areas and staff under each area.

The PHEOC manager reports to the leadership under which the PHEOC is placed in the Ministry's organizational structure and the PHEOC staff report to the PHEOC manager.

The PHEOC manager
The PHEOC manager leads the PHEOC activities and is responsible for:

- The day to day operation of the PHEOC
- All PHEOC operations and ensures that the facility and resources required for PHEOC support are provided
- Ensuring development of plans and procedures, and monitoring implementation
- Developing of training programs and conducting simulation exercise to test systems
- Ensuring proper management of information and documentation
- Ensuring timely dissemination of information
- Undetaking corrective actions following evaluation of the PHEOC and after action reviews

In addition, when the PHEOC is activated the PHEOC manager will:

- staff the PHEOC in collaboration with the Incident Manager;
- advise to the incident manager on utilization of emergency management tools and procedures;
- ensure all systems in the PHEOC are up and running to provide operational support;
- avail PHEOC resources and ensure access to the information systems is provided to the IMS team;
- ensure proper documentation of the response to enable recreate the incident for after action review

The key functional sections operating under the PHEOC manager are:

A- Operations unit: responsibilities include:
Coordinate alert and response activities.

B- Planning unit:
Develop and/or update plans and procedures; conduct exercises to test plans; follow-up on implementation of after-action reviews; maintain situational awareness

C- Logistics and Resources unit
Manage, forecast and order resources based on risk profile.
Because of the centralized finance management in the MOPH, this unit will managed/follow up all finance engaged in the response

It is vital to assign at least one person in each unit as leads. The watch staff fall under the supervision of the operations lead.

The PHEOC needs to have a communication officer. If there is no a permanent communication officer, it is crucial to linkup with the ministry of health communications unit to ensure required support. If capacity allows, it is necessary to also have Liaison and security/safety officers.

It is also very important to have an ICT manager. He/she will ensure all ICT equipment are up and running, and are always ready to support PHEOC operations.

A summary of the PHEOC and its key functions are shown in Annex 3.

9.1.2. Surge staff:

The PHEOC maintains roster of multi-disciplinary and multi-sectoral experts which can be mobilized and staff the PHEOC when activated. When the IMS is activated, depending on the scale of the incident, positions will be identified in the IMS. Based on the positions identified, human resource response plan will be developed. Experts will be identified from the roster to fill the identified positions. Terms of reference for each position will be developed. A generic TOR is given in Annex 3 for adaptation to the situation. The PHEOC manager organizes regular training of people in the roster and conducts simulation exercises to test the PHEOC plans, procedures, and systems.

A request for assistance need to be made to key partners should there be a gap to fill required positions.

9.1.3. Policy group

The policy group will provide strategic leadership and guidance to the EOC operations and avail funding for emergency operations. Roles and responsibilities of the leadership include:

- providing strategic guidance to the PHEOC
- ascertaining funding for sustaining the PHEOC
- Availing funding for emergency operations
- Ensuring relevant plans and procedures are in place and approve them
- Ensuring multi-sectoral and multi-agency coordination and collaboration

The leadership / policy group are composed of:

- Ministres of relevant sectors
- National disaster management agency
- Representatives of international and regional organizations.
- Key subject matter experts including legal and ethical advisors
- Partners involved in emergency management
- Key subject matter experts

The Minister of Health or the DG or a designated person who is given authority to bring different sectors together, is the chairperson of the policy group.
The leadership group need to regularly receive updates highlighting the situation, operations, challenges, gaps and outline activities that require leadership attention and decision and support. A template for situation update to the leadership is provided in Annex 11. The incident manager is responsible for coordinating preparation of the report and sharing with the leadership.

9.2. Modes of operations

The PHEOC typically operate in three modes. These are: watch, alert, and response modes.

9.2.1. Watch mode:

This mode corresponds to the normal day to day business activities. The watch staff constantly monitors and triage information on public health events by facilitating the collection, organization, analysis, distribution, and archiving of information.

N.B: The PHEOC is constantly in watch mode throughout the different modes of operation. The staff continues to monitor events even if the PHEOC is in alert or response mode.

The work of the watch mode is guided by critical information requirement. In this mode, the PHEOC is in a constant state of preparedness and readiness to support any escalation of operation level.
The watch services need to be carried out in coordination with the Epidemiological Surveillance Unit (ESU) at the MOPH.

The ESU team monitors events through routine surveillance, event based surveillance and media monitoring, as well as manages information such as true information or rumors received from the community through the MOPH hotline and other sources such as social media. This work should be done through a digital platform. The watch staff must have full access to all ESU digital platform. When thresholds are exceeded or incidents of public health interest detected, they should be immediately entered into the platform and all follow-up action and response activities should be documented and tracked (if EOC is activated). The same should be done if new threats are detected and evaluated. The platform enhances accountability for any detected incident throughout its entire life cycle. Also, a weekly or bi-monthly technical session National Surveillance and Outbreak Review Meeting brings together key technical staff and partner agencies to review disease data, provide updates on incidents, preparedness and response activities. The ESU meeting conducted once every week can play this role.

Roles and responsibilities of watch staff include:

- Monitor and triage incoming information
- Draft or prepare reports
- Distribute reports, documents, and notifications relevant section or responsible person

- Ensure that the PHEOC has supplies and that equipment is operational
- Coordinate or lead briefings as required
- Support management of small scale events that don't meet criteria for activation

As previously mentioned, these activities are usually conducted by the ESU teams in coordination with the response teams at national and subnational levels.

9.2.2. Alert mode

The alert mode is the early standby phase of activation when an emergency event has occurred or is imminent. The notification will come through the ESU and the watch team. The PHEOC conducts intensive monitoring of an incident or event in preparation for a potential activation.

Alert mode activities include but not limited to intensified surveillance, deployment of RRT to undertaken investigation, commencement of coordination with other sectors, initiation of preparation for deployment of financial and logistic resources, and identification of experts to staff the PHEOC. To accomplish these activities, the PHEOC usually requires increased staff and extended working hours. The PHEOC identifies and requests for additional surge staff as necessary. Depending on the nature of the event, people from other ministries can be invited (MOA, MOE…)

a. Risk assessment

The PHEOC conducts risk assessment to determine if the incident requires PHEOC activation and determine the level of activation. The assessment can be done by the PHEOC staff and subject matter experts.

The levels of activation are determined based on the results of a rapid initial risk assessment after an event has occurred. The PHEOC is activated (within 120 minutes) immediately after the risk assessment is completed and a directive is given. The PHEOC should be capable of activating within 120 minutes as required by IHR indicator for PHEOC to run according to minimum standards.

Risk assessment template is provided in Annex 7.

9.2.3. Response mode

During response mode, the centre is activated. The center defines levels of activation corresponding to levels of response. The lowest level of response addresses relatively lower scale events for which all response activities are largely within the capabilities and resources of the PHEOC and low level augmentation is required.

Activation levels are re-evaluated based on the results of the continuing risk assessment after the occurrence of an event. The levels of activation of the PHEOC are indicated by yellow (low), orange (medium) and red (high) color codes. The determination of a level of activation is based on four criteria: the level of urgency, the severity, the complexity of the event and the capacity of the PHEOC to respond.

Table 4. PHEOC Levels of Activation

Levels of activation	Transition criteria
High intensity emergency	▪ Very complex situation: several Mohafaza affected and the capacities of the structures of care come to saturation. ▪ The resources of the Ministry of Health become insufficient. National support and international partners are needed in terms of logistics and funding. ▪ The response capacity of the PHEOC overwhelmed and as such. ▪ The DRM takes over the coordination of the response
Emergency of medium intensity	▪ Complex situation, more than one Mohafaza, the capacities of the reception structures are reaching saturation. ▪ PHEOC provides coordination and response activities with the support of the surge and contract staff. Some ministries and international partners are involved. ▪ Available local resources are depleted. National logistics is engaged, with minimal logistical and financial support from partners.

	▪ The DRM supports the response
Low intensity emergency	▪ Situation under control (not complex), one Mohafaza affected, the capacities of the local structures are green (Adequate resources available). ▪ Through its management structure, the PHEOC ensures coordination with the internal staff, with the support of the other departments of the Ministry of Health. International partners are minimally involved. ▪ The command and control of the incident will be locally focused, and the coordination will be from the governorate/MOPHafaza EOC. ▪ Available local resources are committed and adequate for the response.

During responses to humanitarian crisis or disasters, the health sector will provide the required health services and activate the PHEOC as necessary.

