



Uganda National Guidelines for Regional Public Health Emergency Operations Center

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Acknowledgements

The covid-19 caused an impact that overstretched health systems, the national public emergency operation center (NPHEOC) was overwhelmed to effectively coordinate all response interventions at subnational level. As a result, the Ministry adopted a regional approach where the pandemic is coordinated at regional level. Regionalization comes in time when the country is implementing the 3rd version of the IDSR (Integrated Disease Surveillance and Response) guidelines. The development of standard guidelines will ensure a consistent and unified approach. It is essential to utilize the IDSR-III guidelines when creating Standard Operating Procedures (SOPs) to avoid duplication, considering that IDSR has already received approval.

As per the Ministry of Health strategy, our objective is to establish PHEOCs in all regions, integrating them into the Community Health Department of the Regional Referral Hospitals. I would like to express my appreciation to the dedicated teams of technical officers who have contributed to the development and review of this national-level guidance document.

Furthermore, I extend my gratitude to the development and implementation partners who have provided continuous support throughout these endeavors. Notably, the Infectious disease institute with funding from Resolve to save lives and Centers for diseases control, Baylor Uganda, and the Bill and Melinda Gates Foundation, USAID RHITES E, for the pivotal role in established the REOCs So far. The The ongoing support, along with the government, will ensure the sustainability of these systems and operations.

Foreword

Uganda has over the years experienced disease outbreaks ranging from those that are preventable through vaccination to emerging and re-emerging diseases such as viral hemorrhagic fevers. The burden of disease outbreaks often alters the socio-cultural and economic fabric of the country, as is the case with COVID-19. Uganda through the Ministry of Health has built capacity at national and sub-national levels to detect and respond to public health emergencies.

Due to the growing population and increase in the number of administrative units (Districts), the Ministry of Health has adopted a regional mechanism in which response to PHEs is coordinated at the regional level. This shall empower regions and districts to use their data to make decisions for outbreak management at regional level.

The Ministry of Health is committed to its mandate of enhancing capacity and providing technical guidance at all levels of healthcare service delivery across the country. This Concept of Operations is in fulfillment of the mandate to support sub-national coordination capacity and it shall guide establishment and implementation of the regional response mechanism. This includes establishing regional emergency operation centers to coordinate disease outbreak response at regional level. Implementation of this mechanism shall require a multi-pronged and multi-sectoral approach. This shall be run by a multisectoral regional steering team with technical guidance from the Ministry of Health.

The Regional Response Mechanism provides a platform for coordination and collaboration to respond to public health emergencies to improve health at regional level. I am appealing to all stakeholders to embrace this mechanism.

For God and My Country.

Hon. Dr. Jane Ruth Aceng Ocero

Minister of Health

Executive summary

The Regional Public Health Emergency Operations Centre provides more coherent, effective, and efficient coordination of various actors representing a multisectoral team within the context of the One-Health approach. The International Health Regulations (IHR) 2005 requires that member states develop, strengthen, and maintain their capacity to respond promptly and effectively to public health risks and public health emergencies. Uganda is prone to outbreaks caused by high consequence pathogens that exert a disproportionately severe impact on public health, and for which effective control measures utilize significant resources.

The COVID-19 pandemic has generally overwhelmed the response capacities and capabilities of the national outbreak response structures. The lessons and experiences provided require that an effective response needs the involvement of more than one health jurisdiction operating under a single response command and control system through multiple entities each with interdependent operational structures. Consequently, the RPHEOC approach, previously envisioned by the NPHEOC, was revisited and the Mbale RPHEOC was commissioned in August 2020, to pilot a regional response mechanism. Lessons learned from Mbale RPHEOC guided the establishment of other RPHEOC in high-risk areas within the country.

The NPHEOC oversees and provides technical guidance to RPHEOC which will in turn mirror activities of the National PHEOC. Implementation will follow the existing government structures and regional integration of activities through the RPHEOC. For successful implementation and establishment of the RPHEOC, the National PHEOC held benchmarking and consultative meetings with relevant stakeholders at National, Regional and District levels as well as other African countries including Nigeria, Ethiopia, Senegal and Gambia.

The recommendations and lessons learned are a basis for the rollout and strengthening of the regional response mechanism. For sustainability, the RPHEOC will be embedded within the Community Health departments of the Regional Referral Hospitals (RRH) in respective regions. Given the uniqueness of Kampala metropolitan RPHEOC, the EOC will be placed within KCCA Directorate of public health. This will strengthen the capacity of the departments through regular training and involvement in public emergency response activities.

Furthermore, additional surge capacity will be drawn from the Ministry of Health-trained Field Epidemiology Training Program fellows within catchment districts. The RPHEOC will function in

outbreak and non-outbreak situations (an "always-on " RPHEOC) to facilitate rapid transition to response mode during outbreaks and improve the cost- effectiveness of the infrastructure investment. This approach ensures retention of technical capacity for data analyses, interpretation, and visualization for informed decisions in regions at high risk for outbreaks.

Purpose and target audience of the guideline

Purpose

This guideline provides national standard guidance for establishing and operationalizing Regional PHEOCs (RPHEOC) in Uganda following expert consultations and systematic reviews of literature, existing standards of practice, and PHEOC information systems and related applications.

Target audience

This guideline is intended to be utilized by stakeholders , organizations, departments, or entities intending to establish and operate RPHEOC.

Abbreviations

IHR	International Health Regulations
PHEOC	Public Health Emergency Operations Center
NAPHS	National Action Plan for Health Security
PHE	Public Health Event
MOH	Ministry of Health
DGHS	Director General of Health Services
DGCIR	Director General Critical Information Requirements
IMT	Incident Management Team
IM/IC	Incident Manager/Incident controller
PHEIC	Public Health Emergency of International Concern
CHD	Community Health Department
NECOC	National Emergency Coordination and Operations center

Chapter 1: Introduction

Background

A Public Health Emergency Operations Center (PHEOC) is a physical location or virtual space where designated emergency management functions are performed in a coordinated manner, supported by appropriate legislation and regulations, and designed and resourced with sustainability in mind (1). It's an information and resources hub for efficient and effective responses (1). In September 2013, the Ministry of Health established a national PHEOC as a requirement of the International Health Regulations (IHR) (2005) in order to timely respond to public health events (2). This direction was strengthened by Uganda's vulnerability to public health emergencies (PHEs) because of its geographic proximity to the Congo Basin epidemic hot spot, placement within multiple epidemic belts, high population growth rates, and refugee influx (2).

The NPHEOC serves as the Ministry of Health focal point for organizing, coordinating, conducting and managing all aspects of PHE preparedness and response utilizing resources in a coordinated, collaborative, and transparent manner (3). Large-scale emergencies like COVID-19 stretched the national outbreak and disaster response capacities and capabilities (4). The lessons and experiences accelerated the implementation of the RPHEOC approach, previously envisioned by the National PHEOC to establish 14 RPHEOC and highlighted in the National Action Plan for Health Security (NAPHS) 2019 - 2023. Uganda has so far established nine (9) Regional PHEOCs namely Mbale, Kampala Metropolitan Area, West Nile, Fort portal, Masaka, Hoima, Mubende, Moroto and Lira.

