

Handbook on Public Health Emergency Operations Center



IEDCR

Institute of Epidemiology, Disease Control & Research (IEDCR)
Dhaka, Bangladesh

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Message



Bangladesh has been experiencing increased frequency and complexity of public health emergencies of varying backgrounds as is the case in many other countries of the world. Establishment of a Public Health Emergency Operations Center (PHEOC) at the Institute of Epidemiology, Disease Control and Research (IEDCR) was meant to provide necessary infrastructure and facilities in enhancing a centralized, yet well-coordinated response to a public health emergency. At this point, the publication of the 'Handbook on Public Health Emergency Operations Center (PHEOC)' will play a vital role for the smooth and standardized functioning of the PHEOC and therefore, a very welcome move.

I feel happy to become a part of this great achievement of publication of this handbook. I believe, this huge task will take our capacity to respond to public health emergencies to a new height. I congratulate the IEDCR team and all the contributors for this commendable achievement. Now we will need to ensure standard practice following this handbook for the response to the public health emergencies.

Thank you

A handwritten signature in black ink, appearing to be 'Abul Kalam Azad'.

Professor Dr. Abul Kalam Azad

Director General of Health Services

Foreword



The world is at risk of more outbreaks of emerging and re-emerging diseases and diseases of pandemic potentials than ever as the consequences of global warming, climate change, unplanned urbanization, deforestation and mass displacement of population (e.g. Forcefully Displaced Myanmar Nationals). In the wake of increased frequency of public health emergencies nationally and globally- the importance of responding to those at the earliest is more crucial than before. Therefore, Bangladesh like many other developing countries needs to be prepared to organize an effective response in the event of a public health emergency. Public Health Emergency Operations Center (PHEOC) based on Incident Management System (IMS) is an internationally recognized structure that coordinates all the response functions to prevent, detect, control and manage any public health emergencies. The Institute of Epidemiology, Disease Control and Research (IEDCR) launched the PHEOC in June 2017 for the first time in Bangladesh and activated (response mode) to respond to the chikungunya outbreak. The future plan is to scale up the facility into an all hazard PHEOC from where all other future incidents will be coordinated. Development of handbook will guide the standardized functioning of PHEOC on how to organize, activate and operate the PHEOC as well as coordinated response to public health emergencies. I believe that this handbook has come on at a critical juncture by clearly describing the mission, authority and procedures for the center, as well as the management, activation and operation of the PHEOC in the day to day monitoring of activities and responses to a public health emergency.

The process of developing the handbook went through various stages and involved dialogue and engagement of a number of individuals and institutions. The processes included zero drafting, desk review, discussions, serial PHEOC core committee discussions and review and a finalization workshop involving resource persons from concerned stakeholders. The IEDCR

would like to express sincere thanks and gratitude to all those involved in the development and completion of the handbook at different stages. As this handbook is a living document, IEDCR looks forward for their support for necessary updating of this handbook in future. We are thankful to US-CDC for providing the technical and financial support for this handbook.

Over time, similar handbook will be developed for District Rapid Response Teams (DRRTs) and Upazila Rapid Response Teams (URRTs) with a common operational framework for all public health emergency responses in Bangladesh.

I would like to acknowledge and extend my gratitude to the PHEOC core committee members, the resource persons from different organizations who contributed to the development of the PHEOC handbook. Our special gratitude to Ms Sharanya Krishnan, Emergency Management Technical Advisor, US-CDC for her all through expert technical support. Lastly, the concerned officers and staff members of IEDCR are highly appreciated for their time and various inputs to the document.

I believe that all concerned will find this document to be useful in responding to Public Health Emergencies in our country.



Professor Dr. Meerjady Sabrina Flora

Director, IEDCR

Acronyms

CDC, DGHS	Communicable Disease Control, Disease Control Unit, DGHS
CDC	Centers for Disease Control and Prevention, Atlanta, USA
CONOPS	Concept of Operations
CIR	Critical Information Requirement
CS	Civil Surgeon
DGHS	Directorate General of Health Services
DRRT	District Rapid Response Team
EOC	Emergency Operations Center
EPR	Emergency Preparedness and Response
GIS	Geographic Information System
IAP	Incident Action Plan
ICT	Information and Communication Technology
IDSR	Integrated Disease Surveillance and Response
IEDCR	Institute of Epidemiology, Disease Control and Research
IHR	International Health Regulations
IM	Incident Manager
IMS	Incident Management System
IT	Information Technology
LNO	Liaison Officer
MoH&FW	Ministry of Health & Family Welfare
NCDC	Non-Communicable Disease Control
NRRT	National Rapid Response Team
PHEs	Public Health Emergencies
PHEIC	Public Health Emergency of International Concern
PHEOC	Public Health Emergency Operations Center
PHI	Public Health Incident
PIO	Public Information Officer
RRT	Rapid Response Team
SITREP	Situation Report
SMEs	Subject Matter Experts
SOPs	Standard Operating Procedures
TOR	Terms of Reference
TTX	Table-Top Exercise
TWG	Technical Working Group
UHFPO	Upazila Health & Family Planning Officer
URRT	Upazila Rapid Response Team
WHO	World Health Organization
WHO, SEARO	World Health Organization, South-East Asia Regional Office

Table of Contents:

1. Background:	1
2. Vision of the PHEOC:	1
3. Mission of the PHEOC:	1
4. Purpose of the PHEOC:	2
5. Scope of the document:	2
6. Objective of the document:	2
7. Oversight and Strategic Guidance of the PHEOC:	3
8. PHEOC Stakeholders:	3
9. PHEOC Modes of Operations:	5
A. Watch Mode:	5
Roles and responsibilities of the PHEOC personnel during Watch Mode:	6
PHEOC Manager:	6
Planning Section (day to day):	6
Operations Section (day to day):	6
B. Alert Mode:	7
C. Response Mode:	8
Roles and responsibilities of PHEOC staff in Response Mode:	9
Incident Manager (IM):	9
Public Information Officer (PIO):	10
Liaison Officer (LNO):	11
Planning Section (Response):	11
Planning Section Chief:	11
Operations Section (Response):	12
Operations Section Chief:	12
Rapid Response Teams (RRT):	13
Logistics Section:	13
Logistics Section Chief:	13
IT Branch:	14
IT Officer:	14
Administrative and Finance Section:	15
Administrative and Finance Officer	15
10. PHEOC Concept Operations (CONOPs):	16
CONOPS Levels:	16

PHEOC Activation Levels:	18
Grading of response:.....	18
Staffing:	18
Shift during activation:.....	18
Responsibilities during shifts	19
11. De-activation/ De-escalation of the PHEOC:.....	19
12. After Action Review:	19
Annex 1: Structure and TOR for the IEDCR PHEOC Core Committee	21
Annex 2: Hotline Call Reporting Template and TOR for the officers on Hotline phones	22
Annex 3: Template of Critical Information Requirement (CIR)	24
Annex 4: Template of Spot Report for DRRT/ URRT	26
Annex 5: Template of Incident/ Event Verification/ Situation Report	27
Annex 6: Sample Collection Form.....	28
Annex 7: Monthly Duty Roster Template for Hotline and Sample Collection	30
Annex 8: SOP of PHEOC Activation.....	32
Annex 9: SOP of Terms of Reference of Activated PHEOC	33
Annex 10: Standard IMS Organogram of PHEOC in Response Mode.....	34
Annex 11: Template of an Incident Action Plan (IAP).....	35
Annex 12: Composition and TOR of NRRT.....	38
Annex 13: Composition and TOR of DRRT.....	39
Annex 14: Composition and TOR of URRT.....	41
Annex 15: Template of Shift Change Brief with TOR (Response Mode)	43
Annex 16: SOP of De-activation/ De-escalation of the PHEOC	45
References:	46

LIST of Figures:

Figure 1: Organogram of PHEOC at Watch Mode	6
Figure 2: Organogram of PHEOC at Response Mode	9
Figure 3: Level of IMS Response, PHEOC	16
Figure 4: Level of PHEOC Activation	18

1. Background:

Bangladesh is a tropical country located in South Asia. The country is bordered by India in the west, north and east, a small part by Myanmar (Burma) in the south east and on the south by the Bay of Bengal. Most of the nation's area is flat and low-lying, prone to flooding. The country is also vulnerable to various natural calamities (tidal surge, cyclones) which roaring in from the Bay of Bengal. The world is at risk of more outbreaks of emerging and re-emerging diseases and diseases of pandemic potentials than ever as the consequences of global warming, climate change, unplanned urbanization and deforestation. In addition, people around the world are travelling more both domestically and internationally. Bangladesh experiences several infectious disease outbreaks such as; diarrhoeal diseases, dengue, chikungunya, nipah and hepatitis etc. These diseases cause morbidity and mortality of the population. Today, Bangladesh is also addressing a humanitarian crisis of Forcefully Displaced Myanmar Nationals (FDMNs) and is addressing public health emergencies in the Cox's Bazar and Bandarban districts. Given the frequency and magnitude of these incidents, there is a need for a public health emergency operations center (PHEOC) in IEDCR. The PHEOC will augment the capacity of the national response for disease outbreaks and other public health emergencies. It will also enhance the national health system by developing an early warning system, supporting effective coordination of responses and enhancing real-time communication at all levels.