9.3. Criteria and authority for PHEOC activation

a. Activation Criteria

In any PHEOC, it is important to define triggers for activation for each level of activation
Meeting the following criteria (some or all) triggers activation:

1. The capacity of the Governorate / district of incident occurrence overwhelmed
2. Any condition that has met the criteria to be declared a Public Health of event of International concern (PHEIC) in line with IHR 2005 guidelines
3. An Emergency with high public health burden potential
4. the capacity of regular staff is overwhelmed and additional support is required
5. Additional resources are required
6. A condition with the potential of cross border effects
7. Leadership / Policy Group directive
8. High media interest
9. wide geographic extent (including one mohafaza or more)

b. Authority for activation

The Minister of Health or the responsible authority (for example the DG of the MOPH) gives directives for activation of the PHEOC following a proposal by the PHEOC manager. Activation will be based on results of risk assessment. The Minister or the responsible authority may also directly provide directives for activation for political reasons or foreseen situations.

Proposed activation procedures (align to the procedures in the overarching health response plan):

- Conduct risk assessment,
- If criteria for activation is met, determine activation level
- Proposal to the health minister or designated authority for activation
- Authorities' approval to activate the PHEOC
- Designation of incident manager and activation of incident management system
- Exceptional activation by direct order by authority
- Approval of resources required (corresponding levels of activation) to kickoff response

c. Activation notification

Activation notification provides information on activation of PHEOC, level of activation, assign lead responsibility to a specific organizational unit; identify the initial IMS structure to be implemented including designation of the Incident Manager.

The notification should be communicated with relevant stakeholders. The PHEOC needs to define recipients of the notification.

d. Activation checklist
    1. Notification sent to relevant stakeholder
    2. Incident manager is designated
    3. IMS activated (partially or fully)
    4. Section leads (Finance, Operations, Logistics & Planning) called upon
    5. Personnel assigned to positions on the PHEOC, report to the PHEOC and check in with section leads
    6. Determine staffing needs and acquire additional support as required
    7. Incident action plan is developed
    8. Orientation provided to surge staff on the PHEOC
    9. Deploy any relevant available maps
    10. Conduct incident situation briefing
    11. Task assigned to Incident Management System (IMS) team monitored using tasks tracking tool
    12. Issue job action sheets
    13. Ensure situation report is regularly disseminated
    14. Activity logs conducted
    15. Shift change plan and briefing done
    16. Emergency contacts list developed and shared
    17. Ensure proper documentation of relevant information in a central location
    18. Ensure communications equipment is working and ready for operation
    19. Necessary logistical supplies and materials are available
    20. Ensure partners activities are tracked and used for planning and coordination

9.4. Contextualization of the CONOPS during the transition period

Waiting for a fully operational and permanent PHEOC, the center will run at the beginning according two modes: Alert and Response.
The lack of human resources made the impossibility to have permanent staff sitting in the center. It's why we start by and temporary PHEOC, activated when an alert occurs.
The epidemiological surveillance unit (ESU) will oversee the watch mode and notify the PHEOC when a signal is considered to be a national or international concern. At this time the PHEOC is automatically activated and start to be operational. SOPs will define how the notification will be done and how the PHEOC will be organize
When activated, the PHEOC must immediately notify the DRM unit and the Lebanese Red Cross.

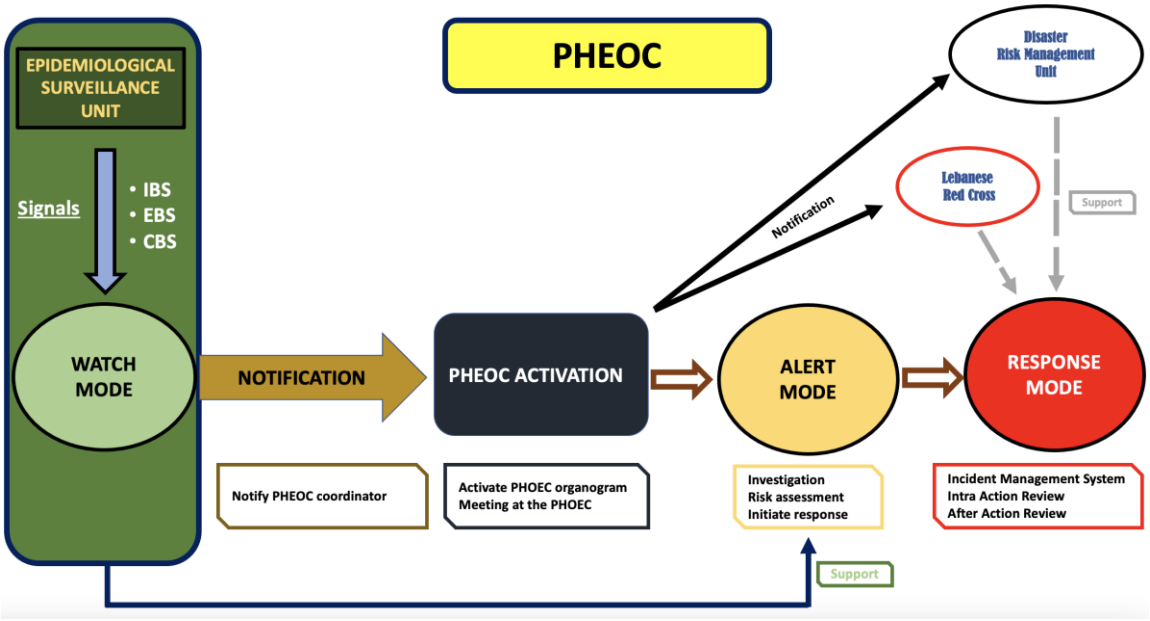

Figure 3. PHEOC functioning

9.5. Shift during activation

During activation where coordination of responses from the PHEOC requires working extended hours up to 24/7, qualified staff on the PHEOC activities will work in rotation. A complete shift of staffing will be established for the duration of the operations. The Incident Manager (IM) with support of PHEOC Manager is responsible for developing a rotation plan. A briefing (at least 15 minutes) must be given to the replacement. It is recommended that a person to work maximum of 12 hours in a shift. The shift plan will be recorded and displayed in the PHEOC. Shift plan template is provided in Annex 8 A / 8 B.

9.6. De-escalation

When the scope, complexity, and severity of health emergency decreases, scale-down, de-escalation of the level of activation needs to be considered.

Consideration on de-escalation includes decrease in one or more of the following:

- No more a Public Health Event of International concern (PHEIC) in line with IHR 2005 guidelines
- Human resource surge support required
- Resources required
- Media interest
- Geographic extent
- Executive / leadership directives

The PHEOC will conduct risk assessment and review of activation level in order to make decision for de-escalation.

9.7. PHEOC Deactivation

When the response is declared over, the PHEOC will be deactivated and return to routine monitoring. The Minister of Health or designated authority is responsible for deactivating the PHEOC.

a. Criteria for deactivation

Some of the criteria for deactivation include:

- The trends and data from the field begin to suggest that the issue being addressed is on the decline

- The issue is no longer a public health threat
- The incident is to the capacity of the sub-national level
- Resources are no longer required
- The incident or state of emergency has been declared over by the MOPH or designated authority

b. Deactivation checklist
   - Notify appropriate agencies through mail &/or phone regarding the individual sites where the PHEOC activation is being closed out.
   - Collect data, logs, situation reports, message forms, and other significant documentation for archiving.
   - the IM to handover to the PHEOC manager
   - Fold and repack re-usable maps, charts, materials
   - Collect items that have been deployed in the field for future response use
   - Make a list of all supplies that need replacement and forward to the logistician
   - Return identification credentials to the PHEOC Manager
   - Develop deactivation report
   - Deactivated

9.8. After Action review

The International Health Regulations (IHR, 2005) require countries to develop core public health capacities to prevent, detect and respond to public health events. Following recommendations of the IHR review committee on second extension for Establishing National Public Health Capacities and on IHR Implementation in 2014, the World Health Organization has developed a new IHR Monitoring and Evaluation Framework (IHRMEF) with three new components. One of the three components is After Action Review – Qualitative review of functional capacity which is conducted after response to public health events

After action review (AAR) helps to assess actions taken in response to a public health emergency as a means of identifying best practices, gaps and lessons learned in order to take corrective actions to improve future response. It is highly recommended to conduct the AAR immediately after the declaration of the end of a public health event and up to three months after the event. Therefore, the PHEOC will conduct AAR with in the recommended timeframe.

The IHRMEF, recommends and encourages countries to conduct After Action Review (AAR) of the response to Public Health emergencies in order to learn from the response to improve future outbreaks and Public Health emergencies.