Legal framework

The legal framework for the RPHEOC establishment is drawn from the National Policy for Disaster Preparedness and Management (October 2010), paragraph 2.1.5 on Epidemics that describes the importance of developing early warning systems through routine surveillance and training in emergency

operations. This policy, which refers to control and management of pandemics, is led by the Ministry of Health (where the RPHEOC is part), in conjunction with Ministry of Agriculture, Animal Industries and Fisheries (MAAIF), Ministry of Water and Environment (MWE), Office of the Prime Minister (OPM), Ministry of Local Government, Uganda Virus Research Institute (UVRI), Joint Clinical Research Institute, Local Government, UN Agencies, Private Sector and Non governmental organizations (NGOs).

The permission to obtain, analyze, and report on public health events is drawn from the Second National Health Policy 2010 that describes the country's health system as a system consisting of communities, Village Health Teams, HCs II, III and IV; general hospitals, Regional Referral Hospitals and National Referral Hospitals. According to NDP III 2021 - 2026, there is a need to expand community-level health services for disease prevention.

Therefore, the Ministry of Health has the mandate to oversee the health emergency management programme, through planning and implementing RPHEOC. This includes coordinating response policies; accessing national disaster management resources; and obtaining funding necessary to respond to public health emergencies.

Scope

The RPHEOC shall serve the districts and cities, under the jurisdiction of the hosting regional referral hospital. The types of emergencies shall be determined based on the potential risks and hazards in the region.

Goal and objectives of the RPHEOC

To build regional capacity for timely and well coordinated preparedness and response to Public Health Emergencies.

The general objective is to organize, coordinate, conduct and manage public health event preparedness and response while utilizing available resources in a coordinated, collective, and collaborative manner

Specific objectives

1. To provide technical support to regional and district coordination and

collaboration mechanisms for preparedness and timely response to public health emergencies.

2. To coordinate communication and information flow between national, regional, and district levels.
3. To strengthen regional capacity to receive, verify, analyze and disseminate public health data for action.
4. Establish a pool of trained workforce in public health incident management systems and emergency management at regional level.
5. Enhance coordination of laboratory sample management and referral for routine and outbreak samples.
6. Mobilize, account for and monitor the usage of available resources including medical countermeasures for preparedness and response to PHEs.

Chapter 2: Establishing a Regional PHEOC

Introduction

The need for establishment of a Regional Public Health Emergency Operation Centre (RPHEOC) shall be informed by the risk and vulnerability to Public Health Events (PHEs) in the region, including environmental disasters and disease outbreaks of animal origin (5). The Director General of Health Services (DGHS) shall direct the National Public Health Emergency Operation Center (NPHEOC) that shall lead and supervise the establishment of the RPHEOC to conduct a comprehensive assessment (3). The NPHEOC shall use the standard PHEOC checklist to assess leadership, location, equipment and human resources. Refer to the WHO PHEOC [checklist in the annex](#).

The NPHEOC and the regional stakeholders shall follow these essential steps when establishing a RPHEOC:

1. Establish a steering committee
2. Conduct and prioritize a regional hazard vulnerability and resulting risk assessment
3. Identify the location and equip the Regional PHEOC
4. Recruit Human resource according to Regional PHEOC Structure
5. Conduct trainings
6. Develop relevant operations documents (eg Handbook, SOPs, newsletters, dash boards, situation reports, spotreps, plans)
7. Collaborate and coordinate with stakeholders
8. Continuous monitoring and evaluation

1. Establish the Steering Committee

The steering committee shall be constituted to include a multidisciplinary team of individuals representing key organizations and agencies involved in emergency management in the region. Examples of such individuals include representatives from local and central government departments or agencies in the region, emergency service providers, public health agencies, security and other essential stakeholders shall be co-opted as needed.

The core functions of this committee shall include but not limited to:

1. Oversee, provide strategic direction and monitor the operations, coordination and implementation of the RPHEOC

2. Develop and endorse policy required to enable prevention, early detection and prompt response in consultation of the DG
3. Ensure resources are available for preparedness and response activities
4. Ensure that core components are in place
5. Review the monitoring and evaluation plans
6. Review a costing and budgeting plan for implementing the RPHEOC

Consider the following proposed composition and adjust it appropriately:

Organization	Officer	Remarks
Regional Referral Hospital	Hospital Director	Chairperson
Security	Regional Army Commander	Deputy Chairperson
Regional Steering committee	DHO/ CHO	ALL
	CAO	Representative [2]
	LC V	Representative [2]
	RDC/ RCC	Representative [2]
	Religious institution	Representative [3]
	Cultural Institution	Representative [1]
	Implementing partner	Representative All
	Development partner	Representative All

2. Conduct and prioritize a regional hazard vulnerability and resulting risk assessment

A multi-hazard risk assessment which is a critical step in identifying, analyzing and prioritizing health risks that enhance the region's resilience towards public health events shall be conducted. This shall include building capacity for multi-hazard health risk profiling and assessing for resource optimization invested in health and social services sectors in order to address public health and emergency problems. To achieve this, the region must invest in risk analysis, strengthen institutional capacities, and implement risk prevention, mitigation, and control interventions. This should be conducted by a team composed of the members to the steering committee, NPHEOC, national task force plus subject matter experts.

3. Identify the location and equip the RPHEOC

For sustainability, the RPHEOCs shall be mainstreamed within the Community Health Department of the Regional Referral Hospital, as this requires minimal investment. This strengthens the community health department's capacity to fulfill its mandate of handling public health emergencies in the region. RPHEOC shall be an epidemic intelligence hub to receive, interpret, and visualize surveillance data from multiple sources in the districts it serves.

Location

The RPHEOC location shall meet requirements for accessibility, security, structural integrity in regards to resistance to natural and human generated hazards. The RPHEOC shall:

- Be housed in a designated space (within the premises of the regional referral hospital), purpose-built space, or set up in a multi-purpose space.
- Have adequate space for the all expected RPHEOC functions, private meetings, surge staff, secure communications, information technology (ICT) equipment and support personnel.
- Be easily accessible to users, with adequate parking for vehicles, adequate security (personnel and surveillance cameras).
- have alternative or backup locations in the case of potential technological and other failures. A business continuity operations plan shall be developed, pretested and practiced.

Key considerations when contemplating the use of space that is routinely given to other purposes are provided below:

- It shall be possible to vacate, convert and activate the space to a RPHEOC in less than one hour

- The location must be secure, or it must be possible to install appropriate security measures within the timeframe of the conversion to a RPHEOC.
- The location shall meet the basic requirements of disaster survivability and access, and must be able to sustain operations during a natural disaster by virtue of robust structure, secure water and food supply and an emergency source of electricity.
- While it may be crowded, there needs to be sufficient space to accommodate the personnel and the equipment required to run it.

Equipping

The RPHEOC shall establish mechanisms to integrate, visualize data, and automate routine geospatial and temporal analyses of surveillance data. The following shall be a minimal type of equipments required in a RPHEOC (Refer to Annex 2)

4. Recruit human resource according regional PHEOC Structure

The regional PHEOC shall have an organizational structure anchored within the Community Health department of the Regional Referral Hospital to run the daily operations of the unit. The structure shall be expanded based on resource availability. The RPHEOC staff shall be aligned as closely as possible with their established skill sets, and received through orientation in the RPHEOC as well as training to their specific functions, roles, and procedures they shall undertake. The staff include those whose purpose is to provide staff support to the emergency response process, are required at varying levels to satisfy the following three criteria.

1. They must have relevant subject matter expertise: they must possess knowledge and Skills about the type of emergency event being managed or the management function they are performing
2. They must have the authority and responsibility to commit or access agency resources
3. They must have been trained in the functions and operations of a RPHEOC.