The Institute of Epidemiology, Disease Control and Research (IEDCR) is the national focal and mandated institute and the Director is the focal person under Ministry of Health & Family Welfare (MOH&FW) for leading outbreak investigation, disease surveillance, training and research. IEDCR serves as National influenza centre which was accredited by WHO in 2007. In the recent years, IEDCR successfully conducted more than hundreds of outbreak investigations. Strengthening the integrated web-based disease surveillance along with other surveillances and outbreak investigations are the key goals of IEDCR. Setting up an Incident Management System (IMS) in PHEOC to coordinate Emergency Preparedness and Response (EPR), is crucial to build a unified command, control & coordination system.

2. Vision of the PHEOC:

To establish PHEOC as center of focus of all disease related emergency preparedness and response.

3. Mission of the PHEOC:

To ensure healthier human life of Bangladesh by mitigating public health hazards by implementing, coordinating, and improving public health emergency preparedness and response in Bangladesh.

4. Purpose of the PHEOC:

The PHEOC is primarily to serve as a hub for coordinating the preparation for and response to Public Health Incidents (PHIs). The PHEOC brings together multi-stakeholder, multi-disciplinary and multi-sectoral experts to coordinate responses to Public Health Emergencies (PHEs) in a truly structured manner using the Incident Management System (IMS). To serve the expected purpose of PHEOC, the recommended functions are as follows:

- 1) Daily monitoring of health data (daily disease and media reports, both electronic and print) to detect any potential or evolving PHEs
- 2) Collecting, analysing and reporting situational information/public health emergency data to relevant stakeholders for action
- 3) Coordinating deployment and mobilization of rapid response team in the field
- 4) Managing and coordinating public health emergency response operations
- 5) Developing briefings to the Incident Management Team (IMT), the MOH&FW and relevant stakeholders
- 6) Facilitating routine feedback to upazillas, districts and other stakeholders
- 7) Receiving and disseminating public health alerts and warnings and providing emergency health information and instructions to the concerned authority
- 8) Providing crisis and emergency risk communication (CERC) support to the community to create awareness, outreach and social mobilisation
- 9) Identifying, prioritizing, acquiring, deploying and tracking of resources such as human, material and financial resources to support all PHEOC functions

5. Scope of the document:

This document summarizes the operations of the PHEOC in preparedness and response to any public health incidents. This document also outlines the management and operations of the PHEOC including roles and responsibilities of the personnel.

6. Objective of the document:

The objective of this document is to provide step by step guidance for the operations of the PHEOC during any Public health event/ incident based on the IMS structure. These include coordination among the public, private sectors and development partners'; as well as among resources, information management and communication.

7. Oversight and Strategic Guidance of the PHEOC:

The guidance and oversight of PHEOC activities and functions will be through the following committees. Approvals and guidance will come from IEDCR, however if there are activities that require higher levels of approval, those will be shared with the steering committee.

1. Steering Committee
2. PHEOC Core Committee/Technical Working Group

1. Steering committee

(Headed by Director General, Health Services, MOH&FW; Member Secretary: Director IEDCR)

Responsibilities:

Provide endorsement of PHEOC activities as needed

2. PHEOC Core Committee/ (Technical Working Group)

(Headed by Director IEDCR, Member Secretary: PHEOC Manager)

Responsibilities:

To develop public health emergency management plans and SOPs that will be utilized by PHEOC

The structure and the Terms of Reference (TOR) of the core committee (Annex 1)

8. PHEOC Stakeholders:

The PHEOC is a centralized facility which will involve collaboration and coordination with other partners and ministries depending on the nature of the incident. The following is a list of key stakeholders but is not limited to these partners.

Ministries need to be involved:

1. Office of the Prime Minister
2. Ministry of Health and Family Welfare
3. Ministry of Planning
4. Ministry of Law, Justice and Parliamentary Affairs
5. Ministry of Social Welfare
6. Ministry of Finance
7. Ministry of Disaster Management and Relief
8. Ministry of Home Affairs
 - Bangladesh Police
 - Border Guard Bangladesh (BGB)
 - Bangladesh Ansar and Village Defense Party
 - Bangladesh fire service and civil defense

9. Ministry of Defense
 - Army Medical Corps (BD Army)
10. Ministry of Fisheries and Livestock
11. Ministry of Agriculture
12. Ministry of Environment, Forest and Climate Change
13. Ministry of Local Government, Rural Development and Cooperatives
14. Ministry of Science and Technology
15. Ministry of Posts, Telecommunications and Information Technology

Ministry of Health and Family Welfare:

DGHS

1. IEDCR
2. Communicable Disease Control
3. Non Communicable Disease Control
4. Institute of Public Health
5. Institute of Public Health Nutrition
6. Primary Health Care-Maternal, Neonatal, Child & Adolescent Health
7. Hospitals and Clinics (Public & Private)
8. Management of Information System
9. Planning & Research
10. Bureau of Health Education
11. District Health Manager

IEDCR:

1. Director (Focal point, IEDCR PHEOC)
2. All Chief Scientific Officers
3. All Principal Scientific Officers
4. All Senior Scientific Officers
5. All Medical Officers
6. PHEOC Manager (Assigned)
7. One Health Secretariat Representative
8. Relevant Project Personnel

Important international stakeholders:

1. World Health Organization
2. Centers for Disease Control and Prevention
3. United Nations International Children's Emergency Fund
4. Food and Agriculture Organization of the United Nations
5. Other development partners/ agencies as and when necessary

9. PHEOC Modes of Operations:

The PHEOC operates in three modes:

- A. Watch mode
- B. Alert mode
- C. Response mode

A. Watch Mode:

During watch mode the PHEOC will conduct the following activities:

- I. Collection of (PHI) information
- II. Preparation of PHI reports and documents
- III. Early notification

I. Collection of PHI information:

At present:

- a) Daily Media Monitoring Data
- b) Hotline Data of IEDCR (Call Reporting Template and TOR: Annex 2)

Recommended:

- a) *Regular Lab data*
- b) *Reports from URRT, DRRT & NRRT*
- c) *Routine Surveillance Data & Report*
- d) *Web Based & Event Based Diseases Surveillance Data & Report*
- e) *Reports from other Departments/Ministries (Formal/Informal)*

II. Preparation of PHI reports and documents:

- a) Prepare CIR (Annex 3)
- b) Collect Spot Report (when required) (Annex 4)
- c) Prepare SITREP (when required) (Annex 5)
- d) Prepare and update handbook and SOPs

III. Early notification:

Director (Focal point, IEDCR PHEOC)

Organogram of PHEOC at Watch Mode:

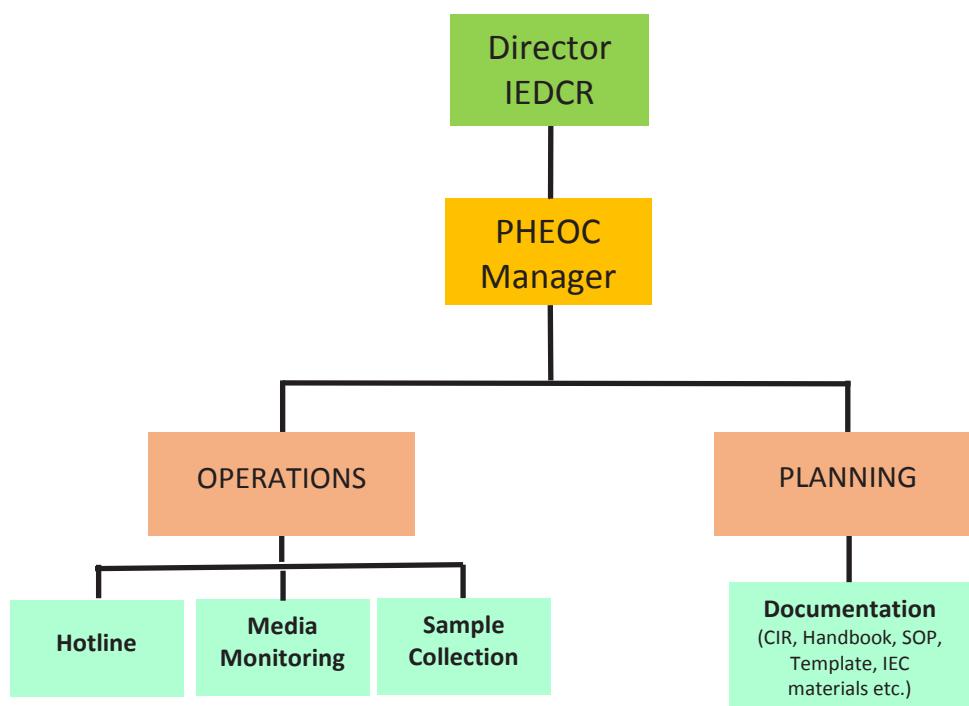


Figure 1: Organogram of PHEOC at Watch Mode

Roles and responsibilities of the PHEOC personnel during Watch Mode:

PHEOC Manager:

The PHEOC Manager is responsible for following activities during daily operations

- Report directly to the leadership (Director, IEDCR)
- Responsible for the day to day operations of the PHEOC
- Overall supervision and monitoring of planning and operations sections

Planning Section (day to day):

- Planning functions drafts and maintains the key PHEOC documents such as, plans, SOPs, forms and the handbook.
- The PHEOC develops and maintains Incident Action Plan (IAP), conducts exercises and after action reviews and maintains an archive
- Training on *Emergency Preparedness & Response (EPR)* and *Crisis & Emergency Risk Communications (CERC)* to DRRTs and URRTs

Operations Section (day to day):

- The PHEOC maintains the four hotlines that are open to the general population as well as clinical and public health professionals throughout the country. The hotline

serves as the primary form of event base disease surveillance. Based on nature of the incidents, reports are collated weekly and shared in the monthly meeting.