9.8.1. Objectives of AAR:

- Demonstrate the functional capacity of existing systems to prevent, detect, and respond to a public health event
- Identify lessons and develop practical, actionable steps for improving existing preparedness and response systems
- Share lessons learned from the review with other public health professionals
- Provide evidence for the development of the national action plan for health security or to contribute to other evaluations such as the Joint External Evaluation or simulation exercises

9.8.2. Methodology:

An After Action Review (AAR) is a qualitative review of actions taken to respond to a real event as a means of identifying best practices, lessons and gaps in capacity.
The AAR exercise uses an interactive, structured methodology with user-friendly material, group exercises and interactive facilitation techniques. It is divided into 5 sessions :

- What was in place before the response?
- What happened during the response?
- What went well? What went less well? Why?
- What can we do to improve for next time?
- Way forward

After any live activation or simulation exercise, the PHEOC conducts an AAR ; and at the end of every AAR, an action plan is developed and the activities are prioritized for implementation with clear timelines to address the identified gaps.
The planning section is responsible for conducting AAR, development of action plan and monitoring of implementation.

9.9. Response structure and roles and responsibilities

We have three levels of coordination: Strategic, Operational and Tactical.

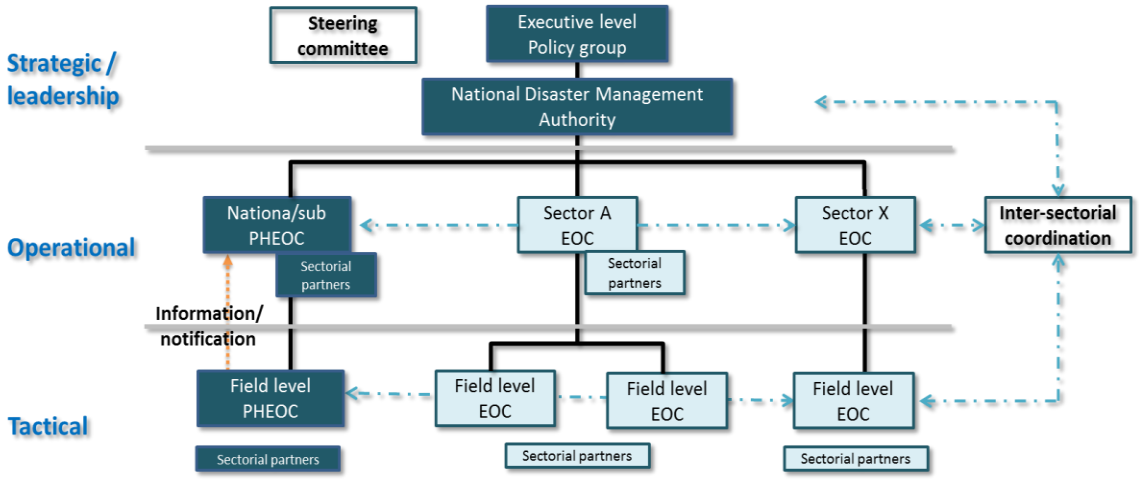

Figure 4. Organizational structure for command and response

9.9.1. Strategic level

It's also the policy level. This is the highest level of the national disaster management structure and is responsible for strategic coordination and policy making. It is usually led by the office of the prime minister, coordinated by the DRM unit

9.9.2. Operational level

The operational level is responsible for effective coordination of all response elements and maintenance of situational awareness for strategic-level authorities. It's the level of the PHEOC
The PHEOC will use the IMS for coordination of response to public health emergencies. The IMS is an emergency management structure and protocols that provide an approach for coordination of response of the PHEOC in a coordinated manner, primarily to respond to and mitigate the effects of all types of emergencies. The system is modular and scalable, hence can be partially or fully activated depending on the scale of the event.
Within the necessary framework, five essential functions are typically established, with the flexibility to adapt to different incidents, agencies, and jurisdictions. These essential functions are:
1. Management
2. Operations
3. Planning
4. Logistics
5. Finance and administration.

1. Management: It sets the response objectives, strategies and priorities; including public communication and liaising with agencies and the safety of responders. The IM is responsible for overall management of the response operation. The role of the IM can be assumed by designated deputy IM. Leaders of the other four sections directly report to the IM.

   The following functions fall under management section: PHEOC manager, public health communication officer, liaison / partnership officer, and safety/security officer.

2. Operations: It guides the use of resources to directly respond to the event. At the national level it provides coordination and technical guidance. This section includes the following technical areas: surveillance, laboratory, epidemiological data management, social mobilization, water, sanitation, and hygiene; and case management, mass casualty management etc.

3. Planning: It supports the event action planning and budgeting process by tracking resources and collecting and analyzing information. This function is responsible for preparing incident action plan and maintaining documentation of the event. An incident action plan template is provided in Annex 9.

4. Logistics: It acquires, tracks, stores, stages, maintains, and disposes material resources required for an event response.

5. Administrative and finance: It organizes all financial and administrative tasks including accounting, procurement, human resource, etc.

The Incident Management and response structure is provided below (Figure 5).

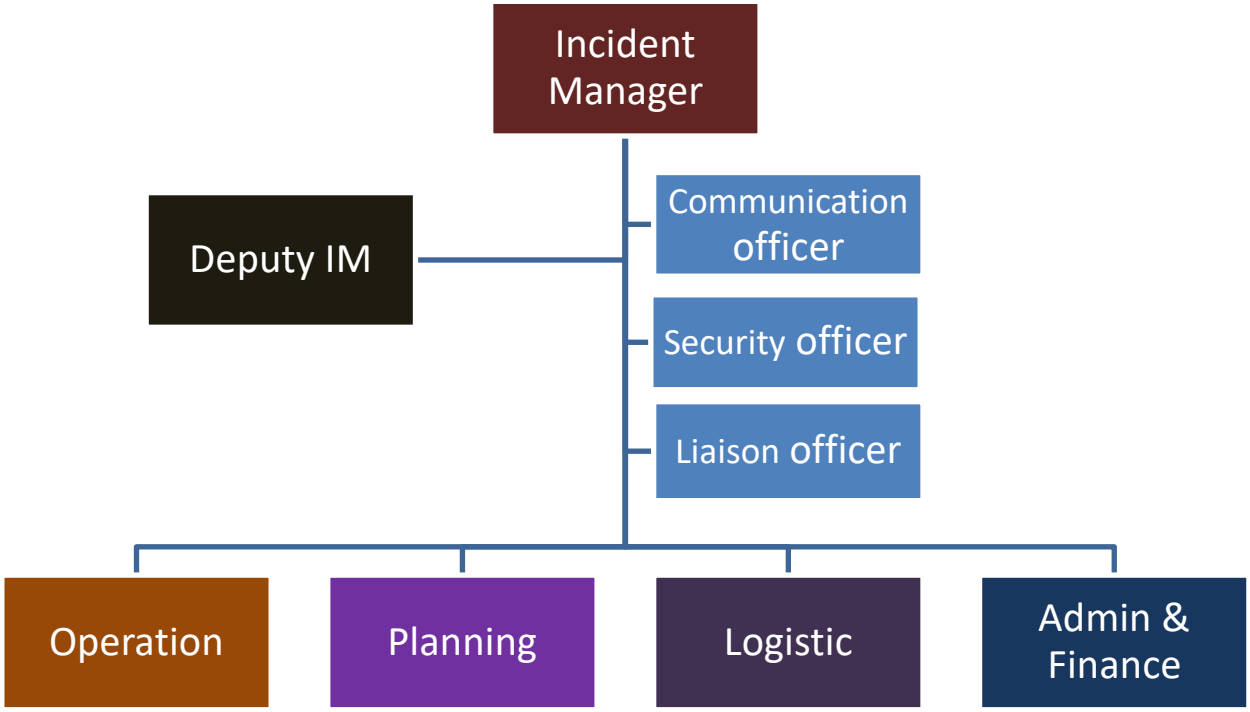

Figure 5. Incident management model

The incident manager is responsible for determining the IMS structure and defining staffing requirement. Continuous assessment will be conducted, and the structure will be reviewed based on the scale and complexity of the emergency event. Roles and responsibilities of response personnel is given in Annex 3 and must be adapted to the event situation.

Once the PHEOC is activated, the IM and section leads will issue job action heets. Tasks on the job action sheet can be amended to fit the situation by adding or deleting tasks. The job action sheet outlines tasks to be implemented by surge staff.
The tasks are categorized as:
Immediate: tasks that must be completed first upon assuming the role or coming on duty.

Intermediate: tasks to be completed after the immediate tasks are addressed.

Extended: tasks to be completed later or on an on-going basis during the work shift.
Annex 10 provides a job action sheet template.

9.9.3. Tactical level

The third level of a response is the tactical management of response operations. Unlike the national or subnational levels, this will normally be located as close to the incident as possible, at Governorate, district or community level. This may take the form of a mobile and temporary command post, an EOC staffed by all agencies responding locally, or a local public health-specific EOC.

9.9.4. Rapid response team (RRT)

The RRT is a multi-disciplinary team, trained to provide support to Governorate, District and local health authorities in the event of any public health emergency. The RRT is ready to be deployed and provide surge capacity, and complimentary expertise to responses to emergencies.
The RRT will participate in all training and exercise programs planned by the PHEOC. During responses to PHE, experts will be deployed to the tactical level to conduct investigation and support response operations.