State the qualification for the officers

All personnel recruited to the RPHEOC must be committed to teamwork and emergency management work, and shall be instructed to respect the fact that teamwork, collaboration and cooperation are absolute requirements. The following staff shall be recruited: community health department head, operations officer, epidemiologist, laboratory and logistics officer, information and alert desk officer.

Community Health Department Head

The community health department head shall be oversee and supervise the RPHEOC on behalf of the regional hospital director. The roles include;

- Command: Responsible for overall response management.
- Operations: Responsible for coordinating all operations to support the Incident Action Plans.
- Planning: Responsible for collecting, evaluating, and disseminating information and for coordinating development of Incident Action Plans (annex 4).
- Logistics: Responsible for procuring facilities, services, personnel, equipment and materials.
- Finance / Administration: Responsible for tracking incident costs, forecasts, and payment of responders, contractors, and claims.

NB: These can be delegated to other staffs within the RPHEOC

Operations officer;

The role of an Operations Officer at an Emergency Operations Center (EOC) is crucial in coordinating and managing emergency response operations.

- Coordinate the day-to-day operation of the regional PHEOC
- Ensure the regional PHEOC plan, process and procedure documents are developed and periodically reviewed and their implementation is monitored
 - Ensure that the key staff, tools/facilities and other resources required for routine regional PHEOC activities are available
 - Ensure that a comprehensive training and exercise program is in place to build and maintain regional PHEOC staff competence and validate regional PHEOC plans
 - Ensure that all information products are disseminated to key stakeholders in a timely manner
 - Manage liaisons with key stakeholders including partners
 - Ensure safety of all regional PHEOC staff both in the regional PHEOC facility and in the field

Response time

- Ensure that the key regional PHEOC staff and tools/facilities needed to support the incident response are available
- Advise the Incident Manager on the utilization of these emergency management

tools and procedures

- Work with the Incident Manager to ensure that all incident response information products are disseminated to key stakeholders in a timely manner
- Work with the Incident Manager to manage liaisons with key stakeholders in the incident response including partners
- Work with the Incident Manager to ensure safety of all incident response staff both in the regional PHEOC facility and in the field
- Work with the Incident Manager to ensure Inter-Action Reviews (IAR) and an After Action Review (AARs) are done during and after incidents respectively and best practices are documented and adopted.

Epidemiologist

- Provides technical oversight to all outbreak investigations
- responsible for dissemination of outbreak investigation reports to support timely response to public health events.
- serves as analyst for EBS and heads the EBS unit at the RPHEOC.
- supports writing of annual research findings/manuscripts and publishes in reputable peer reviewed journals.
- works collaboratively with other disease intelligence experts to provide critical outbreak information and provide timely mitigation measures.
- provides technical support to the surveillance technical officers in the Region.

Peace time

- Coordinate preparedness activities such as Exercises, and After action reviews
- Support in EBS analysis and coordination of the EBS unit at the RPHEOC
- Write annual research findings/manuscripts and publish in reputable peer reviewed journals

Response time

- Together with the Incident Commander, provide technical oversight to all outbreak investigations
- Prepare and disseminate outbreak investigation/Situation reports to enhance situation awareness and support timely response to public health events.
- Collaboratively work with other disease intelligence experts to provide critical outbreak information and timely mitigation measures

- Provide technical support to the surveillance technical officers and rapid response team members in the region
- Monitors and analyzes disease patterns, trends, and outbreaks.
- Provides data-driven insights and recommendations for public health interventions.
- Conducts surveillance and risk assessment of health-related incidents.
- Collaborate with local health facilities and laboratories to track and investigate communicable diseases.

Laboratory and logistics officer

- Provides technical assistance to the RPHEOC
- works with the Regional Laboratory manager, DLFPs and hub coordinators to strengthen laboratory capacity at the different levels in the regional health delivery system in diagnosing IDSR priority diseases.
- works in collaboration with the information and alert desk officer to track specimens through the DHIS2 SMS-reporting module.
- Responsible for laboratory processes for testing including correct sample recommended collection techniques, and transport.
- The laboratory and logistics officer is also responsible for the logistical requirements of the RPHEOC staff and response teams and ensures response teams have the minimum and appropriate logistics to effectively mount systematic responses to PHE. He is also the liaison for the logistics response sub-pillar.

Peace time

- Establish / implement protocols for sample transportation, storage, and analysis.
- Manage the logistics and coordination of laboratory testing and sample collection.
- Oversee the procurement and distribution of required supplies testing
- Ensure the availability of necessary equipment, facilities, and trained personnel for laboratory operations.
- Collaborate with external laboratories and coordinate sample processing and reporting.
- Support in EBS analysis

Response time

- liaise with DLFPs, Hub coordinators, Laboratory managers, and laboratory customers in order to effectively coordinate the laboratory activities during the response
- Manage the logistics and coordination of laboratory testing and sample collection.
- Oversee the procurement and distribution of required supplies testing
- Collaborate with external laboratories and coordinate sample processing and reporting.
- troubleshoots laboratory and specimen transportation issues
- supports coordination of distribution and collection of supplies and materials for specimen transportation hubs including test kits
- coordinates obtaining results from the test laboratory on any specimens submitted.

Information and alert desk officer

- Is responsible for collecting, triaging, and processing outbreak related information from the region
- Works collaboratively with the RPHEOC Laboratory and Logistics officer in tracking highly pathogenic samples through the National Specimen Transportation and Referral Network as well as relaying results to requesting clinicians.
- Responsible for maintaining an up-to-date common operating picture
- Maintains and updates the electronic IDSR (eIDSR) system and supports the service providers or responders to post activity information and alerts through the eIDSR.
- Works collaboratively with the epidemiologist to conduct Event Based Surveillance (EBS).
- Designs and implements the M&E function including tracking progress towards achievement of the RPHEOC objectives.
- provides technical assistance on evaluation design, methods, and implementation.
- Support all data management and reporting aspects of the RPHEOC.
- He/She is also in charge of Geographic Information System (GIS) requests to the RPHEOC and IMT.

Peace time / watch mode

- Works collaboratively with the epidemiologist to conduct Event Based Surveillance (EBS).
- Maintain an up-to-date common operating picture of the region
- He or she maintains and updates the electronic IDSR (eIDSR) system
- Supports the service providers or responders to post activity information and alerts through the eIDSR
- Coordinate the Monitoring and evaluation of the RPHEOC functions

Response time

- Collect, triage, and process outbreak related information from the region
- Work collaboratively with the RPHEOC Laboratory and Logistics officer in tracking highly pathogenic samples through the National Specimen Transportation and Referral Network
- Work collaboratively with the RPHEOC Laboratory and Logistics officer in relaying results to requesting clinicians and epidemiologists.
- Serve as the primary point of contact for information management and communication within the RPHEOC.
- Monitor and gather real-time information from various sources, including government agencies, healthcare facilities, and public health organizations.
- Manage the RPHEOC's communication systems and disseminates information to internal and external stakeholders.
- Create situational reports, updates, and alerts for decision-makers and the public.
- Coordinate with public information officers to ensure accurate and timely release of public health messages.