- In addition daily media monitoring is conducted both within the PHEOC and by an external contracting agency.
- Whenever notified from any of the sources the PHEOC verifies the situation and develops verification/ situation report
- PHEOC notifies Director, IEDCR and accordingly NRRT responses with technical support from Outbreak investigation and Response section.
- The PHEOC also tracks laboratory sample collection for suspected cases of diseases such as dengue, chikungunya, MERS-CoV. The samples are tested by the IEDCR laboratory. The laboratory notifies the IEDCR director who determines if follow up actions are required. (Annex 6)
- The PHEOC staff develops and maintains the monthly schedule of hotline and sample collection.(Annex 7)

B. Alert Mode:

During Alert Mode the PHEOC conducts the following activities:

- I. Collect demographic and epidemiological data on an incident. There are no specific thresholds for incidents. Incidents may be defined as any death occurring, pre-maturely from an infectious disease.

Note: One death can constitute an incident if it meets the criteria.

- II. Situational awareness:
 - a) PHEOC staff will contact Subject Matter Expert(s), such as physicians in hospitals or Civil Surgeons of the affected district(s) to verify that the information is accurate and gather information on the incident.
 - b) PHEOC staff will collect information (epidemiologic and demographic data) by discussing the incident with field teams such as the RRTs (URRT, DRRT)
 - c) PHEOC staff will provide written reports to the director once the verification process is completed.
 - d) Once an incident has been verified, this information is shared with the IEDCR Director to determine next steps

Considerations for PHEOC Activation:

1. Any report(s) of disease outbreaks or deaths above the normal (average) or expected base line for the season or geographic region from any source.
2. Any suspected disease outbreak with high mortality (e.g. ebola, zika, nipah)
3. Any event or incident that presents a public health threat and requires additional resources above current IEDCR capabilities.
4. Increased severity of the incident.

5. Death or severe illness of an IEDCR staff due to suspected outbreak during an outbreak investigation.
6. Reports or physician inquiries related to other infectious or zoonotic disease threats with epidemic/pandemic potential.
7. Reports of a public health event or incident that exceeds regional or geographic management or staffing capability.
8. Increased demands from partner agencies or other government departments.
9. Significant increases in media interest or political concern in any public health event or incident.
10. Events with predictable public health impact (such as seasonal weather events).
11. Any activation inquiry, request, or decision originating from a Ministry of Health or DGHS or a policy oversight authority.
12. National event with potential public health impact, such as sporting events, parades, festivals, etc.

Decision making criteria:

- Incident of a single laboratory confirmed case with high mortality and poses potential public health threat (e.g. ebola, zika, nipah, MERS-CoV), will suffice to activate PHEOC
- Incident with mild and moderate mortality and morbidity then fulfilling any three of aforesaid considerations will activate PHEOC

A meeting is organized with PHEOC core committee chaired by Director, IEDCR. After discussion the director makes the final decision. If necessary concerned authority and/or other stakeholder may be included in the meeting. Preliminary Assessment Process SOP (Annex 8)

C. Response Mode:

The PHEOC is in response mode, once the Director, IEDCR determines (as per decision of the core committee and if needed upon discussion with superior authority) if there is a need for activation of the IMS to coordinate and manage the response. The Director will declare that the PHEOC is activated. She/he will also develop the activation and deactivation notifications by issuing office order and distribute through press release and/ or a press conference. Activation SOP will be followed. (Annex 9)

Organogram of PHEOC at Response Mode:

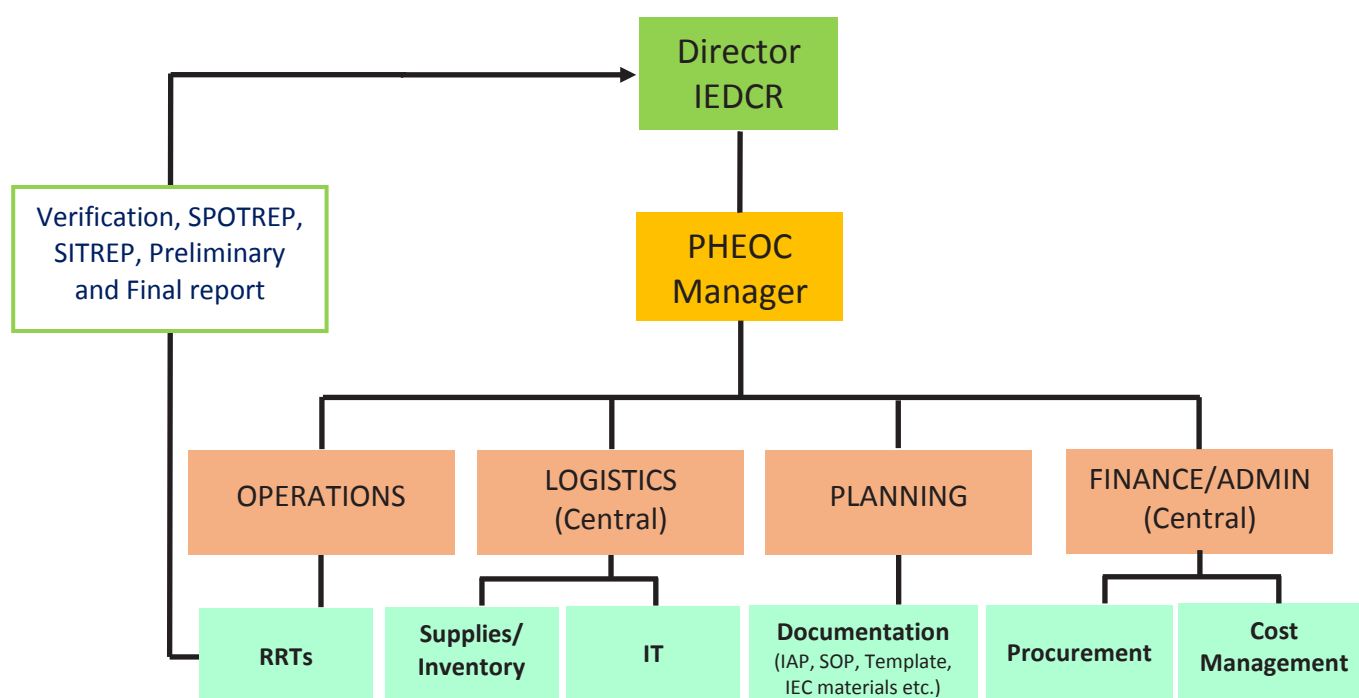


Figure 2: Organogram of PHEOC at Response Mode

Standard IMS organogram of PHEOC at Response Mode (Annex 10)

Roles and responsibilities of PHEOC staff in Response Mode:

Incident Manager (IM):

The Incident Manager (IM) will be selected by the IEDCR Director.

Criteria for selecting an IM.

- An IM preferably an epidemiologist/ SME with public health background
- Experienced in dealing PHEs
- Good leadership, communication and decision making skills.

Responsibilities of an IM

- Key personnel of the specific event or incident during responses
- Will recommend, in consultation with PHEOC core committee to leadership for escalation/ de-escalation of response mode and renewal when necessary
- Provide overall direction to the incident or event specific response operations
- Responsible for the overall (from development to implementation) incident action plan

- Ensure the appropriate staffing level for the IMS and continuously monitor operational effectiveness of the response
- Propose media messaging prior to distribution by PHEOC
- Submit daily situation reports from the PHEOC to the leadership prior to sharing with stakeholders
- Coordinate with appropriate partners to ensure support for response operations and routine support for the PHEOC
- Submit after action report of the PHE
- Responsible for de-escalation/ deactivation of the response mode as necessary

Public Information Officer (PIO):

PHEOC, regardless of size and type should have a designated PIO. The PIO will be selected by the IEDCR Director.

Criteria for selecting a PIO

- IEDCR officer preferably from Medical Social Science department
- Familiar with the policies and procedures of the organization & Government
- Knowledgeable with PHEs and good communication with the media
- Someone who is not offended easily and less reactive
- Good writing and communication skills

Responsibilities of a PIO

- Develop and release information about the incident to the news media, to the response personnel, and to other appropriate agencies and organizations in consultation with IM and Director
- Obtain and organize information of media that may be useful to incident planning
- Provide accurate and timely (on daily basis) status reports to the incident manager and PHEOC members
- Provide accurate information from the PHEOC to the media in consultation with the Director on a timely basis
- Perform the key role in monitoring public health information, such as implementing measures for rumour control
- Develop and distribute after approval community information releases through local and national medial such as TV, radio, or newspaper, and the use of Social Media networks
- Will be accountable to the core committee
- Will provide all technical support to IM and/or the Director, IEDCR when necessary

Liaison Officer (LNO):

The Liaison Officer will be selected by the IEDCR Director.