The RRT operates at tactical level (field level) and the operations section of the IMS in the PHEOC oversees their activities.
Eight RRT should be established: One in each Governorate, the one in Beirut will be the national RRT. A training program should be developed for the RRT team.

9.10. Request for assistance

The IM identifies gaps and proposes to the leadership on types of resources (human, material and financial) required from external sectors and response partners. The leadership prepares a letter of request for assistance signed by the minister or designee. This process needs to be aligned to the existing internal ministry procedures.

9.11. Linkages with other sectors and agencies

The Concept of Operations (CONOPS) in the national public health response plan should describe when and how the PHEOC links and interacts with national disaster management agency, line ministries including defence, security and international organizations. Military and other resources may be engaged as necessary and coordinated through the PHEOC. National CONOPS on linkages and responsibilities of all stakeholders in Lebanon is done through the National DRM Committee and the National CBRN Committee. If needed, the bigger CONOPS might be annexed in this handbook.

- In case of partial activation, and when other sectors are involved, the PHEOC manager should ensure to have contact with relevant persons at different ministries (Agriculture, Environment, Interior, Defense…)
- In case of full activation, the PHEOC manager should liaise with the representative of the Ministry of Health at the National EOC.

Using both national and technical IHR committees can help in establishing coordination between all agencies during activation.
Emergency response planning is part of a comprehensive disaster risk management program that addresses questions about who or which agency does what during an emergency, and when. This creates a framework for responsible agencies to develop and test plans for engagement.
A PHEOC is the response management component of an evolving comprehensive emergency (risk) management program within the responsible jurisdiction. PHEOC planning should recognize both alignments with the NDMA and linkages with national-level humanitarian response agencies.
The PHEOC need to secure a liaison officer who facilitates linkages and coordinate joint planning and efforts of agencies that are external to the health sector. A model of CONOPS is given in Annex 13.

10.Information management

The EOC framework defines three types of information required in PHEOC for decision making. These are:

- Incidents specific information
- Event information
- Contextual information

The PHEOC needs to define information requirement in the PHEOC to support decision making.
This Information is known as essential elements of information (EEI).

10.1. Essential elements of information (EEI):

An Essential Element of Information (EEI) is information that is required for decision-making in a PHEOC in a timely manner across all IMS functions. The level of urgency and the need for action distinguish CIRs from EEIs.

Characteristics of EEIs:

- Include standard data and information items for routine situational awareness.
- Provide context and contribute to analysis.
- Are included in response situation reports.
- Facilitate identifying response activities and materials requirements.

The EEI include:

- All the notifiable diseases / conditions outlined in national ESP
- Resource mapping including human, financial and logistical, and availability

10.2. Critical information requirements (CIRs):

The CIRs include collection, analysis and dissemination of relevant information on public health risks, epidemic investigation and response, needs assessment, overall health sector response, gaps, and performance. It is information that is vital to facilitating situational awareness and decision-making. It is a high-priority subset of EEIs, and is used to trigger immediate or mandatory action.
The list of events below, not limited to, requires prompt reporting by watch team and are monitored on regular basis. This list can be amended to meet information requirement of a PHEOC.

- All PHEs of international concern in accordance with IHR requirements;
- An outbreak that exceeds the threshold defined in the ESU and being monitored by PHEOC
- Any acute PHE that requires assistance from WHO;
- Media interest for any event;
- Accidental death/injury of response personnel deployed in the field;
- Any event affecting installation activities/operations;
- Upward or downward change in grade of a current PHE
- An incident which negatively impacts the facilities, activities, or operations of the PHEOC or MOPH.
- An unusual or serious event reported from the sub-national level.

During activation, incident specific, targeted CIRs are developed to guide information gathering and reporting for the specific event. The PHEOC Manager in consultation with the IM develops the CIRs.

10.3. Information flow:

Coordination of information on PHEs is very crucial. The PHEOC should serve as a hub for reporting public health events and coordination of information. All information on PHEs must systematically flow to the PHEOC. These include information flowing from community, event sites, health facilities (including treatment centres and point of entries) flow from ward level to district, regional and national levels and is received by the PHEOC at the national level.

All communication to and from the PHEOC will be done using the information management system, the PHEOC email or by a phone application (WhatsApp group for example).

10.4. Recording and documentation:

Information related to the PHEOC should be recorded in PHEOC information system. This includes logging activities, tracking HR deployment, tracking of partner's activities, tasking, scheduling etc.

It is extremely important to accurately document actions taken during preparedness and response to emergencies. This will assist in tracking and monitoring the effectiveness of the response activities. Hence, all documents related to an event will be properly archived. The PHEOC needs to have a central repository (preferably online to ease access) where all relevant information on incident is archived. The planning function is responsible for documentation and must ensure proper documentation of all relevant information on response operations

10.5. Analysis / visualization:

The PHEOC will regularly analyse epidemiological data and produce epidemiological situation maps. Trends and maps need to be displayed in the PHEOC.
The planning function is responsible for collecting analysing and visualizing incident information such as human resource deployment, status of materials deployment (what has been deployed when and where) and mapping partners' activities (who is do what, where and when). Trends of the event and situational maps will regularly be produced, displayed and shared.
It is vital for the PHEOC to have key analytical tools such as GIS…

10.6. Displaying information:

The PHEOC needs to define type of information to be displayed in the walls, boards and screens of the PHEOC. Information for display include: PHEOC schedules, maps and trends of events, task tracking, etc. It is vital to post in the PHEOC walls big size (A0 or bigger) maps of the country depicting district, provinces, bordering countries, rivers, health facilities etc. and have a regularly updated GIS with the necessary information relevant to the activities conducted at the PHEOC.

10.7. Information products:

To support informed decision-making, the EOC produces various information products. Table 3 below provides list of information products, frequency of reporting, target audience and responsible person/s for producing the product. SOPs for producing each information product must be included in the handbook. Templates for summary of response to leadership, situation report, and 4Ws is given in annexes 12, 14, and 15 respectively.

Table 6. List of information products, frequency and reporting

Information product /outputs	Source of information	Frequency of report	Report Distributed	Responsible
SPOTREP	PHEOC	To be determined by nature of event	EOC Manager	Secretary
Situation report	PHEOC	To be determined by nature of event	EOC Manager	Secretary
Summary of Event to leadership (max 2 pages)	PHEOC	2 times a week	Policy / leadership group	EOC Manager
Feedback report	PHEOC	Weekly	EOC Manager	Secretary
4W matrix	PHEOC	1 time a week	Policy / leadership group	EOC Manager
Investigation Reports	PHEOC	Depending on occurrence of PHE	Policy / leadership group	EOC Manager
After Action Reports	PHEOC	End of an outbreak	Policy / leadership group	EOC Manager
Annual report	PHEOC	1 time a year	EOC Manager	Secretary

10.8. Partners' activity tracking:

To coordinate response efforts and avoid duplication, it is vital to know who is doing what, where and when. This information is maintained in the PHEOC and regularly updated and shared throughout the course of the response (the PHEOC to determine frequency). The leadership, incident management team and partners will receive this report. A template for tracking partners' activities is given in annex cc The partnership focal person is responsible for ensuring availability of the 4Ws.
The PHEOC will maintain data on partners' capacity by area of intervention.

10.9. Meetings and activities schedule:

All planned activities, conferences and meetings (regular and adhoc) will be recorded regularly displayed in the PHEOC. The PHEOC manager ensures updating the information. A scheduling template is given in Annex 15. The schedules need to be displayed (during normal and activation time) to help know what activities are occurring at the PHEOC.

10.10. Emergency contacts:

There will be a 24/7 PHEOC dedicated call line in the PHEOC which can be used as an emergency contact point (the hotline of the MOPH 1214 can be used until the PHEOC is operating properly). It is also important for the PHEOC to have a toll-free line. 2 phone numbers are available 01843120-01829081 in the PHEOC that will be used by individuals to report any event.
The PHEOC maintains a list of contact of key stakeholders, including all levels of health system delivery, government sector, key staff, partner organization representatives, and disaster management. In addition, the PHEOC will maintain contacts of EOCs that the PHEOC connects to including telephone number, address, and video and tele-conferencing detail. Contacts tracking template in provided in Annex 16.

11.Coordination and communication

An effective, accurate and timely communication system is crucial for the control of the response and the PHEOC is the platform for effective communication. The PHEOC establishes internal communication within the Incident Management System (IMS) and external communication with partners, government and the private sector as well as the public.