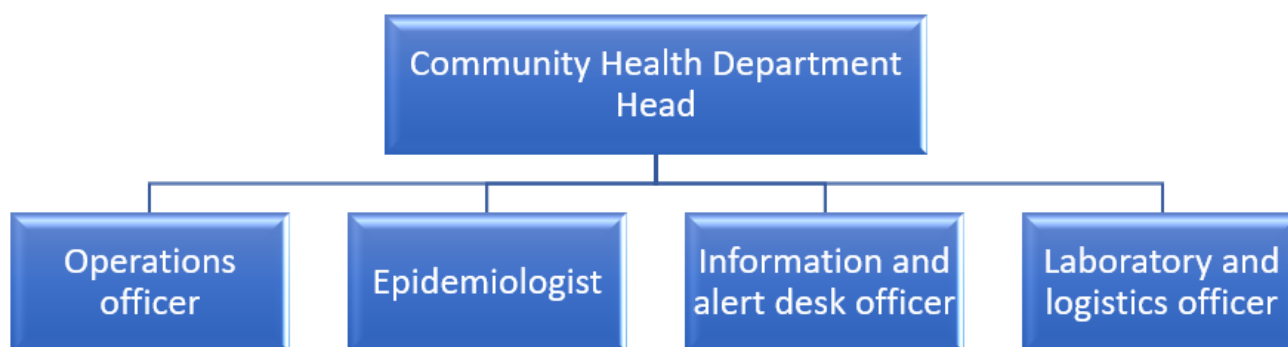


Figure 3: Minimum RPHEOC operational structure

5. Conduct trainings

The RPHEOC shall organize and train its staff on their roles, responsibilities, and the overall functioning of the RPHEOC. The minimum training packages include:

1. Incident command system
2. Foundations of Public Health Emergency Management
3. Key PHEOC components
4. PHEOC Modes of operation
5. Activation and deactivation criteria
6. Planning for the PHEOC (Incident Action Plans, Response plans, 72 hour plans, recovery plans etc)

7. SOPs required for the EOC to function.
8. How to conduct exercises (table top, drills, full scale exercises)
9. After action and intra action reviews
10. In addition, skills specific trainings should be taught including
11. Data analytics
12. Geographical Information Systems etc
13. Continuous capacity development by the NPHEOC ensures that the RPHEOCs utilize skills and competencies gained from the various trainings

6. Develop relevant operations documents

The RPHEOC shall develop documents that outline processes and protocols for operation. Such documents include a handbook specific to the RPHEOC and Concept of operations (CONOPS), Emergency response plan (ERP), Emergency management programme, Incident management system (IMS) SOP, Event or hazard-specific response and management plans among others.

Handbook

The RPHEOC shall adopt the national handbook to describe its structure, functions and procedures for operations. It is the primary resource manual for RPHEOC staff, containing necessary forms, role descriptions, CONOPS and standard operating procedures (SOPs). The plan may include specific annexes, as well as plans for continuity of operations.

Concept of operations (CONOPS)

The RPHEOC shall adapt the national CONOPS that defines the intended operation of the entire emergency response system. A sample CONOPS is provided in **Annex 3**. Unique to the risks, hazards, vulnerabilities, capabilities and operations needs of the region, the CONOPS shall indicate:

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

Incident action plans

Based on assessment of the scale and impact of the public health emergency and the availability of resources and capacities, action plans result in a more effective response. A written incident action plan describes the specific objectives that must be accomplished in succession in order to achieve larger

event management goals. Incident action plans are developed within the planning section, and provide all RPHEOC supervisory personnel with directions for current and future actions. Incident action plans also form the basis for defining operational periods. Operational periods reflect the time required to achieve specific objectives identified in the action plan, and to plan in advance for required resources. The length of operational periods varies according to the needs of particular events, often from a few hours to 24 hours.

Emergency response plan (ERP)

The RPHEOC staff in coordination with the respective DTFs shall develop emergency response plans (ERPs) specific to given public health events. The ERP clarifies the roles and responsibilities of involved districts, departments and agencies, and the resources required. The ERP shall cover periods before, during and immediately following a public health emergency. The components of an ERP are shown in Fig. 1.

Event or hazard-specific response and management plans

Hazard-specific response and management plans shall be based on the prioritized list of threats and hazards determined in the threat assessment process. They shall take into account the regional, national and local regulations or mandates that may apply to specific threats. They may be included as Annexes to the RPHEOC Plan.

The RPHEOC shall develop event or hazard specific response and management plans using a multi-hazards approach, recognizing both the commonalities in responses to different kinds of emergencies and the differences in context-dependent response requirements. For example: some public health emergencies require rapid deployment of personal protective equipment (PPE) for responders, or pharmaceuticals for treatment and prophylaxis. The exact type of equipment and pharmaceuticals depends on the specific contaminant or pathogen causing the emergency. Event or hazard-specific plans may include the following:

- Public Health threats or occurrence thresholds that trigger alerts and escalating levels of emergency response (event and response grading)
- Technical and scientific capacities that need to be engaged (laboratories, subject matter experts)
- Data collection and processing requirements
- Risk communication and community engagement through messaging, public warning, and inter-agency communication processes (partner coordination like National Task

Force, National One Health Platform and Incident Management Team).

- Decision approval processes (Report to Unit Office of Public Health Emergencies at MOH to Division of Public Health Emergencies at MOH to Department of Integrated Epidemiology, Surveillance and Public Health Emergencies to Technical Working Group Meeting (including Partners) to Senior Management Committee of MOH to Health Policy Advisory Committee (HPAC) at MOH reports to Top Management of MOH for Final Approval).
- Legal frameworks and ethical issues e.g Public Health Act, National Action Plan for Health Security, IDSR, and International Health regulations.
- Cultural and religious sensitivities*
- Public health medical countermeasures (MCM)
- Key partner engagement (Partner mapping)
- Standard operating procedures.

Standard operating procedure on Incident management system (IMS)

The RPHEOC shall adopt the national IMS SOP that is a common organizational model for all hazards and emergencies. IMS functions are typically established under the following; management, planning, operations, logistics, and finance and administration.

- The **management function** is an executive, strategic, operational, incident command and coordination mechanism that involves making decisions and coordinating the entire response to PHE.
- The **planning section** is responsible for evaluation of the situation (information gathering and analysis), assessment of the options for dealing with it, and keeping track of resources.
- The **operations section** deals with supporting tactical application of resources.
- The **logistics section** deals with acquiring and deploying resources.
- The **financial and administrative section** tracks expenditure, makes payments, and provides administrative services. NB: This model is flexible and can be adapted to individual events, agencies and jurisdictions, whether local, regional, or national, according to needs and available resources.

7. Collaborate and coordinate with stakeholders

The RPHEOC shall foster relationships and establish protocols for collaboration with stakeholders including external agencies, organizations, and other stakeholders involved in emergency management.

This shall include development of mutual aid agreements, memorandums of understanding (MOUs), and communication channels to facilitate cooperation and resource sharing. Below examples of stakeholders to work with RPHEOC.

1. Development partners
2. Regional Implementing partners
3. Security organs
4. Local government entities
5. Central government entities
6. Cultural institutions
7. Religious institutions

Linkage of the RPHEOC with the NPHEOC

The RPHEOC shall routinely work closely with the NPHEOC in the following scenarios:

During watch mode: The RPHEOC shall on a daily basis prepare and send reports on the common operational picture to the NPHEOC through the VEOCI system and this shall be done by the operations officer. The Common Operating Picture (COP) is a single, continuously updated overview of an incident using data shared between integrated systems for data, information, and intelligence. Other reports submitted include essential element of information (EEI), Critical information requirements (CIR)

During response mode: The RPHEOC shall

The response structure consists of the strategic, operational, and tactical levels. The regional PHEOC is at the operational level. The response pillars under the district task forces contribute to the data, decision and information flow to the regional PHEOC which in turn share with the national PHEOC and national task force.