Criteria for selecting a LNO

- IEDCR officer preferably from Medical Social Science department
- Experienced in a related role with good verbal and written communication skills
- Stake holder/ partner-oriented attitude
- Ability to establish and nurture beneficial multi-sectorial relationships
- Good negotiating skill with influencing others

Responsibilities of a LNO

Communicate and coordination with the designated point of contact (liaison officers) from other concerned agencies identified as potential stakeholders, public & private agencies and other volunteer organizations to make sure they are incorporated into PHEOC operations as appropriate and when necessary. Will be accountable to the core committee.

Planning Section (Response):

The planning section is responsible for development of key response documents such as the Incident Action Plan (IAP) and Situation Report (SITREP). The planning section will also develop the organizational structure for the response and get approval from the IEDCR director. The planning section is supposed to coordinate the deactivation and demobilization activities once obtaining approval from the IM and IEDCR director. (Annex 11: IAP Template)

Planning Section Chief:

The Planning Section Chief will be selected by the IEDCR Director. It is up to the Planning Section Chief to activate any additional staffing that is needed. The IM will perform all planning functions if no Planning Section is established.

Criteria for selecting a Planning Section Chief

- IEDCR officer with public health background preferably from Epidemiology
- Prior work experience in planning
- Innovative and capable of thinking out of the box
- Knowledgeable with PHEs
- Good analytical and writing skills.

Responsibilities of a Planning Section Chief

- Receive, compile, evaluate and analyse all outbreak information and providing updated status reports to PHEOC management and field operations
- Developing and communicating operational information

- Prepare protocols for surveillance at community and hospital facilities
- Predicting the probable evolution of events
- Developing and documenting objectives, strategies and incident action plans
- Maintaining incident documentation
- Tracking resources assigned to the incident
- Identifying the technical expertise (Subject Matter Experts) that is needed during the response
- Developing plans for demobilization
- Will be accountable to the core committee

Operations Section (Response):

During a response, the primary function of the operation section is to manage information from the field and Rapid Response Teams (RRTs) and coordinate response activities. The Operations Section will also maintain rosters and contact lists of response personnel and will distribute the IAPs and SITREPS developed by the plans section. This section will execute incident objectives developed by the Incident Manager and IEDCR director.

Operations Section Chief:

The Operations Section Chief will be selected by the IEDCR Director. It is up to the Planning Section Chief to activate any additional staffing that is needed.

Criteria for selecting an Operations Section Chief

- IEDCR officer preferably from Epidemiology
- Prior work experience in operations
- Knowledgeable with PHEs
- Good decision making and leadership skills

Responsibilities of an Operations Section Chief

- Submit the approved contingency/ incident action plan and request for funds to the Director, IEDCR
- Implementing strategies and developing tactics to carry out the incident objectives
- Directing the management of all tactical activities on behalf of the Incident manager
- Supporting the development of the Incident Action Plan to ensure it accurately reflects current operations
- Organizing, assigning, and supervising the tactical response resources
- Ensure the verification of the incident, rumours and suspected cases
- Manage the implementation within the approved budget
- Manage outbreak data: analyse data regularly for trends and establish transmission chains

- Prepare and submit cumulative and progress implementation report to the Director, IEDCR
- Will be accountable to the core committee

Rapid Response Teams (RRT):

RRTs are organized in three tiers from central to local: National Rapid Response Team (NRRT), District Rapid Response Team (DRRT), Upazila Rapid Response Team (URRT). The NRRT is comprised of the IEDCR officers, expert in various fields, FETP, B fellows, concerned GHSA consultants, laboratory; other relevant departments may be deemed necessary depending on the nature of the PHEs. These teams are trained to provide support to DRRTs and URRTs in an incident of any confirmed PHE. The NRRT is ready to be deployed and provided surge capacity and complimentary expertise to responses to PHEs. Upon notification and verification of an incident, PHEOC will convey to the Director, IEDCR. Then she/ he will decide whether to deploy the response team for outbreak investigation accordingly. Once deployed in the field, the NRRT will send all the updates and reports (SPOTREPs/ SITREPs etc.) to the PHEOC and then PHEOC will update the Director in form of CIR maintaining all possible confidentiality.

It is recommended that in the occurrence of any incident, the primary responder would be the local RRTs (DRRTs, URRTs) and if only they need further assistance, the NRRT would respond. The local RRTs will maintain communication and share report. All RRTs are to follow the steps of outbreak investigations according to the outbreak investigation manual. The composition of NRRT, DRRT and URRT are added with TOR in Annex. (Annex 12, 13 &14)

Logistics Section:

The Logistics Section will coordinate the deployment of resources to the incident site. Logistics will work with operations and planning to obtain and deploy the appropriate resources to the field. This section will also work with the store officers of IEDCR to collect resource items and the Finance and Admin section to ensure appropriate funds are available to obtain and track resources. In the absence of a dedicated logistics section, the central store section of IEDCR will execute the function of the logistics section. The central store of IEDCR has communication with the outbreak investigation consultant and as per requirement will supply the necessary items for the outbreak investigation teams.

Logistics Section Chief:

The Logistics Section Chief will be selected by the IEDCR Director.

Criteria for selecting a Logistic Section Chief

- IEDCR officer preferably prior work experience in managing logistics
- Having skills in early anticipation/ forecasting and supply chain management

- Experience in maintaining inventory & records
- Knowledgeable with PHEs
- Good interpersonal communication

Responsibilities of a Logistic Section Chief

- The personnel oversees the store officer
- Provide logistics support to the PHEOC
- Estimate the needs of response, supplies, transport and communication equipment
- Manage the procurement of supplies and essential outbreak response equipment, communications systems
- Support 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
- Will be accountable to the core committee

IT Branch:

The IT branch will maintain and coordinate all the information received in and despatched out of the PHEOC. It will also ensure the security of all information and the overall system. This branch will organize and manage the data entry, analysis, compilation and interpretation of all the information received routinely by developing and using appropriate software, application and a dash board. Until the development and establishment of the PHEOC IT branch, the central IT branch of IEDCR will execute its function.

IT Officer:

The IT Officer will be selected by the IEDCR Director. The IT officer will help maintaining connectivity and security of the PHEOC IT system.

Criteria for selecting an IT Officer

- At least bachelor's degree in ICT preferably with computer science background
- Prior work experience in managing IT in similar organizations
- Knowledge in statistical analysis
- Good interpersonal communication

Responsibilities of an IT Officer

- Provide all types of IT support to the PHEOC
- Provides communication equipment and technical assistance to IEDCR staff deployed in the field
- Ensure PHEOC hardware and software systems are developed, operational and maintained
- Establish security of the PHEOC IT system

- Manage and update the PHEOC part of the IEDCR website under the guidance of the Director
- Be responsible to manage the audio/ video conferencing system
- Will be accountable to the core committee

Administrative and Finance Section:

The Finance and Administration Section will be set up for any incident that requires incident-specific financial management. The Administrative and Finance section will work with the Director IEDCR, IM, Planning Section and the logistics section to develop the budget for the response and obtain emergency funding, if necessary. Until the development and establishment of the PHEOC Administrative and Finance section, the central Accounts section of IEDCR will execute its function.

Administrative and Finance Officer:

The Administrative and Finance Section Chief will be selected by the IEDCR Director.

Criteria for selecting an Administrative and Finance officer

- Should be an MBA/ Masters in Accounts or Finance
- Prior work experience on office, accounts and/ or finance management in similar organizations
- Good interpersonal communication

Responsibilities of an Administrative and Finance Officer

- Monitor, supervise and evaluate all administrative and financial documents
- All routine correspondence related to the operation
- Monitor and maintain office supplies
- Contract negotiation and monitoring
- Contribute in budget preparation, audits and accounts
- Cost analysis
- Organize emergency financial resources including petty cash for staff deployed to the field (for emergency procurement in the field) if needed
- Monitor expenditure for the response and facilitate on cost-sharing arrangement with Stakeholders
- Will be accountable to the core committee

10. PHEOC Concept Operations (CONOPS):

WHO Definition of CONOPS: The **concept of operations**, or CONOPS, is a section or statement in an agency emergency plan or EOC plan that **identifies policies, roles and responsibilities** and how the structural or functional elements of the organization will work together to produce a coherent management response.

The PHEOC will operate under the IMS when activated for a public health incident. Applying 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, is highly beneficial. The IMS is being utilized internationally to manage public health emergencies.

The incident manager will be assigned by the Director, IEDCR in response to any public health event or incident. Under his/her jurisdiction several personnel including liaison officer (LNO), public information officer (PIO) and safety & security officer (SSO) will operate. During the PHEOC activation, staff will operate under the basic IMS structure.