11.1. Internal:

To establish effective communication within the different sections of the IMS and the field, the following actions shall be taken:

- Regular IMS team coordination meeting:

When the PHEOC is activated, regular IMS team meeting is scheduled. Frequency of the meeting is determined based on the severity and evolution of the incident. This platform facilitates communication between the different sections and serves as a mechanism for sharing of updates for common operational picture, decisions for action and coordination of the emergency response. All IMS staff and partner organizations participates in the meeting. The incident manager chairs this meeting.
Action point form this meeting will be recorded in the task tracker and their implementation monitored against the assigned timeline. The IM and function leads are responsible for assigning responsibilities and monitoring implementation.
Minutes of this meeting are compiled and shared with the team for comments within 24 hours and finalized. The planning team is responsible for preparing minutes and archiving them in a central repository.
The incident manager will report to the leadership issues and challenges that require leadership decision and present them during the leadership meeting.

- Sections coordination meetings: Each section meets regularly (determine frequency) to enhance communication and facilitate coordination of response.

- Strategic communication:

1. Reporting to leadership: the IM prepares leadership update reports regularly and shares with the leadership. The summary includes brief summary of the event, actions taken and next steps, issues and challenges that required high level decision making (maximum two pages). Reporting templates given in Annex 11)
2. Leadership meeting: this meeting is chaired by the minister or designee. It is attended by all respective health directors, IMS personnel, heads of responding partners and other relevant stakeholders. This is a forum for strategic communication among relevant stakeholders where critical decisions are undertaken. The incident manager and section leads will provide situational awareness. Minutes of the meeting are shares regularly to monitor actions and documented properly in the PHEOC repository.

- PHEOC email: a PHEOC mailbox will be created and will serve as a central mail repository. Any communication with the PHEOC and going out of the PHEOC should be done through the PHEOC mailbox. PHEOC staff must have access to and should communicate via the PHEOC email.
- Situation Report: situation reports are produced regularly. An email distribution list needs to be formed containing all taskforce members. The SITREP should be disseminated widely to the IMS

members, all levels of the health system delivery (regions, districts etc.), relevant private and government sectors and partners, and displayed in the PHEOC.
- Communication with the field: it is critical that the field response team maintain regular communication with the PHEOC and information should seamlessly flow to the PHEOC. The PHEOC must have a full operational picture on what is happening in the field. The PHEOC needs to put a mechanism or procedures to establish steady communication with sub-national levels.
At sub-national level, teams need to be equipped with basic communication facility such as telephone (with timeline), internet etc. to enable them communicate and share information.

11.2. External:

The PHEOC communicates externally with relevant partners, government and private sectors as well as the public in-line with government communication policy.

The PHEOC communicates with relevant partners, government and private sectors through a communication unit, which has been set up in advance with designated roles and responsibilities. Crucial preparatory work must be conducted in advance of a public health emergency, standard operating procedures (SOP) with key timelines need to be developed and then followed during a health emergency and then finally the communications outputs need to be monitored and evaluated. There is a crucial need to understand the difference between risk communications and corporate communications.

Communications includes a website or newsletter with a regular situation update, regular press briefings, press releases of actions taken and areas which needs support.

11.2.1. Public communication :

Preparing Communications for a Public Health Emergency

- ✓ Building on the current communications structure setting up a team with clearly defined roles and responsibilities that people can shift into once an emergency strikes.
- ✓ Media mapping and developing the contacts of influential mass media outlets and journalists with the widest reach, scope and appeal
- ✓ Partner mapping and creating a contact list of key communications partners who will participate in the response and devising a communications system
- ✓ Capacity Building and designating key spokespersons and officials who will interact with the media and public. Media training should be provided in advance of an emergency.
- ✓ Developing SOPs for communications during a public health emergency with key timelines.
- ✓ Preparing preliminary statements on different possible emergencies and storing in a 'bank' to ensure that initial information about the incident is swiftly and accurately conveyed to the media and key stakeholders. These would include:
    - Fact sheets
    - Questions and Answers
    - Important telephone numbers and contacts

During the Public Health Emergency

- Posting the daily situation update on the MOPH website and sending out to key media and stakeholder contacts
- Holding regular press briefings on the situation
- Sharing key messages regularly with partners to ensure everyone is speaking with one voice
- Issuing press releases at key moments in the response: announcement of outbreak, scaling up of support and key control measures such as vaccination campaigns and then containment and end of outbreak
- Daily monitoring of news channels, including social media to spot any misinformation or rumours circulating

- Media training of key journalists and outlets to sensitize them to key prevention and other measures
- Working with risk communications health promotion and community engagement colleagues to disseminate key prevention and other measures through radio, social media and other communications channels
- Communicating with the public to inform them about the situation, control measures and risks
- Using social media platforms to disseminate key information and to dispel rumors, as well as to identify issues of concern

After the Public Health Emergency has ended

- Looking at media output in terms of numbers of press releases, briefings, interviews and social media posts
- Analyzing coverage in terms of alignment of messaging
- Archiving useful documents for easy access next time
- Doing rapid lessons learned exercises in regards to procedures and processes, to see what went well and what can be improved next time.
- Continue building partnerships in preparation for the next emergency.

12.Monitoring and evaluation of the PHEOC:

Following a simulation exercise, or after a real incident is declared over and the PHEOC is deactivated; performance of the center must be evaluated. This evaluation will consider facility availability, connectivity with the field and other level of PHEOC operations, availability of information, functionality plans and procedures. Input will be collected from PHEOC staff and other incident management staffs regarding PHEOC support to the response. This process will identify key failures / drawbacks that the PHEOC need to improve to fully support response operation. Results of the evaluation will inform development of corrective action plan to rectify weaknesses. The PHEOC manager should ensure development and implementation of the action plan, and reports to the supervisor on implementation of the plan within timeframe. A PHEOC evaluation form and corrective action plan (CAP) template is provided in Annexes 17 and 18 respectively.

13.Training and exercise

The PHEOC has to develop training program and regularly train both PHEOC permanent and surge staff. These allow development and maintenance of critical set skills, and continuous improvement of PHEOC functions. During normal time, the PHEOC must train its staff and conduct simulation exercise.

Outline:

- Types of training to be conducted
- Persons to be involved in the training (need to be multi-disciplinary / multi-sectoral including response partners)
- Frequency of trainings per year

Trainings are usually followed by exercise. Simulation exercise will be regularly conducted to test skills acquired, functionality of plans and procedures and systems.

Outline:

- Types of exercise to be conducted
- Frequency of exercise per year
- Persons to be involved in the exercise (need to be multi-disciplinary / multi-sectoral including response partners)

The EOC framework outlines six types of exercise for PHEOC. These are:

- Orientation exercise
- Drill

- Table-top exercise (TTX)
- Functional exercise
- Full-scale exercise
- Games

WHO has developed a manual titled "WHO Simulation Exercise Manual" which provides an overview of the different simulation exercise, tools and guidelines. The manual is available at: https://www.who.int/ihr/publications/WHO-WHE-CPI-2017.10/en/ .

14.Redundancy / continuity of operations plan

This plan enables the PHEOC to continue carrying out its operations in case of an emergency situation that disrupts the normal working conditions. A permanent PHEOC that is continuously in use should have an alternate location that can be activated with full functionality within minutes for swift resumption of the delivery of critical services affected by a disruption.

a. Physical security

The PHEOC at RHGUH has 4 cameras as follows:

- 1 at the main entrance
- 2 at the main room
- 1 at the IT room

It has also 2 fire extinguishers: 1 at the main room, and 1 at the kitchenette.
Security staff during emergency will be deployed from RHGUH own security staffing. It is important to note that this public hospital has the Lebanese army present at the main entrance and the Emergency entrance, besides its own security staff. Staff of the Ministry of Health (Surveillance, response specially), and other ministries (e.g. MOA staff) are called by either phone or a phone app group.

b. Data security

To avoid loss of data following failure of IT systems, a backup system needs to be put in place. In this section, external double hard disk should be used to save data regularly. This data will be re-installed in case of the IT system failure.

c. Communications system backup

In the event of communication breakdown, a backup communication system should be installed to enable continuity of operations. This will include internet connectivity, satellite phones, radio etc. A direct satellite communication through Thuraya satellite is established at the PHEOC and can be used during breakdown of the usual communication system. Wireless walkie talkie should be also put in place to assume communication between stakeholders.

d. Power backup

All computers and other appliances have to be connected to uninterrupted power Supply (UPS) to protect equipment from power surge and subsequent failure.

Continuous and lengthy power interruption disrupts PHEOC operations. To ensure continuity of operations, it is crucial to have a power generator in the PHEOC. The generators will automatically takeover in events of commercial electricity power cut.

As the PHEOC is located at RHGUH, any electricity power cut will be automatically taken over by the 2 generators of the hospital. A UPS system should be put in place in case these 2 generators are out of service.

e. Continuity of operation

In case of physical infrastructure failure that does not allow use of the PHEOC, the operation of the PHEOC must continue from another location. The PHEOC can continue from the MOPH itself. It is highly recommended that the current alternative EOC at the MOPH DG office should be moved to the

basement of the building for better functionality and security. A virtual PHEOC should be also considered in case of physical infrastructure failure. If the internet connectivity is available, a collaborative application can be used (cloud, WhatsApp…). If there is no internet connection, an alternative walkie talkie system should be available.