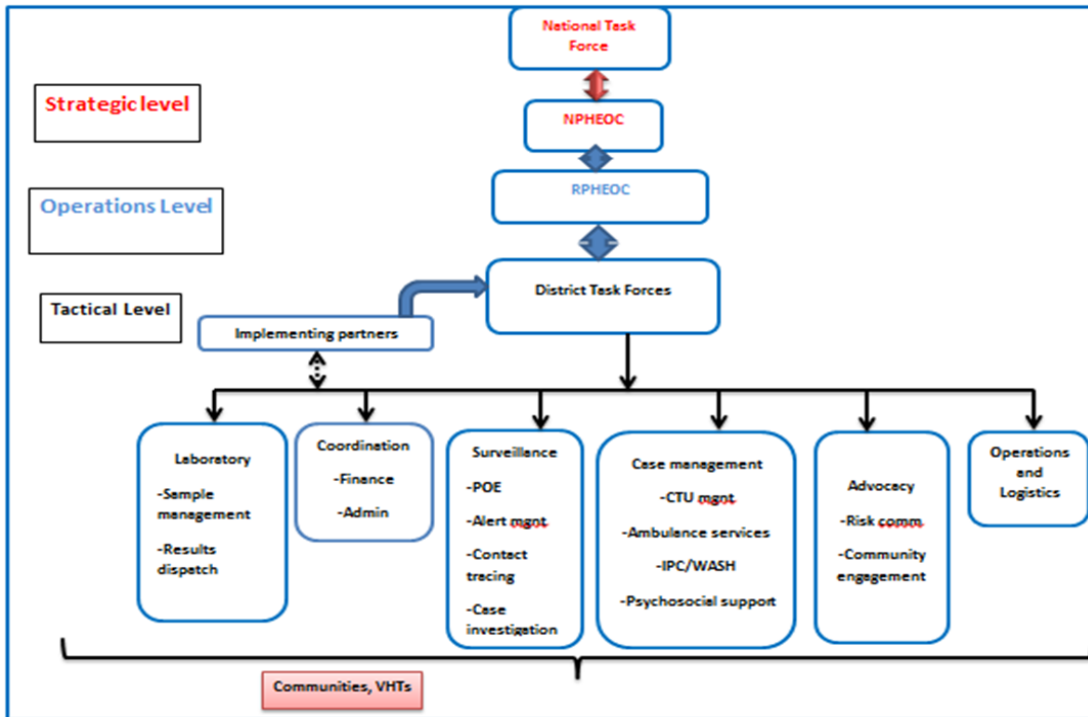


Figure 4: Schematic showing response linkages, national, regional, and district

8. Continuous monitoring and evaluation

The monitoring and evaluation is a powerful means to assess the effectiveness of the operations of the RPHEOC in terms of plans, procedures and infrastructure employed. It is critical in all modes of operation (watch, alert, and response) and provides a basis for continuous improvement of the emergency preparedness and response capabilities.

The RPHEOC shall regularly assess its performance based on the established key performance indicators (KPIs). The RPHEOC with support from the NPHEOC shall regularly assess the functionality, challenges and propose solutions towards addressing the identified challenges/ bottlenecks using a standard checklist (WHO tool). The RPHEOC shall identify lessons learned and implement improvements to enhance her capabilities, operational efficiency, and resilience. benchmarking visits and participating in activities that improve the quality.

Evaluations for the RPHEOC shall be done for all exercises and live activations (often called an ‘after action review’ and intra action reviews) focussing on the effectiveness of the plans and suitability of the RPHEOC. All intra and after action reviews shall be based on the construction of a timeline of what happened, with key events that changed the operational context of the RPHEOC.

Chapter 3: Operating a regional PHEOC

Notification of an incident

Notification of an incident during working hours (Monday to Friday 8 am to 5 pm)

1. When an incident/alert is reported to the RPHEOC, the CHD head immediately informs the hospital director, and the national PHEOC. The appropriate heads shall determine the relevant DRRT, SMEs and inform them of the situation, including other relevant departments.
2. The director of the regional referral hospital and appropriate SMEs shall work with the CHD head to assemble a regional RRT at the RPHEOC. The RPHEOC shall brief the RRT/SMEs on the incident according to available information including the safety and security situation. The regional epidemiologist and relevant SMEs shall gather scientific facts regarding the situation and make recommendations for any additional functional expertise needed in a preliminary investigation report. These investigations may initially take place by telephone.
3. The CHD head shall coordinate additional personnel as dictated by the gravity of the required response according to predefined SME response rosters.
4. The CHD head shall facilitate convening of a meeting of the regional RRT to review information and incident status to aid in determining the level of the MOH response to the incident.
5. The CHD head shall inform the regional Hospital director and national PHEOC manager of any CIRs and provide situation awareness and updates.
6. The national PHEOC manager shall inform the DGHS of the situation who shall in turn activate the RPHEOC according to the level of MOH response – either Alert Mode, or Response Mode.
7. The activation process is initiated by a communication from the DGHS to the National PHEOC Manager (verbal or written) who shall in turn inform the CHD head. The CHD head acts as the incident manager (IM) until a substantive IM is selected by the steering committee. In addition to selecting the IM and person(s) to support the initial operation, the steering committee determines shift assignments. The IM constitutes the IMT with clearly defined terms of reference (ToRs).

Note 1: The RPHEOC core team must ensure that the RPHEOC facility is capable of activation within two hours of confirmation and able to maintain full operation status under emergency conditions.

Note 2: For notification after working hours or during weekends, the RPHEOC shall utilize a toll-free number for contact. Steps as in a) above shall be followed in managing the alert.

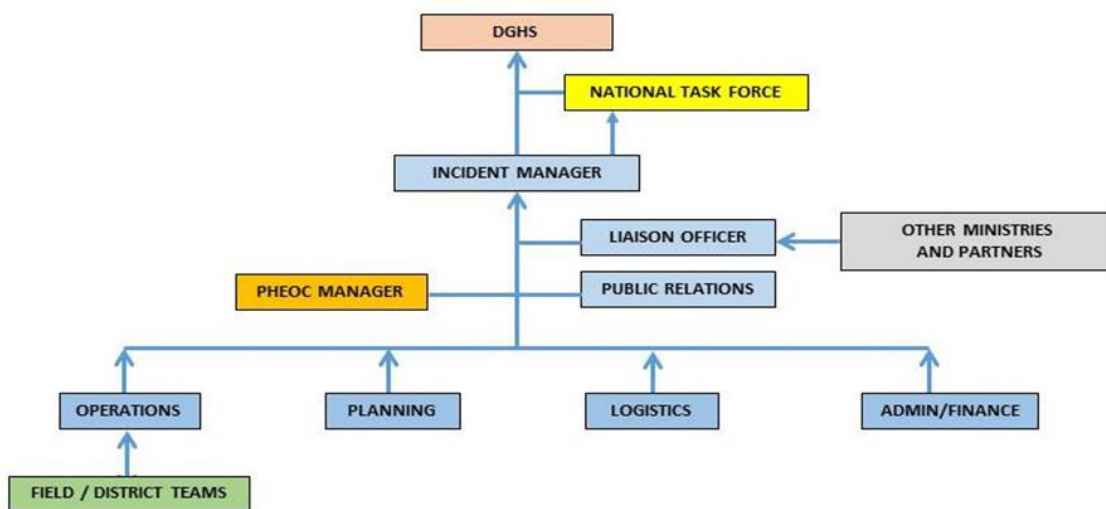


Figure 3: Incident Management System Model

Modes of operation of the RPHEOC

The RPHEOC shall function in either or all the three modes of operation and submit reports to the NPHEOC regularly. These modes of operation shall include; Watch Mode, Alert Mode, and Response Mode. **The SOPs and checklists for activation are included in the appendices.** The DGHS (or designee) shall determine an appropriate mode of operation based on the initial information regarding a public health emergency incident.