CONOPS Levels:

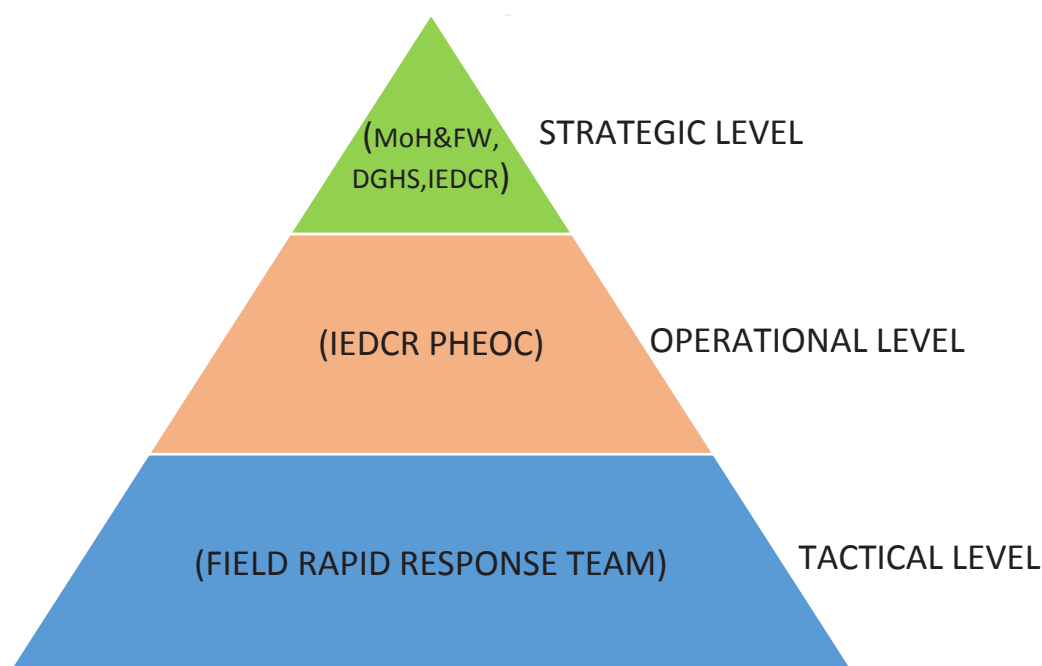


Figure 3: Level of IMS Response, PHEOC

1) Strategic Level:

Policy and strategic directions for the operation of the PHEOC will be given by Director, IEDCR in consultation with Steering Committee along with other available technical expert from Ministry of Health & Family Welfare, Ministry of Disaster Management & Relief and other ministry as well as concerned agencies if necessary. The liaison officer of the PHEOC will act as medium for the coordination, collaboration and dissemination of information from/ to PHEOC to other agencies and partners.

2) Operational Level:

For effective coordination across all elements of IMS, this level is crucial. Also, it will maintain situational awareness for strategic partners for decision making.

- It will provide the technical information for the operational response based on strategic guidance from higher authorities.
- IEDCR PHEOC will focus only on disease outbreak related public health emergencies.
- It will identify and prioritize the disease outbreak threat and hazards.
- It will do the necessary need assessment to address the threat.
- Considering the threats and needs it will develop the contingency plan, IAP accordingly to meet the strategic objectives and guidance.
- It will also develop all the necessary documents (Templates of Operational SOPs, SPOTREP, SITREP, Verification report, Shift change brief etc.)
- PHEOC (Liaison Officer) will share the information with the concerned stakeholders (Point of Contacts) through reports/ meeting/ conference call as situation demands

3) Tactical Level:

This will be located as close to the incident as possible, at district or community level. This level is responsible for the day-to-day actions that will achieve the operational goals and objectives. To accomplish these actions, the tactical PHEOC will develop incident action plans that focus on goals and objectives set by operational level by tactical resources during a set 'operational period' time.

Upon informed of any incident, PHEOC will verify the information from the competent authority (CS, UH&FPO, RMO). It is internationally recognized that the local RRT will take primary responsibility of the early response. After verification, PHEOC will notify the director of the overall situation (SPOTREP/ Verification Report). After evaluating the situation and the demand of the local authority the director will decide whether to provide technical support and/ or to deploy NRRT for response.

PHEOC Activation Levels:

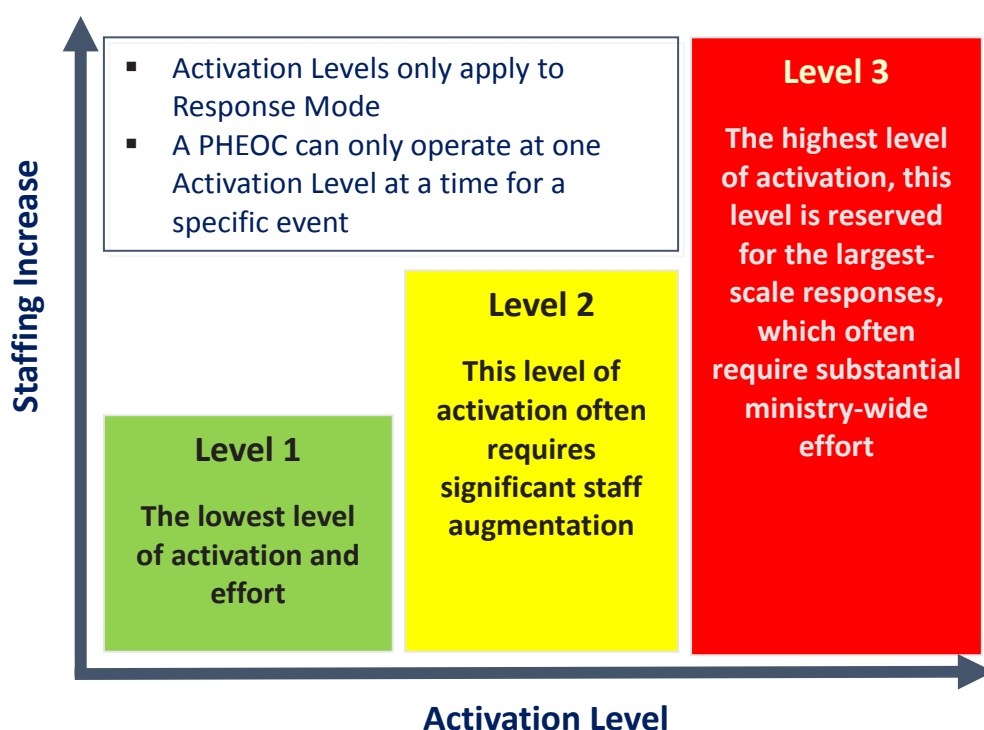


Figure 4: Level of PHEOC Activation

Grading of response:

The Focal point (Director, IEDCR) after consultation with the core committee will determine the grade of a public health incident based on WHO guidelines. And will also determine the level of activation.

Staffing:

The PHEOC will maintain a roster of experts to mobilize to staff the PHEOC after activation. The list will be reviewed and updated regularly. When the PHEOC is activated, SMEs (any qualified personnel concerned to the incident from government/ non-government organizations/ freelance) will be identified to staff the PHEOC. The IM with the support of the PHEOC manager will be responsible for staffing the PHEOC during activation.

Shift during activation:

During activation when 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 and the PHEOC Manager are responsible for developing a duty roster plan for the event support team and PHEOC team respectively. The duty roster will be recorded in the PHEOC. It will be displayed in the PHEOC and shared by email.

Responsibilities during shifts:

When a member of the IMS on duty shifts his/her responsibilities to another, a simple but formal transfer/ shift briefing is required. Shifts, therefore, should not exceed 8 – 12 hours and should overlap by 15-30 minutes briefing to prevent a situation where a staff position will be inadequately relieved. A shift briefing should summarize the activities of the previous shift, identify on going incidents or activities and if time permits, be accompanied by a short written summary. (Annex 15)

11. De-activation/ De-escalation of the PHEOC:

When the emergency has progressed to the point that high-level coordination is no longer required, a decision will be made by the IM whether the PHEOC should be de-escalated to return to level 2 and level 1. SOP for de-activation/ de-escalation will be followed. (Annex 16)

Criteria for de-activation/ de-escalating the PHEOC:

- An epidemiologic curve (Epi-curve) of suspected/ confirmed cases has been reached its peak and shows continuous reduction in number of cases for an extended time frame
- Decreased number and spread of the public health impact or affected population
- Reduced internal resource utilization
- Coordination of response activities and / or resources is no longer required
- Reduced severity of the incident
- The Incident Action Plan (IAP) objectives have been satisfied
- Decreased need for additional resources from partners or outside agencies
- Reduced public or media interest
- Decrease in geographical area or population affected
- The event has been contained and surge staff have returned to regular (Level 1) duties
- Working from the PHEOC is no longer required

12. After Action Review:

The After Action Review (AAR) is a simple but powerful tool to help any program at the end of an incident or event that can help the team learn from their efforts in identifying strengths, weaknesses, and areas for improvement. Using this approach to routine review incidents and events will contribute to a culture of continuous organizational learning and improvement. The IM is responsible for ensuring that all document records are completed and available in EMS including an AAR, which will be developed following the deactivation from Level 2 or Level 3 activations.

It is recommended that as part of this AAR, the PHEOC activities will be evaluated to determine the effectiveness of the PHEOC in supporting the response. This evaluation will consider

- Facility availability
- Connectivity with the field and other level of PHEOC operations
- Availability of information and
- Functionality of the PHEOC SOP

Input will be collected from team members, PHEOC staff and other IM staff regarding PHEOC support to the response, using the corrective action plan in PHEOC document. The AAR will be developed jointly by the Incident Manager and the PHEOC Manager, and will be submitted to the respective subcommittee Chairperson. Based on the comments received, the PHEOC Manager should develop a Corrective Action Plan (CAP) in order to identify, track, and address the issues that were identified as needing improvement. He will also brief the Director, IEDCR regularly on the progress made to complete the items listed in the CAP.