15.Logistics support for PHEOC operations

a. Communication equipment

Communicating with Rapid Response Teams (RRT) is very critical during response operations. To enable the RRT to communicate with the PHEOC, they need to be equipped with some of the following communication equipment: laptops, phones, satellite phones, internet access, GPS and other necessary stuff. The Logistics team from PHEOC will be responsible for making available the communication equipment for deploying and conducting training for staff on how to operate the equipment.

b. Staff sustainment and safety

During activation, food and beverages will be served in the PHEOC to sustain staff working extended hours. The logistics section coordinates these services (include administrative procedures to following for ordering and procuring the service). As previously said, the PHEOC has a kitchenette equipped with refrigerator and utensils for storing and serving food and beverages. Toilets are available outside the EOC.

Flash lights, need to be available at the PHEOC (at the secretary room closet). As for the first aid kit that usually needs to be present at the PHEOC (at the secretary room closet) the ER department at RHGUH can be used for any emergencies that might occur specially that this department is less than 100 meters far from the center. However, this kit should be available at the alternative facility at the MOPH main building.

Their locations are indicated in the floor plan (Figure 2).

c. PHEOC supplies and materials

The logistics section is responsible for providing necessary stationery materials and supplies for the PHEOC staff both during normal and activation period. These supplies and materials are already available at the PHEOC at the secretary room closet.

ANNEXES

Annex 1: Sign-in Sheet

The Sign-in sheet is used to keep a record of all persons who utilize the PHEOC. The purpose of this log is to monitor utilization as well as to assist with recreating the event for after action reviews after response operations have concluded. Each individual must sign in and out upon entering and exiting the room.

Date	Name	Program	Sign in time	Sign out time

Annex 2: Regular Facility Check Checklist

Regular equipment check

No.	Equipment	Frequency	Date	Status	Remedy

Annex 3: Roles and Responsibilities

Person/Institution	Roles and Responsibilities
PHEOC Manager	• Supports all PHEOC operations and ensures that the facility and resources required for PHEOC support are provided • This position works closely with the Policy Group and ensures that proper emergency and disaster declarations are enacted and documented • Ensure PHEOC plans and procedures and monitor implementation • Staff the PHEOC in collaboration with the Incident Manager • Responsible for the day-to-day operation of the PHEOC • Ensures proper management of information and documentation • Ensures timely dissemination of the response information • Responsible for activation and deactivation of the PHEOC
Operation Lead / Incident Manager	• Responsible for all aspects of the outbreak response; including developing event objectives, managing all operations, application of resources as well as responsibility for all persons involved • sets priorities and defines the organization of the response teams • Responsible for the overall incident action plan • Oversees all operations of the outbreak response • Establish the appropriate staffing level for the IMS and continuously monitors operational effectiveness of the response • Ensure availability of end of PHE after action report • Responsible for recommending deactivation of the PHEOC when the outbreak is declared over
Deputy Incident Manager	• Assume the responsibility of Incident Manager when needed • Perform specific tasks as requested by the Incident Manager • Implement directives from senior managers
Communication Officer	• Interface with the public, media, other agencies, and stakeholders to provide response related information , and updates based on changes in the status of the incident or planned event • Responsible for development of a public information and communication products • Control and coordinate the release of information to the media • Prepare press releases and conferences • Develop and release information about the response to the news media, to the response personnel, and to other appropriate agencies and organizations • Obtain media information that may be useful to incident planning • Provide accurate and timely status reports to the Incident Manager and PHEOC members • Provide accurate information to the media on a timely basis • Perform a key public information - monitoring role, such as implementing measures for rumor control • Develop and distribute community information releases through local and national medial such as TV, radio, or newspaper, and the use of Social Media networks
Coordination officer	• Coordinate with other agencies in the PHEOC that are normally not part of the PHEOC staff, such as partners, private and governmental sector or volunteer organizations to make sure they are incorporated into PHEOC operations as appropriate
Safety / Security Officer	• Ensure the safety, security of the PHEOC and the staff
Planning Section lead	• Receive, compile, evaluate, and analyze all outbreak information and providing updated status reports to PHEOC management and field operations • Develop and communicate operational information • Predict the probable evolution of events • Develop objectives, strategies and action plans • Keep records and ensure proper documentation of the response • Identify inaccuracies and conflicting reports

	• Coordinate with technical areas (sub-committees) and Logistics to capture and centralize resource status information • Prepare and maintain resource status boards, and display current status and location of tactical resources • Identifying the technical expertise that is needed during the response
Logistics Section lead	• Provide logistics support to the PHEOC • Estimate the needs of response equipment, supplies, transport and communication equipment • Manage the procurement of supplies and essential response equipment, communications systems • Support MOPH on stock management, inventory, replenishment and stock rotation • Develop distribution plan in collaboration with partners for all supplies and equipment from central level to the points of use • Support PHEOC with prerequisite administrative support and finance resource management to ensure implementation of field activity
Administrative Officer	• Ensure office administration and support • Handle all routine correspondence related to the operation • Monitor and maintain office supplies • Ensure that printers, copiers and faxes are functional and stocked with paper • Ensure that all memos, letters and other documents related to the outbreaks are handled effectively, rapidly and disseminated accordingly • Prepare and maintain a rotation plan for administrative staff beyond normal hours in line with the SOPs • Update arrival and departure dates of deployment personnel
Finance Officer	• Mobilize and manage financial resources in collaboration with HQ • Organize rapid transfer of funds if required • Support funding proposals • Organize petty cash for staff deployed to the field (for emergency procurement in the field and /or cash advance on per diem) if needed • Monitor expenditure for the response, including cash flows, and work with partners on cost-sharing arrangements • Clear all financial documents
Surveillance Program	• Submit the plan and request funds • Plan for the activities, assign responsibilities and implement • Prepare protocols for surveillance at community and health centers • Ensure that active case finding and contact tracing is done well at both National and regional levels • Prepare a standard protocol for contact tracing • Follow up all contacts and ensure that a database for all the contacts is in place • Ensure core capacity for surveillance and response is well established at all community, health facilities and ports of entry • Oversee capacity building for health workers on surveillance and response • Work with GIS to map key epidemiological parameters • Collate, analyze, interpret and report summary data (e.g. daily counts of cases/deaths) • Generate descriptive epidemiology and data visualization • Manage the implementation within the approved budget • Manage outbreak data: analyses data regularly for trends and establishes transmission chains • Supervise, monitor and evaluate implementation at national and regional levels • Prepare and submit cumulative and progress implementation report to the task force • Closely link with infection control and social mobilization groups
GIS Unit / Data analyst	• Collect, collate epidemiological data from regions • Manage database including content, structure, file location, backup system • Work with surveillance and epidemiology to map and visualize data • incorporate all relevant data to produce map products, statistical data for reports and/or

	analysis
Laboratory expert	• Prepare guidelines, policies and manuals • Ensure all referral laboratories provides services consistently and accurately • Provide supportive supervision to referral laboratories • Provide advice to case management on treatment guidelines • Ensure referral laboratories have supplies
Central Public Health Laboratory/National-International Referral Laboratory	• Provide technical assistance on testing referral samples • Provide technical trainings (in service trainings) to lab personnel in the country • Conduct supportive supervision to laboratories • Mentor laboratories in Microbiology practices and Quality Management system • Provide technical advice on sample management (sample transportation) • Confirm the outbreak • Link the confirmed cases with epidemiology • Test water samples brought for surveillance. • Professionally and effectively perform referral laboratory testing services to produce accurate, reliable, timely and precise results
Response/Case management Unit	• Conduct assessment, care coordination, evaluation, and advocacy for services to meet the impacted populations health needs during a disease outbreak. • Acquire and provide to the other subcommittees and the Task Force detailed information regarding the impacted population to establish an intervention and response plan • Work with the community health officers in impacted areas to assist in the development, and implementation of response actions; assure that services provided are specified in the treatment plan(s) and monitor progress toward treatment goals • Regularly attend the coordination and the Task Force meetings to provide updates and exchange pertinent information • Review and advice on the requests from regions before processing them for support
Social Mobilization Lead	• Monitor implementation of social mobilization and health education activities • Develop or Revise IEC materials to be used at field level • Ensure provision of training to community health workers • Conduct house to house awareness on the disease to reduce denial and provide information to help prevent the spread of disease within the community • Search for victims and refer to appropriate health care facilities for treatment • Spearhead the distribution of response supplies, ORS, etc. at the community level • Develop and implement a communications plan to support response activities • Develop and periodically update appropriate “action points” concerning the response for dissemination to all appropriate policy makers
IT Officer	• Ensure PHEOC hardware and software systems are operational and maintained • Ensure security of the PHEOC IT system • Provide access, response personnel, to relevant PHEOC information
Human Resource Officer	• Regularly assess and identify the human resource needs for the response in liaison with function leaders • Prepare human resource plan and regularly update and monitor • Send requests to relevant partners for support • Facilitate recruitment of local experts and organize administrative arrangements • Regularly update the deployment tracking database

Annex 4: Grading Template

GRADING TEMPLATE
Incident name:
Done by technical team

Date: Time:	Chair: Minutes taker: Participants:
Country name	Emergency Type:
Grading level decision	Eg. Grade 1, 2....
Agenda	Grading meeting for .....
Situation analysis – summary	
Risk assessment - summary	
Assessment of grading criteria	Scale (provide assessment for each: **1)** Increased number of cases: **2)** Geographical spread: Urgency: **3)** Complexity: **4)** Capacity:
Names and contacts of key staff	•
Immediate actions	•

AGREED IMMEDIATE NEXT STEPS			
Action	Details	Person responsible	Date
	1.		
	2.		
	3.		