1. Watch mode

During watch mode, the RPHEOC team shall maintain situational awareness of incidents requiring potential public health related response in the region. This shall include triage which is the process of gathering, sorting, and prioritizing information in order to identify what is relevant or important. The staff on watch mode shall be on standby 24/7 and ready to develop reports or identify any situation that could develop into an emergency requiring the RPHEOC activation. Examples are:

- Mass gathering event to identify situations requiring public health intervention.
- Reports of suspected cases of disease of unknown etiology for further investigation.
- Monitor reports and track suspected case samples sent to the national referral

laboratories using DHIS2.

- Monitor national or international incidents that may be of interest to the MOH for the purpose of planning, preparedness, and training.
- Unconfirmed rumours or news reports of disease outbreaks or other events requiring verification and follow up.

RPHEOC actions during watch mode include: to

- Maintain situational awareness of incidents requiring potential public health related response actions by receiving and collating information; and data (Event-based surveillance, indicator-based surveillance, rumours monitoring, collation of reports, drawing of maps to summarize and depict data for the situation).
- Inform the national, regional stakeholders and appropriate Subject Matter Experts (SMEs) about potential incidents
- Investigate and verify reports/rumours of public health incidents in the region
- Distribute reports and documents to the designated groups using pre-established distribution lists.

RPHEOC information products during watch mode

- Weekly situation awareness reports include; EBS, items of interest, including rumours of potential public health incidents, in the “Health Alert Log” (electronic record) and displayed at the PHEOC on the status boards.
- Maps of health alerts and other public health incidents
- PHEOC Daily Slides
- Spot reports

2. Alert mode

Alert Mode represents an increased level of awareness for the region. The RPHEOC moves to alert mode when an incident of interest from the Director General’s Critical Information Requirements (DGCIR) list [add to annex -still missing] has occurred resulting in an increased level of awareness, increased contact with other local and central governments and incident-specific planning and initial response activities are initiated.

Alert mode shall be used for emergencies or planned events that would require more than a minimum staff level but would not call for a full activation of all the IMS elements.

The RPHEOC is activated, but only some of the positions need to be filled. It might involve the early stages of an evolving event of public health importance, or it might involve the late stages of an emergency response prior to deactivation of the RPHEOC.

A preliminary assessment is conducted by an appropriate team to assess the situation and determine the level of the region's potential involvement in and recommended response to the incident. Additional logistics support, deployments, data collection and analysis, and coordination with partner representatives may be required.

Along with core RPHEOC staff, SMEs from across MOH and partners shall be called upon to support the assessment and operations. The SMEs provide updates and situational reports as required to the RPHEOC for distribution.

Examples:

- “Enhanced surveillance” at ports of entry to detect importation of cases of infectious diseases of public health concern.
- Report of a disease outbreak from a district, but that may be adequately managed at the district level and needs only some minimal support from the central level.
- De-escalation of a public health event from response mode to alert mode.

RPHEOC actions during alert mode:

- Ensure appropriate staffing level at the RPHEOC
- Ensure assignment of an Incident Manager
- Support the IMS prepare the IAP
- Maintain situational awareness by receiving and collating data on the incident
- Distribute reports and documents to designated distribution lists and coordinate response activities as required
- Provide GIS displays of public health information including physical locations of health facilities and shortest distance routes for quick medical evacuation.
- Develop “heat maps” showing areas of potential spread of the outbreak based on characteristic of disease outbreak
- Display assorted information pertaining to health facility logistics, staffing levels and other information necessary during an outbreak.
- Inform Hospital director and NPHEOC manager with updates as required

- Coordinate conference calls with SMEs and technical partners, as required
- Maintain RRT and SME lists.
- Coordinate deployment of regional RRTs
- Assist with coordinating the release of supplies and equipment
- Monitor specimen transport and laboratory test results through the DHIS2 (eIDSR) system and ResTrack system

RPHEOC information products during alert mode

- Situation Reports (SitReps) as needed
- The IMS organizational structure diagram
- Incident information summaries (charts, tables and map displays of outbreak and other data showing the locations and analysis of available information)
 - The GIS products eg maps showing areas of potential spread of an outbreak based on characteristics of the disease
 - Report to hospital director and the national PHEOC manager
 - Regional PHEOC staffing plan
 - Timelines for planned response activities
 - Task Tracker
 - Resources Tracker

3. Response mode

The RPHEOC shall be activated to the response mode by the DGHS or designee when an incident demonstrates confirmation of a DGCIR with a potential public health threat or any of the conditions which the DGHS deems necessary to activate the IMS resulting in centralized management to include all functional areas i.e., operations, logistics, and decisional support and planning.

Partial activation at the RPHEOC may occur when the PHE does not need full involvement of regional level pillars i.e., the district may have all resources to handle the emergency locally.

Full activation occurs when the emergency requires a coordinated regional and or national response and may have more than one Central and local district engaged following the IMS.

- An Incident Manager is appointed by the steering committee to coordinate a large-scale response with multiple functional teams.
- An IMT is assembled with functional representation from across the region.

- The IM shall determine if a response team shall be deployed to the field to conduct further investigations.

As multiple departments, agencies and partners continue to become involved in the response, the management and team staffing shall evolve even further into a whole of regional response. In addition, any incident of regional significance or public health emergency, or any incident with a confirmed terrorist origin, or a situation indicating a potential terrorist attack may necessitate the region moving to response Mode.

Examples of response mode activation:

- Confirmation of a VHF outbreak
- Multi-district cholera outbreak with high case fatality rate
- A cluster of Multi-Drug Resistant Tuberculosis (MDR TB) cases / deaths
- Any public health incident that requires response beyond district capabilities and requires national level assistance for the response
- Notification of sustained human-to-human transmission of a potentially pandemic virus/agent/pathogen
- Man-made incidents and natural disasters and other incidents causing loss of life and large-scale evacuations and requiring significant national involvement
- Credible threat of terrorist attack against Ugandan personnel, facilities, and assets

RPHEOC actions during response mode

- Activate RPHEOC and appropriate staffing level
- Support the IMT to develop and execute the IAP
- Receive and collate data on the incident
- Distribute reports and documents to designated distribution lists and coordinate response activities as required
- Provide GIS displays of public health emergency information related to the incident
- Share situation information with the steering committee and DGHS
- Coordinate conference calls and meetings to facilitate the response
- Coordinate requests for assets, equipment, ground vehicles and personnel
- Facilitate notification to WHO according to in accordance with IHR 2005
- Solist for essential element of information (EEI); This is information that is required for decision-making in a timely manner across all IMS functions and it includes;

standard data and information items for routine situational awareness used to provide context and contribute to analysis, included in response situation reports and facilitate identifying response activities and materials requirements.

- Solist for critical information requirements (CIR); This is a high-priority subset of EEIs, and is used to trigger immediate, mandatory action. They are used to inform decision-making, linked to decision points for executing a plan, trigger Rapid Response Team deployment and task force activation.