Annex 1: Structure and TOR for the IEDCR PHEOC Core Committee

Institute of Epidemiology, Disease Control and Research (IEDCR)
Public Health Emergency Operations Center (PHEOC)
IEDCR PHEOC Core Committee

1. Director, IEDCR	<i>Chairperson</i>
2. Chief Scientific Officer, Virology, IEDCR	<i>Member</i>
3. Chief Scientific Officer, Epidemiology, IEDCR	<i>Member</i>
4. Principal Scientific Officer and Project coordinator, GHSA, IEDCR	<i>Member</i>
5. Medical Officer, IEDCR (PHEM Fellow, CDC, Atlanta)	<i>Member</i>
6. Disease Surveillance Consultant, GHSA, IEDCR	<i>Member</i>
7. EOC consultant, GHSA, IEDCR (PHEM Fellow, CDC, Atlanta)	<i>Member</i>
8. Senior Scientific Officer and PHEOC Manager, IEDCR (PHEM Fellow, CDC, Atlanta)	<i>Member Secretary</i>

Terms of Reference

1. To develop public health emergency management plans and SOPs that will be utilized by the PHEOC
2. Oversee the activities of the Emergency Operations Center according to the project proposal.
3. Can Co-opt expert member(s) or representative from concerned stakeholders as and when necessary.
4. Member Secretary of the committee in discussion with the Chairperson will arrange weekly meetings and prepare the meeting minutes.

Terms of References

(For the officers on watch mode hotline phones, PHEOC, IEDCR)

1. The duty officer will receive the hotline phone from the relieving officer on every Thursday at 3.00 PM being physically present in the PHEOC. (The handover process will be held in the PHEOC).
2. The relieving officer will hand over the cell phone with all its accessories (head phone, phone charger etc.) to the duty officer.
3. The relieving officer also will have to submit the weekly shift change report (in PHEOC_HL excel file via e-mail to iedcrpheoc@gmail.com) on every Thursday within 3.30 PM.
4. When any outbreak/ unknown/ unexpected incident is reported to any hotline number, responding duty officer will immediately inform PHEOC (*PHEOC Manager, PHEOC Consultant, OIR Consultant*) by phone call, SMS, and via e-mail to iedcrpheoc@gmail.com.
5. While on duty (8:00 AM- 8:00 PM) and after duty hours, in case any call is missed, they will call back.
6. Those who are attending hotline numbers will make their conversations as precise as possible in order to attend the maximum number of phone calls.
7. In case, any duty officer has to go for an outbreak investigation or field visit, he/she will inform PHEOC and hand over the phone to the next scheduled duty officer according to the duty roster.
8. For any questions, queries and clarifications all are requested to contact PHEOC, Room # 227.

Annex 3: Template of Critical Information Requirement (CIR)

Institute of Epidemiology, Disease Control and Research (IEDCR) Public Health Emergency Operations Center (PHEOC) Critical Information Requirement (CIR)

(Put Tick Mark Where Applicable)

Title:

Date:

Time:

Location of Incident:

Type of Incident: Natural ☐ Man Made ☐ Technical ☐

Level of response: Watch ☐ Alert ☐ Response ☐

Whom to report (name, post/designation, institute/organization name):

Background:

Number of Death:

Number of Casualty:

Number of Cases:

Epi-curve (if the data are significant to present here):

Recent/ Related issue of concern:

Required Emergency Resources:

Item Name	Amount	Date of Requirement

Political concern: Yes ☐ No ☐

Media update (if any issue of concern):

Laboratory confirmation:

- a. Number of sample tested:
- b. Number of confirmation:

Communicated with:

Reason for Communication:

Action taken:

Next Steps:

IHR: Suspected cases of ☐ **Smallpox**
☐ **Polio (due to wild-type poliovirus)**
☐ **Human influenza caused by a new subtype**
☐ **SARS**

Reporting by

Name:

Designation:

Date:

Time:

Contact number:

Email:

Annex 4: Template of Spot Report for DRRT/ URRT

Institute of Epidemiology, Disease Control and Research (IEDCR)
Public Health Emergency Operations Center (PHEOC)
Spot Report (for DRRT/ URRT)

Name of the Reporting Organization:

Date & Time:

Title:

Source of information:

Information verified from:

Reported Incident:

- Incident:
- Date & Time:
- Place:
- Person:
- Symptoms:

Findings:

Response/ Actions taken:

Challenge:

Next plan:

Need Assistance from IEDCR: Yes/ No/ others (Please specify)

Name:

Designation:

Organization/ Institute/ Hospital:

Annex 5: Template of Incident/ Event Verification/ Situation Report

Institute of Epidemiology, Disease Control and Research (IEDCR)
Public Health Emergency Operations Center (PHEOC)
Incident/ Event Verification/ Situation Report

Memo No.:

Date & Time:

Title:

Source of information:

Information verified from:

Reported Incident:

- Incident:
- Time & Date:
- Place:
- Person:
- Symptoms:

Findings:

Response/ Actions taken from IEDCR:

Recommendation:

(On behalf of the PHEOC team, IEDCR)

Name :

Designation:

Annex 6: Sample Collection Form

Institute of Epidemiology, Disease Control and Research (IEDCR) Public Health Emergency Operations Center (PHEOC) Sample Collection Form

Particulars of the patients

Date: ____/____/____ ID No: _____
Name: _____
Age: _____ Contact No.: _____
Father's/ Husband's Name: _____
Village/ House No: _____ Union/ Road No: _____
Upazilla/ Ward no: _____ District: _____
Sex: 1. Male 2. Female
Religion: 1. Islam 2. Hinduism 3. Buddhism 4. Christianity
Occupation: 1. Service 2. Business 3. Student 4. Homemaker
5. Others (Please mention _____)

History of present illness

When did patient develop first sign/ symptom of current illness? ____/____/____

Signs/ Symptoms	0 = No 1 = Yes	If yes, date of symptom started	Date of symptom cessation
Fever			
Cough			
Sore throat			
Difficulty in breathing			
Malaise			
Headache			
Bodyache			
Joint pain			
Abdominal pain			
Vomiting			
Loose motion			
Severe weakness			
Itching			
Enlarged lymph node			
Swollen gland			
Bleeding from skin or mucous membrane			
Rash			
Altered mental status			
Convulsion			
Others (please specify)			

Travel history:

Co morbid conditions:

Provisional diagnosis:

Advice:

Referred by: Name of the physician-

Name of the institute-

Name of collected sample:

Name of the physician (Interviewer) :

Date:

Annex 7: Monthly Duty Roster Template for Hotline and Sample Collection

Institute of Epidemiology, Disease Control and Research (IEDCR)
Public Health Emergency Operations Center (PHEOC)

Duty Roster (Month, Year)

A. Hotlines:

Date/ Day (Thursday – Thursday)	Hot Line 1 (01937-000011)	Hot Line 2 (01937-110011)	Hot Line 3 (01927-711784)	Hot Line 4 (01927-711785)

B. Sample Collection (Physicians):

Date/ Day	Sample Collection 9:00 am- 5:00 pm	Contact No.

C. Weekend Sample Collection (On call):

Date/ Day	Sample Collection 9:00 am- 5:00 pm	Contact No.

D. Sample Collection (Lab Medical Technologists):

Date	Day	Name of the MT lab	Contact No.

**PHEOC Manager
IEDCR**

**Director
IEDCR**

Annex 8: SOP of PHEOC Activation

Institute of Epidemiology, Disease Control and Research (IEDCR) Public Health Emergency Operations Center (PHEOC)

Standard Operating Procedure PHEOC Activation

SI No.	Considerations for PHEOC activation	Put Tick for Yes and Cross for No
1.	Any report(s) of disease outbreaks or deaths above the normal (average) or expected base line for the season or geographic region from any source.	
2.	Any suspected disease outbreak with high mortality (e.g. ebola, zika, nipah)	
3.	Any event or incident that presents a public health threat and requires additional resources above current IEDCR capabilities	
4.	Increased severity of the incident	
5.	Death or severe illness of an IEDCR staff due to suspected outbreak during an outbreak investigation	
6.	Reports or physician inquiries related to other infectious or zoonotic disease threats with epidemic/pandemic potential	
7.	Reports of a public health event or incident that exceeds regional or geographic management or staffing capability	
8.	Increased demands from partner agencies or other government departments	
9.	Significant increases in media interest or political concern in any public health event or incident	
10.	Events with predictable public health impact (such as seasonal weather events)	
11.	Any activation inquiry, request, or decision originating from a Ministry of Health or DGHS or a policy oversight authority	
12.	National event with potential public health impact, such as sporting events, parades, festivals, etc	

Decision making criteria:

- Incident of a single laboratory confirmed case with high mortality and poses potential public health threat (e.g. ebola, zika, nipah), will suffice to activate PHEOC
- Incident with mild and moderate mortality and morbidity then fulfilling any three of above conditions will activate PHEOC

Comment:

Decision:

Annex 9: SOP of Terms of Reference of Activated PHEOC

Institute of Epidemiology, Disease Control and Research (IEDCR)

Public Health Emergency Operations Center (PHEOC)

Standard Operating Procedure

Terms of Reference of Activated PHEOC

Event/Incident	Disease Outbreak (<i>provide formal name, such as "Measles Outbreak #5, 2013-2014"</i>)
Section Responsible	Operations
Section Activity	Activation of Response Mode
Point of Contact	
Time Frame	As Required
Section	Section Function or Activity
Director/ Designate	<ul style="list-style-type: none"> • Instructs Operations Section to activate PHEOC.
Operations	<ul style="list-style-type: none"> • Reviews current disease situation. • Reviews staffing requirements. • Checks PHEOC equipment and supplies. • Initiates internal and external notifications. • Reviews necessity of involvement of other agencies.
Planning	<ul style="list-style-type: none"> • Contacts where event/incident is occurring. • Initiates IAP and SITREP.
Logistics	<ul style="list-style-type: none"> • Puts staff on stand-by and/ or ask staff to report to assigned locations.
Finance	<i>To Be Determined</i>
Information Needed	<ul style="list-style-type: none"> • PHEOC Handbook. • Map of areas affected. • Suspected disease. • Number sick/ dead/ injured. • Staff lists of those on Alert or Response mode. • Contacts of District or Upazila Health care staff of areas affected.