Decision and approval by leadership
Comment: .....
.....
.....

Approval: ..... /signature: .....

Annex 5: Risk Assessment of Acute Event Template

[EVENT NAME], [EVENT LOCATION]

Date and version of current assessment: Choose date, select version

Date(s) and version(s) of previous assessment(s):

Overall risk and confidence (based on information available at time of assessment)

Overall risk		
National	Regional	Global
Choose an item.	Choose an item.	Choose an item.

Confidence in available information		
National	Regional	Global
select	select	select

Risk statement

Risk questions (assess scenario where no further interventions are implemented)

Risk question		Assessment		Risk	Rationale
		Likelihood	Consequences		
Potential risk for human health?	National	select	select	select	
	Regional	select	select	select	
	Global	select	select	select	
Risk of event spreading?	National	select	select	select	
	Regional	select	select	select	
	Global	select	select	select	
Risk of insufficient control capacities with available resources?	National	select	select	select	
	Regional	select	select	select	
	Global	select	select	select	
Add additional risk question if needed; otherwise delete	National	select	select	select	
	Regional	select	select	select	
	Global	select	select	select	

Major actions recommended by the risk assessment team

	Action	Timeframe
☐	Refer the event for review by IHR Emergency Committee for consideration as a PHEIC by DG (Art 12, IHR)	Choose an item.
☐	Immediate activation of ERF response mechanism (IMS) as urgent public health response is required	Choose an item.
☐	Recommend setting up of grading call	Choose an item.
☐	Immediate support to response, but within limit of CFE (no grading recommended at this point in time)	Choose an item.
☐	Rapidly seek further information and repeat RRA (including field risk assessment)	Choose an item.
☐	Support Member State to undertake preparedness measures	Choose an item.
☐	Continue to closely monitor	Choose an item.
☐	No further risk assessment required for this event, return to routine activities	Choose an item.

[+]If chosen, list actions and identify persons responsible and due dates for each action in section 2 (Supporting information)

Communications

Target audience/ channel	Planned	Done	First date	Last update
Inform ExD and Deputy ExD of WHE (HQ)		☐	Choose date	Choose date
Inform relevant RD and RED (RO)		☐	Choose date	Choose date
Inform WR (CO)		☐	Choose date	Choose date
Enter event into EMS (RO)		☐	Choose date	Choose date
Inform GOARN (HQ)		☐	Choose date	Choose date
Share event via Event Information Site (EIS)	☐	☐	Choose date	Choose date
Share event via Disease Outbreak News (DON)	☐	☐	Choose date	Choose date
Public SitRep	☐	☐	Choose date	Choose date
Media talking points (coordinate with Communications)	☐	☐	Choose date	Choose date

Other – specify:	☐	☐	Choose date	Choose date

Supporting information

Hazard assessment
Expand

Exposure assessment
Expand

Context assessment
Brief context summary

Capacities	Vulnerabilities
Expand	Expand

Immediate actions (not a detailed response plan, state if no action required)
List here

Risk assessment team members
List names and roles

Reference documents used for risk assessment
List here

Annex 6 - A: Shift Plan During Activation

Date: Day, DD/MM/YYYY

Time in 24 Hrs

Function	Name	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1	2	3	4	5	6

Annex 7 – B: Transfer of Responsibility During Activation

Date	Name	Function	Sign in time	Sign out time	Major responsibilities to be shifted

Annex 8: incident Action Plan Template

INCIDENT ACTION PLAN (IAP)			
Incident Name and Incident Action Plan Version			
Incident Name:	Operational Period (Date/Time):	IAP Type: Initial ☐ Update ☐ Final ☐	
Risk level:	PHEOC Activation level:		
Functional IMS Position	Name	Email	Phone
IMS Management Leadership and Staff			
Incident Manager			
Deputy Incident Manager			
Core IMS Functions			
Operations Section			
Plans Section			
Logistics Section			
Finance & Administration Section			
Expanded IMS Functions			
Liaison Officer			
Safety Officer			
Public Information Officer			
Response Branch Operations			
Current Operations Branch			
Laboratory Branch			
Case Management Branch			
Epidemiology Branch			
Situation/Actions for Current Operational Period			
Background:			
Situation/Actions for Current Operational Period (continued)			
Current Activities: Ministry/Department Response Mission: Response Mode Critical Information Requirements (CIRs)			
Planning Assumptions (Evidence based facts and assumptions in the context of developing the plan.)			

Response Objectives (SMART: Specific, Measure, Achievable, Realistic, Timeframe)

Response strategies

Sections / Functional Area Operational Objectives / Expected results

Response activities

No.	Activity / Task	Responsible	Cost	Completion date

Triggers That May Increase the Response Tempo and/or Raise the Response Level

.

Triggers That May Return Centralized Response Operations to a Program Management Level

Pending Briefings for Operational Period

Scheduled Meetings for the Operational Period

Safety and Security Concerns

Place a visual depiction of the incident location or locations here.

Current Organization

Annex 9: Job Action Sheet Template

Incident Management System Job Action Sheets

A Job Action Sheet, or JAS, is a tool for defining and performing a specific IMS response functional role. The tasks on the Job Action Sheet can and should be amended to fit the situation by adding or deleting tasks. The Section lead who is issuing the Job Action Sheet should review for applicability and add in writing any incident-specific instructions or changes. The key elements are:

Position Title
The name of the emergency response functional role.
Note that these generally are not the same as every day, non-emergency job titles.

Reports to: The supervisor that has direct authority over the staff.

Mission: The purpose of the role, and a brief guiding principle for the responder to keep in mind.

Immediate:

- ☐ Tasks that must be completed first upon assuming the role or coming on duty.

Intermediate:

- ☐ Tasks to be completed after the immediate tasks are addressed.

Extended:

- ☐ Tasks to be completed later or on an ongoing basis during the work shift.

Annex 10: Summary of Incident to Leadership

Incident update to leadership
As of dd/mm/yyyy, update # xxx 1. SITUATION UPDATE Very brief summary……. ……..... ……..... 2. ACTIONS UNDERTAKEN Very brief summary in bullet points …… …….. 3. ISSUES AND CHALLENGES Highlight major issues and challenges that require leadership attention …… …….. 4. NEXT STEPS FOR DECISION Bullet points that require high level decision
EOC contact: physical address, email, tel

Annex 11: Situation Report (SITREP) Template

MOPH HEADER

Situational Report (SITREP)			
Outbreak Name		MOPHafaza/Caza/Region affected	
Date & Time of report		Investigation start date	
Prepared by			
Status (activation level)		Activation date	dd/mm/yyyy
Frequency of report			

1. HIGHLIGHTS

- No. cases reported this week/day. Compare to previous week/day.
- Cumulative case numbers to date e.g. From 'dd month year' until 'dd month year', a total of XXX (SUSPECTED/PROBABLE/CONFIRMED) cases including XX deaths of DISEASE/ SYMDROME have been reported from LOCATION.
- Summary of key challenges

2. BACKGROUND

Brief description of

- How and when the outbreak was recognized
- Description of disease burden in the country
- Overview of initial rapid situation assessment
- Date of outbreak declaration

3. EPIDEMIOLOGY & SURVEILLANCE

Case definition (please include as an annex)

Include definition of suspected, probable and confirmed cases as an annex so it is clear what the data is referring to.

Descriptive epidemiology

Please use graphs, tables and maps for visualisation of the data by time, place and person. Please make sure all figures have clear titles including the population being displayed e.g. n=. Please make sure all axis and legends are clearly labelled. Please ensure sufficient interpretation is provided to aid the reader.