RPHEOC information products during response mode

- Situation Reports
- Maps
- DHIS2 alerts through the health alert network
- Chart, table and map displays of outbreak and incident data
- IAP
- IMT Organogram
- Notification to WHO according to in accordance with IHR 2005
- PHEOC staffing plan
- Additional CIRs
- Timelines for planned response activities
- Staff Rhythm
- Task Tracker
- Resources Tracker

Activation and deactivation of the RPHEOC

1. Authority for activation

The authority to activate the RPHEOC lies with the DGHS and or the national PHEOC Manager, under conditions specified by the DGHS. The following actions are taken to activate the RPHEOC in response to notification of a public health incident (refer also to SOP Checklist).

2. Conditions for activation

The RPHEOC shall be activated whenever one or more of the following conditions exist:

- Any suspected, reported, or confirmed outbreak of epidemic potential or any Public

Health Emergency of International Concern (PHEIC)

- Significant number of people at risk i.e. a large-scale disease outbreak
- Any reportable incident under IHR 2005
- Response coordination required because of: Geographical dispersion (large or widespread event/outbreaks reported across a large or disperse geographical area), multiple emergency sites and several responding agencies
 - Media interest – significant media interest in a particular incident
 - Resource coordination required because of limited local resources, and/or significant need for outside resources
 - Public health threat - uncertain conditions posing a significant potential threat to people, property and/or the environment ie Possibility of escalation of the event and unknown extent of threat
 - Reputational risk to the government

3. Criteria for activation

The RPHEOC shall be activated upon declaration of a PHE. Activation of the RPHEOC signifies the existence of a potentially serious public health threat, and the commitment of the region to provide resources to respond. In the event that the RPHEOC shares critical information requirements, the NPHEOC shall inform the DGHS (designee), who in turn will activate the national task force to oversee the response and the regional task force to coordinate and respond to the emergency at regional level. The regional incident management team through the RPHEOC shall from time to time update the NPHEOC on the progress of the response through the national incident management team meetings overseeing the operations at national level. The regional task force shall meet on a weekly or monthly basis depending on the response phase, receive and discuss the response report from the regional incident management team.

4. Criteria for deactivation

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Routine activities at the RPHEOC

1. Continuous Risk assessments

The RPHEOC shall periodically conduct risk assessments using the strategic multi hazard risk assessment using the Strategic Tool for Assessing Risk (STAR). This tool maximizes resource

utilization and prioritizes actions for managing potential emergencies through an all-hazard, participatory and whole-of-society approach to strategic risk assessment. The STAR methodology includes six key steps that could be adapted to specific hazards and scenarios such as displaced populations and mass gatherings. By engaging key stakeholders in a workshop to develop an emergency risk profile and prioritize risk prevention and mitigation actions, the region can enhance their preparedness and response readiness to emergencies. **Refer to the PHEOC hand book for risk assessment procedure.**

2. Continuous surveillance activities

The RPHEOC shall routinely manage surveillance activities within the region. These activities include collecting (using DHIS2, eHMIS, eIDSR, mTrac, VEOCI, ODK, GoData, EPIVAC, and RDS), collating and analyzing (using MS excel, STATA, EPI INFO) all data on potential public health threats. The generated information is displayed on boards, screens and or wall charts to demonstrate the situational awareness of potential and real threats. The information is also disseminated to relevant stakeholders for action in the form of SitReps and epi bulletins. This information is password protected and backed up to prevent bridge or loss. The following are major types of public health threats data sources that form an integral part of continuous surveillance early warning systems.

Event-based surveillance

The Event Based Surveillance (EBS) information includes unstructured information on health events or risks from multiple sources that could be formal and informal. Examples of sources of information include:

- Print and electronic media reports (television, internet, newspaper, radio)
- Information from international health agencies and organizations (WHO, Afro Regional Office of the WHO [AFRO], CDC, Médecins Sans Frontières [MSF], Food and Agricultural Organizations [FAO] etc)
- Information from other ministries (Ministry of Agriculture, Animal Industries, and Fisheries [MAAIF], Ministry of Water and Environment [MWE], OPM, Ministry of Education and Sports [MOES], etc)
- Internet based bio surveillance databases (e.g., EIOS, ProMed Mail, Health Map, Global Public Health Intelligence Network [GPHIN])
- Uganda National Integrated Early Warning System (UNIEWS) bulletin
- Early Warning Alert and Response Network (EWARN)
- Meteorological reports

- Social Media scanning (Facebook, TweetDeck, others)
- Public in-calls to the PHEOC hot lines and core staff
- Walk-ins

Indicator-based surveillance

The Indicator Based Surveillance (IBS) information includes structured data routinely collected on priority diseases mainly from health facilities and analyzed to monitor trends and identify potential threats and outbreaks. Examples of sources of information include:

- DHIS2 Health Alert System (eIDSR)
- National Specimen Referral Network Tracking System
- MTRAC/HMIS immediate (HMIS 033a form), weekly (HMIS 033b form), monthly reports (HMIS 105 and HMIS 108 forms) and quarterly reports (HMIS 106 form)
- Weekly Epidemiological Bulletin
- Specific surveillance or other reports from other Divisions/Programs or special projects within the MOH
- Laboratory data from national and regional reference laboratories (Central Public Health Laboratory [CPHL], UVRI, National TB Reference Laboratory [NTRL], EPI)

Note: Refer to the national PHEOC handbook on detailed description of sources of public health threat data.

Essential elements of information

The Essential Elements of Information (EEI) is required for timely decision-making and includes standard data and information items for routine situational awareness. It provides context and contributes to analysis, includes response situation reports and facilitates identifying preparedness and response activities. Refer to Annex for list of EEIs

Critical information requirements

The critical information requirements (CIRs) are used to trigger immediate, mandatory action such as issuing SpotReps and SitReps. These CIRs facilitate situational awareness and decision-making. The CIRs are categorized into standing CIRs which are used during watch mode and response specific CIRs used during response mode. Please refer to annex for list of CIRs

3. Conduct refresher trainings and simulation exercises for staffs and key stakeholders

Trainings

From time to time, the RPHEOC shall conduct a training needs assessment of the knowledge, skills and abilities (competencies) staff and key stakeholders require to work effectively. The NPHEOC shall support the refresher training needs and train newly recruited staff. The CHD head or designee shall from time to time identify shortfalls and formulate training objectives, design, develop, deliver, evaluate and project the programme of training. **Refer to minimum training package in chapter 2**

Simulation exercises

The unit shall periodically conduct either PHEOC internal exercises or those involving external exercises. They shall be carried out by the RPHEOC staff and regional health response partners in conjunction with other sectors involved in emergency management. These exercises include regular tabletop exercises, drills and full-scale exercises that test the RPHEOC's readiness, identify areas for improvement, and enhance coordination among personnel.

The RPHEOC shall utilize exercises as a primary tool to train staff. such exercises are either;

1. Discussion-based exercises, which are useful for learning and understanding plans and procedures
2. Operational exercises, which are useful for practicing and evaluating response and management procedures.

4. Surveillance and laboratory information flow management

The RPHEOC shall manage surveillance and laboratory information across different levels of the health system in the region. The watch staff shall collect, triage, verify, analyze, interpret and disseminate information to the RPHEOC head for public health action.

During response, the RPHEOC shall manage Information flow as follows

- The IMS chain of command and control provides a framework for the orderly flow of communication. Flow of information will follow the chain of command within the IMS
- The policies and procedures associated with data and information flow and management are planned and coordinated based on the existing MOH policy, procedures and structures.
- The plan for information flow during the response is implemented by the Incident Manager with support from the RPHEOC.
- Teams deployed to the field will send situation update reports on a regular basis to

the Incident Manager through the RPHEOC for action. Where regional PHEOCs exist, the deployed teams will work with the RPHEOC to submit reports to the National PHEOC.