Annex 10: Standard IMS Organogram of PHEOC in Response Mode

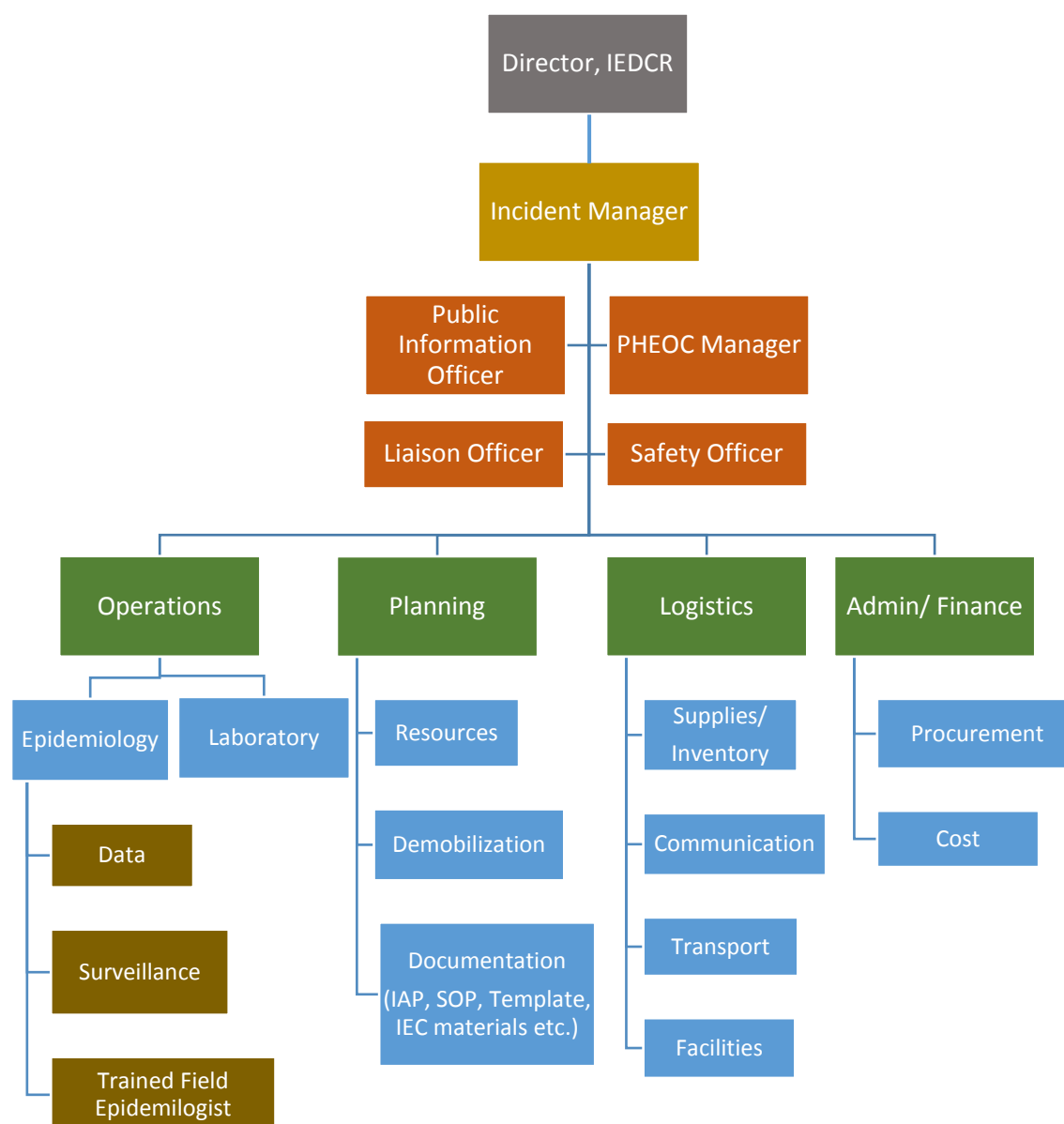


Figure: Standard IMS Organogram of PHEOC at Response Mode

Annex 11: Template of an Incident Action Plan (IAP)

Institute of Epidemiology, Disease Control and Research (IEDCR) Public Health Emergency Operations Center (PHEOC) Incident Action Plan (IAP)

Incident Name: _____ Response		Operational Period (Date/Time): From: To:		IAP Type: Initial <input type="checkbox"/> Update <input type="checkbox"/> Final <input type="checkbox"/>	
Functional IMS Position	Name	Email	Phone		
IMS Management Leadership and Staff					
Incident Manager					
IEDCR Director					
PHEOC Manager					
Principal Scientific Officer					
Liaisons and Personal Staff					
Liaison Officer					
Safety Officer					
Public Information Officer					
Response Task Forces and Teams					
Operations Laboratory					
Operations Epidemiology					
General Staff					
Operations Chief					
Plans Chief					
Logistics					
Admin/Finance					
Planning					
Planning					
Planning					
Situation/Actions for Current Operational Period					
<p>Background:</p> <p>Current Activities:</p> <p>Response Mission:</p> <p>Critical Information Requirements (CIRs) for the incident response.</p>					
Strategic Objectives					

Operational Objectives
<p>General:</p> <p>Key Activities for Technical Teams</p> <p>Epidemiology /Surveillance</p> <p>Laboratory</p> <p>Communications</p> <p>Vector Control</p> <p>Case Management</p> <p>Key Activities for PHEOC Functions and Teams</p> <p>Operations:</p> <p>Plans:</p> <p>Logistics:</p>
Triggers that may Increase the Response Tempo and/or Raise the Response Level
Triggers for De-escalation
Scheduled Meetings for the Operational Period:

Epi Curve

Flowchart for the Notification of a Suspected Outbreak and Response:

Area wise case distribution (mapping)

Current Organization

Organizational Structure for the Response here.

Annex 12: Composition and TOR of NRRT

Institute of Epidemiology, Disease Control and Research (IEDCR) Public Health Emergency Operations Center (PHEOC) National Rapid Response Team (NRRT)

COMPOSITION:

Advisor: Director General of Health services

Chairperson: Director

Member Secretary: Outbreak Investigation Consultant

Members (Not according to the Seniority):

1. Chief Scientific Officer / Principal Scientific Officer
2. Senior Scientific Officer / Medical Officer
3. Outbreak Investigation Consultant/ Veterinary Consultant
4. FETP,B Fellows
5. Medical Technologist
6. Support Staff
7. If needed, additional experts could be included in the team from relevant disciplines by the Director, IEDCR

Multiple teams will be formed and updated by Member Secretary; NRRT with consultation of the Director, IEDCR and these teams will conduct the outbreak investigation by turn.