- Number of cases to date: (as a table)
    - new and cumulative (suspected, probable, confirmed)
    - deaths: count and CFR%
    - incidence/attack rate (e.g. number of cases per 100,000 population)
- Case/person characteristics (e.g. age, sex, occupation, risk factors): comment on the most affected groups if present
- Time trends: Epi curve
- Geographical distribution (maps preferable, describe new areas affected)
- Clinical description (e.g. symptoms, duration,no. cases hospitalisations)
- Analysis by exposure
- Source investigations
- State any delays in notification

Contact tracing summary (for events where contact tracing is necessary)

- No. contacts, no. seen, no. traced, no. missing, no. completed follow up, no. become symptomatic
    - by lowest geographical location possible

4. LABORATORY INVESTIGATIONS

- Brief summary of tests performed and results
- Subtyping (this section may be combined with epidemiology description above)

5. ENVIRONMENTAL ASSESSMENT

- If completed, summarise the findings of any environmental investigations to date (e.g. water testing, vendor inspections, community assessments, etc.)

6. PUBLIC HEALTH ACTION / RESPONSE INTERVENTIONS

Describe the response measures implemented by thematic area and any impact seen. Please add additional pillars if required e.g. vector control, operational research

1. COORDINATION
2. SURVEILLANCE
3. LABORATORY
4. CASE MANAGEMENT
5. HAZARD CONTAINMENT
6. WASH & IPC
7. RISK COMMUNICATION, COMMUNITY ENGAGEMENT & SOCIAL MOBILISATION
8. LOGISTICS

7. CHALLENGES/GAPS

8. RECOMMENDATIONS & PRIORITY FOLLOW UP ACTIONS

- COORDINATION AND LEADERSHIP
- SURVEILLANCE
- LABORATORY
- CASE MANAGEMENT
- HAZARD CONTAINMENT
- WASH & IPC
- RISK COMMUNICATION, COMMUNITY ENGAGEMENT & SOCIAL MOBILISATION
- LOGISTICS

9. CONCLUSIONS

- Provide concluding remarks on the overall perspective of the event including future outlook

Re-echo key messages for urgent attention.

Point of contact of PHEOC and / or the report (the persons to whom questions regarding the report are directed

Annex 12: 4Ws Matrix (Who, What, When, Where)

No.	Activity		Organization	Location (prov, district)		Resources needed	Start date	End date	Status
	Area	specific activity		Province	District				

Annex 13: Meetings and Activities Schedule

Date	Time	Activity	Focal point	Location

Annex 14: Emergency Contact List Template

No	Name	Function	Organization	Location	Tel. No.	Email
1	EOC direct line	National PHEOC	MOPH	RHGUH	01843120 01829081	
2	Dr Walid Ammar	DG	MOPH	Bir Hassan	01/830300 ext 03/302095	moph@cyberia.net.lb wammarmd@gmail.com
3	Dr Atika Berry	Head of the Preventive Medicine/ CD Response Departments	MOPH	Bir Hassan	03/976032	aberrymd@gmail.com
4	Dr Nada Ghosn	Head of the ESP	MOPH	Bir Hassan	03/214520	esuMOPH@gmail.com
5	Dr Joseph Helo	Head of the Care Directorate	MOPH	Bir Hassan	03/262288	
6	Mrs Randa Hamade	Head of the PHC department	MOPH	Bir Hassan	03/538878	Randa_ham@hotmail.com
7	Dr Ghassan Zalaet	Bekaa MOPHafaza physician	MOPH	Zahle	03/802020	
8	Dr Mahmoud Yaghi	Baalbeck-Hermel MOPHafaza physician	MOPH	Baalbeck-Hermel	03/421297	
9	Dr Ali Ajram	Nabatiyeh MOPHafaza physician	MOPH	Nabatiyeh	03/888418	
10	Dr Jalal Haydar	South MOPHafaza physician	MOPH	South	03/956048	
11	Dr Michel Kfouri	MOPHafaza physician	MOPH	Baabda	03/620615	Michfouri40@hotmail.com
12	Dr Jamal Abdo	MOPHafaza physician	MOPH	Tripoli	03/406050	
13	Dr Hassan Chdid	MOPHafaza physician	MOPH	Akkar	03/209340	
14	Mr Zahi Chahine	Head of the National EOC	PMC	Grand Serail	03/760480	Zahi.chahine@undp.org
15	Mrs Wahida Ghalayini	Head of Nursing department	RHGUH	Bir Hassan	03/349593	wahidaghalayinii@yahoo.com
16	Mr Hussein Kataya	ER supervisor	RHGUH	Bir Hassan	76/993103	Hussein.kataya@hotmail.com
17	Dr Jacques Mokhbat	NCDC Member	LSID	-	03/292915	Jacques.mokhbat@gmail.com
18	Dr AbdelRahman Bizri	NCDC Member	LSID	-	03/300811	Ab00@ub.edu.lb
19	Dr Nada Melhem	NCDC Member		AUB		melhemn@aub.edu.lb
20	Eng Abeer Sirawan	Head of the Poultry department	MOA	Bir Hassan	03/603917	abeersirawan@hotmail.com
21	Dr Bassel Bazzal	Head of the Animal department	MOA	Bir Hassan	70/222687	bbazzal@agriculture.gov.lb
22	Dr Dolla Sarkis	Head of the Research lab	USJ	Museum square	03/680065	Dolla.sarkis@usj.edu.lb
23	Dr George Araj	Head of the microbiology lab	AUB	Hamra	03/628730	garaj@aub.edu.lb

Annex 15: PHEOC Evaluation Form

PHEOC Corrective Action Programme
After Action Comment Submission Form

Name: _____ Exercise/Incident: _____
Role in Exercise/incident: _____ Location: _____

Issue: Simply state the observation or problem:
_____
_____
_____
_____

Discussion: Describe the observation or problem in detail. If an expected action did NOT occur, please provide why you think it did not occur. If an action occurred that was unexpected, please provide why you think it occurred and the positive or negative effect it had on the situation. Please provide specific information that may be used for follow-up (dates/times, locations, names, etc.):
_____
_____
_____
_____
_____
_____
_____
_____

Recommendation: Provide your assessment of what action(s) should be taken to correct/resolve the problem and who should be involved in implementing your recommendation:
_____
_____
_____
_____
_____
_____
_____

Are you willing to be contacted to provide additional information if necessary? Yes___ No___
Contact telephone # _____ Contact e-mail _____

Annex 16: Corrective Action Plan (CAP)

Corrective Action Plan			
Characterize	Issue#	Issue:	
	System name:		Date:
	description:		
Cause & Implication	Root cause		
	Results and implications:		
Corrective action	Immediate corrective action:		Date:
	Long-term corrective action:		Date:
	Preventive action:		Date
Closure	Conclusion:		

GLOSSARY

After action review (AAR): Qualitative review of functional capacity which is conducted after response to public health events

Caza: second subnational level
Concept of operations (CONOPS): describes how and when to engage different branches and levels of government as well as other partners (including international agencies) in the incident management system (IMS). It defines the intended operation of the entire emergency response system.

Critical information requirements (CIRs): The CIRs include collection, analysis and dissemination of relevant information on public health risks, epidemic investigation and response, needs assessment, overall health sector response, gaps, and performance.

Essential elements of information (EEI): An Essential Element of Information (EEI) is information that is required for decision-making in a PHEOC in a timely manner across all IMS functions.

Incident command system (ICS): a standardized approach to the command, control, and coordination of emergency response providing a common hierarchy within which responders from multiple agencies can be effective.
Incident management system (IMS): A common organizational model or framework to all levels of emergency management responsibility within a jurisdiction, from national government to front-line emergency response services. The IMS embraces five functions: Management, Operations, Planning, Logistics and Administration/Finance.

International Health Regulations (2005) IHR: The purpose and scope of the IHR (2005) are "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade."
MOPHafaza: First subnational level
Public Health Emergency Operation Center (PHEOC): it is a physical location or virtual space in which designated public health emergency management personnel assemble to coordinate operational information and resources for strategic management of public health events and emergencies.
Public Health Emergency of International Concern (PHEIC): a formal declaration by the World Health Organization (WHO) of "an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international actions.
Rapid Risk Assessment (RRA): it is the combined effort of: identifying and analyzing potential (future) events that may negatively impact individuals, assets, and/or the environment (i.e. risk analysis); and making judgments "on the tolerability of the risk on the basis of a risk analysis" while considering influencing factors (i.e. risk evaluation) in order to ensure necessary response.
Rapid Response Team (RRT): readily deployable team to respond to a public health threat in a timely manner and before it spreads.

REFERENCES

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7. Centers for Disease Control and Prevention (2013). Technical Guidelines for Integrated Disease Surveillance and Response in the African Region, Brazzaville, Republic of Congo and Atlanta, USA.
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9. https://www.who.int/ihr/publications/WHO-WHE-CPI-2017.10/en/
10. Framework for a Public Health Emergency Operations Centre. November 2015. World Health Organization.