- Under the IMS, the Planning Section coordinates development of the IAP with information from other IMS sections, and SMEs. Once the IAP is finalized, the IM will present it to the NTF for approval.
- All reports from the IMT to the media will be reviewed by the IM, SMEs, the MoH PRO and approved by the DGHS before release to the public.

5. Continuous monitoring and evaluation

The RPHEOC shall use the 7-1-7 concept to improve early detection and rapid control of public health threats. Early and effective detection, notification and response are crucial to containing outbreaks of infectious disease and other public health threats before they escalate. Improving the identification and control of these threats requires setting ambitious but achievable targets and ensuring continuous evaluation and performance improvement. Refer to the 7-1-7 standard operating procedure.

Chapter 4: Costing, funding and sustaining a RPHEOC

The RPHEOC is not a one-time investment. It is part of a programme intended to enhance and sustain institutional readiness. The costs of a RPHEOC include all the aforementioned aspects of planning and development required to achieve the minimum necessary scope and scale as determined by an assessment of anticipated needs. Refer to the table titled Setting up a RPHEOC (in the annex 5) for

Setting up a RPHEOC. In addition, further consideration shall be given to future enhancements that move the RPHEOC towards a more optimal level as requirements change and new technological opportunities mature.

RPHEOC development requires an understanding of fixed and recurring cost categories. The fixed cost categories include but are not limited to costs for acquiring and maintaining physical infrastructure and related utilities, ICT investments, and basic RPHEOC staffing. Recurring variable cost categories include but are not limited to meetings, consultant fees, training, equipment, materials, travel and transport, and surge staff costs.

Sustainability of the RPHEOC shall be achieved primarily through government support and integration into the mainstream government of Uganda health structure. To ensure that the RPHEOC fits within the existing structure, integration into the Community health department of the Regional referral hospitals is a best fit, considering its mandate of management of public health emergencies.

Additional support, in the form of surge staff, financial support and equipment during outbreaks can be received from development and implementing partners. This in turn shall contribute to the capacity building and transfer of skills.

The RPHEOC shall also provide a platform for mentorship of public health students from local universities on outbreak investigation and management. This in turn shall boost human resource availability for the RPHEOC in both peace and outbreak situations.

The activities of the RPHEOC shall largely be dependent on the geographical scope, existing and anticipated emergencies as per the risk assessment findings.

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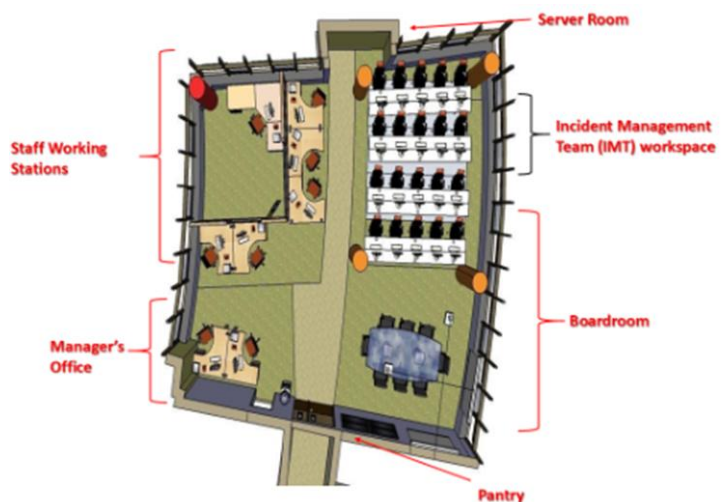
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Annex (needs re-organisation as indicated)

Annex 6 : Infrastructural designs from Masaka RPHEOC



Masaka RPHEOC building in Masaka Regional Referral Hospital



Masaka RPHEOC situation room in Masaka Regional Referral Hospital

Masaka RPHEOC Tea room in Masaka Regional Referral Hospital



Annex 5 : Setting up a RPHEOC

No	Activity	Objective	Minimum Cost (per activity)	Maximum cost (per activity)	Comments
1	Benchmarking activity at the Mbale/Kabarole RPHEOC	Provide a glimpse of the EOC operations at Sub-national level.		UGX 8,000,000	Funds needed - Per diem - Potential staff earmarked for the proposed EOC to visit another already operationalized EOC
2	Regional Stakeholders meeting	To co opt all regional and district technical and political stakeholders	UGX 35,000,000	UGX 65,000,000	Funds needed - Per diem, meeting venue, facilitators, travel costs
		Form a regional task force for epidemics			
3	Field visit of the Public Health Emergency Management technical teams	Engage Regional Referral Hospital Senior management & identify space for RPHEOC.	UGX 5,000,000	UGX 5,000,000	Per diem needed, fuel,

		Engagement/ designation of RPHEOC staff- Engage districts			
4	Modify Space for RPHEOC	Equip the EOC with necessary equipment	UGX 11,000,000 (only refurbishing space at the community health departments of the respective RRHs)	UGX 300,000,000 to build a new structure at a designated area in the hospital.	Funds needed to ensure consistent power supply
5	Provide ICT and equipment support for the RPHEOC including power backup	Ensure smooth running of the RPHEOC	UGX 75,000,000	UGX 75,000,000	Funds needed
6	Provide Furniture for the RPHEOC	Ensure smooth running of the RPHEOC	UGX 15,000,000	UGX 15,000,000	Funds needed
7	Basic IMS training of the RPHEOC	To build skills, operationalize the RPHEOC	UGX 7,887,000	UGX 11,000,000	Funds needed for meetings
8	Risk profile assessment for the RPHEOC	One exercise to provide a regional epidemic profile for preparedness and response.	UGX 11,287,000	UGX 18,000,000	Funds needed - Meeting

9	Development of operational SOPs and Concept of Operations and Work plan	Engage the team to develop regional specific CoNOPs.	UGX 7,887,000	UGX 16,000,000	Funds needed for meetings
10	Commissioning ceremony of the RPHEOC	To commission the regional PHEOC	UGX 95,000,000	UGX 150,000,000 including all regional stakeholders, partners and donors.	Funds needed - Meeting
11	Continuous support supervision for the RPHEOC	To strengthen operational capacities of the RPHEOC, both virtually and physically.	UGX 31,548,000	UGX 31,548,000	Funds needed for Perdiem The NPHEOC would have to visit the RPHEOC once every quarter for mentorship = 4 Quarters in Year one

ANNEX 1
WHO EOC Checklist

Annex 2
EOC Equipment Types

Communication Equipment:
Toll-free Landline phones Computers Laptops Printers Internet connectivity (routers, modems) Projectors TV Screens Teleconferencing equipment Mobile phones Backup power supply (UPS)
Information Technology (IT) and Data Equipment:

Servers, switches, cables,
Access Points
Firewalls, Antivirus,
cybersecurity systems
EOC management software
(Veocci)
Data storage & backup
solutions
GIS mapping tools/ Garmin
Data analysis tools/
software
Office 365 Subscriptions

Safety and Security
Equipment:

First aid kits
Fire extinguishers
Security surveillance
cameras (CCTV)
Access control

systems(Fingerprint Access)
Facility Management Equipment:
Public address system Ergonomic furniture Signage Backup power generators Restroom facilities