TERMS OF REFERENCE:

1. The NRRT will investigate and take appropriate measures to control outbreak. They should
 - a. Identify the illness and contributing risk factors
 - b. Ensure proper management of the patient
 - c. Give preventive measures to stop secondary spread of infections
 - d. Document the investigations
 - e. Activate active surveillance system or strengthen the existing surveillance system
2. The NRRT will support the outbreak investigation team of DRRT/ URRT
3. Should conduct coordination meetings in the field (if required)
4. Guide the DRRT/ URRT to ensure the implementation of recommendations on recently completed specific outbreak investigations
5. Closely monitor and follow up the appropriate health care service delivery in places
6. Report to Director IEDCR within three days

Annex 13: Composition and TOR of DRRT

Institute of Epidemiology, Disease Control and Research (IEDCR) Public Health Emergency Operations Center (PHEOC) District Rapid Response Team (DRRT)

COMPOSITION:

Advisor: Divisional Director Health (At Divisional Headquarter District) &
Superintendent, District General Hospital

Chairperson: Civil Surgeon

Member Secretary: Medical Officer, Civil Surgeon/ Disease Control (MOCS/ MODC)

Members (Not according to the Seniority):

1. Deputy Civil Surgeon (DCS)
2. Resident Medical Officer (RMO), District General Hospital
3. Consultant (Medicine/ Paediatrics/ Pathology/ Microbiology), required as type of Outbreak. (Would be nominated by Superintendent)
4. Surveillance and Immunization Medical Officer (SIMO), WHO
5. Senior/ Junior Health Education Officer
6. Public Health Nurse
7. District Sanitary Inspector/ District Health Superintendent
8. Health Officer/ Medical Officer (in case of City Corporations/ Municipality)
9. The Committee can Co-opt any official (Department of Human Health/ Animal Health/ Others) as and when required

TERMS OF REFERENCE:

1. The DRRT will notify any locally occurred outbreak of Health Event(s) to the NRRT
2. Under the direction and guidance of the NRRT, the DRRT will response rapidly for respective local level outbreak investigations
3. The DRRT will investigate and take appropriate measures to control outbreak in coordination with the NRRT. Investigation procedures are:
 - a. Verification the existence of an outbreak
 - b. Identification the illness and contributing risk factors
 - c. Proper management of the patient
 - d. Prevention of further cases and secondary spread of infections
 - e. Documentation the investigations and as prevention & control measures add community awareness
4. The DRRT will participate in the outbreak investigations for the following conditions:
 - a. To request/ propose whether NRRT team is required to mobilize for outbreak investigation(s)
 - b. To assess the type of resources required for the outbreak investigation(s)

5. In case of local outbreak investigation(s), the Chairperson/ Member Secretary of the DRRT will update latest findings with the NRRT Chairperson or any person assigned by the NRRT
6. Upon the completion of local outbreak investigation, the Chairperson/ Member Secretary of DRRT will submit an official report along with primary data to the NRRT within 3 days
7. During local outbreak investigation by the DRRT, data confidentiality should be maintained. Sensitive information should not be shared/ disseminated without prior approval from the NRRT
8. The respective DRRT Chairperson, after consultation with the NRRT Chairperson can share the outbreak info with the media
9. The DRRT will support the outbreak investigation team of NRRT
10. After consultation with the NRRT, the respective DRRT should conduct coordination meetings in the field (if required)
11. Under the guidance of NRRT, the DRRT will ensure the implementation of recommendations on recently completed specific outbreak investigations
12. The DRRT will closely monitor and follow up the appropriate health care service delivery in places
13. The DRRT will closely follow up the patient management in District Health Facilities (if admitted)
14. The DRRT should coordinate with the DRRT (livestock) if necessary

Annex 14: Composition and TOR of URRT

Institute of Epidemiology, Disease Control and Research (IEDCR) Public Health Emergency Operations Center (PHEOC) Upazila Rapid Response Team (URRT)

COMPOSITION:

Advisor: Civil Surgeon

Chairperson: Upazilla Health & Family Planning Officer (UHFPO)

Member Secretary:

Medical officer completed Front line FETP,B Training (posted in Health Facilities at upazilla & below) **or**

Medical Officer, Disease Control (MODC)

Members (Not according to the Seniority):

1. Resident Medical Officer (RMO)
2. Junior Consultant (Medicine/ Paediatrics), required as type of Outbreak and would be nominated by UHFPO
3. Medical Officer/ MO Maternal, Child Health, Family Planning (as nominated by UHFPO)
4. Nursing Supervisor
5. Medical Technologist (Lab)
6. Health Inspector (In charge)
7. Upazilla Sanitary Inspector

TERMS OF REFERENCE:

1. The URRT will inform/ notify any locally occurred outbreak of Health Event(s) to both the NRRT and the DRRT
2. Under the direction and guidance of the DRRT and the NRRT, the URRT will response rapidly for respective local level outbreak investigations
3. The URRT will investigate and take appropriate measures to control outbreak in coordination with the DRRT and the NRRT. Investigation procedures are:
 - a. Verification the existence of an outbreak
 - b. Identification the illness and contributing risk factors
 - c. Proper management of the patient
 - d. Prevention of further cases and secondary spread of infections
 - e. Documentation of the investigations
4. The URRT will participate in the outbreak investigations for the following conditions:
 - a. To request whether DRRT/ NRRT team is required to mobilize for outbreak investigation(s)
 - b. To assess the type of resources required for the outbreak investigation(s)

5. In case of local outbreak investigation(s), the Chairperson/ Member Secretary of the URRT will update latest findings with the DRRT/ NRRT Chairperson or concerned person.
6. Upon the completion of local outbreak investigation, the Chairperson/ Member Secretary of URRT will submit an official report along with primary data to the NRRT within 3 days
7. During local outbreak investigation by the URRT, data confidentiality should be maintained. Sensitive information should not be shared/ disseminated without prior approval from the NRRT
8. After consultation with the DRRT/ NRRT Chairperson, the URRT Chairperson, can share the outbreak info with the media
9. The URRT will support the outbreak investigation team of DRRT and NRRT
10. After consultation with the DRRT, the respective URRT should conduct coordination meetings in the field (if required)
11. Under the guidance of DRRT and NRRT, the URRT members will ensure the implementation of recommendations on recently completed specific outbreak investigations
12. The URRT will provide technical support to Upazila Multi-sectoral Coordination Committee
13. The URRT should coordinate with the URRT (livestock) if necessary

Annex 15: Template of Shift Change Brief with TOR (Response Mode)

Institute of Epidemiology, Disease Control & Research (IEDCR) Public Health Emergency Operations Center (PHEOC)

Shift Change Brief

Date: _____ Shift: Morning ☐ / Evening ☐ / Night ☐

Time of Shift change: _____

Type of Shift: HL ☐ / SC ☐ / WD ☐

(HL= Hotline/ SC= Sample Collection/ WD= Watch Desk)

Hotline No 1: 09137-000011 ☐

Hotline No 2: 01937-110011 ☐

Hotline No 3: 01927-711784 ☐

Hotline No 4: 01927-711785 ☐

A. HOTLINE (HL):

Number of calls received		Location of calls received from	
Outbreak on which PHEOC activated upon	Others (specify)	Name of District	# of calls

Total calls:

B. Sample Collection:

Sample collected	Counselled	Attended (Total= Sample collected + Counsellled):

Follow-Up Activities (if applicable):

Notes and Reminders for Upcoming Shift:

Logistics Checklist (please tick):

(Relieving/Duty officer will handover/receive all items checked in laptop bag)

1. Laptop + Adapter + Bag
2. Mouse
3. Cell Phone
4. Headphone
5. Phone Charger

Duty Officer _____

Relieving Officer _____

(Name & Signature)

Terms of References

(For the officers on emergency duties in PHEOC, IEDCR):

1. As reliever, duty officers will report to the PHEOC 15 minutes prior to the starting time of the scheduled duty.
2. Upon taking charge, they will collect the "shift change briefing form" and at the end of the shift will submit (fully filled & completed and duly signed by the relieving officer) from/to the PHEOC room. They will also have to e-mail a soft copy (Enclosed) to: iedcrpheoc@gmail.com
3. The duty officer will complete the scheduled duty by physically handing over the duty to the relieving officer.
4. The laptop, it's adapter, mouse, cell phone, head phone, phone charger- all to be put in laptop bag and handed over to the reliever.
5. Those who are on evening duty in addition will take, maintain, update and submit the manual log book in prefixed format.
6. Those who are on evening duty on weekends including Thursday, as a relieving officer, will have to handover the duty next morning physically to the next duty officers in the PHEOC room.
7. While in emergency duty, officers will refrain from personal activities (eg. making or attending personal phone calls etc.) as much as possible. In case any call is missed, they will call back.
8. Those who are attending hotline numbers will make their conversations as precise as possible following the written instructions from the PHEOC in order to attend the maximum number of phone calls.
9. Those who are attending in sample collection room will follow the written instructions from the PHEOC to screen and counsel the patients coming to IEDCR for testing.
10. Transport would be provided to the officers on emergency duties. IEDCR logistic section will ensure the necessary support in this regard.
11. For any questions, queries and clarifications all are requested to contact PHEOC (Room # 227).

Annex 16: SOP of De-activation/ De-escalation of the PHEOC

Institute of Epidemiology, Disease Control and Research (IEDCR)
Public Health Emergency Operations Center (PHEOC)
Standard Operating Procedure
De-activation/ De-escalation of the PHEOC

Event/ Incident	Disease Outbreak (<i>provide formal name, such as “Measles Outbreak #5, 2013-2014</i>)
Section Responsible	Operations
Section Activity	De-activation/ De-escalation of Response Mode
Point of Contact	To be determined
Time Frame	As Required
Section	Section Function or Activity
Director/ Designate	Instructs Operations Section to De-activate/ De-escalate PHEOC.
Operations	<ul style="list-style-type: none"> • Reviews current disease situation. • Reviews if the Incident Action Plan (IAP) objectives have been satisfied. • An epidemiologic curve (Epi-curve) of suspected/ confirmed cases has been reached its peak and shows continuous reduction in number of cases for an extended time frame. • Checks there for no evidence of sustained or efficient human to human transmission for a predetermined time frame. • Media attention shows continuous downward trend in news and social media for a two week time frame. • Cases are having minimal impacts to national, social, business or economic affairs.
Planning	Contacts where event/incident is occurring.
Logistics	<i>To Be Determined</i>
Finance	<i>To Be Determined</i>
Information Needed	<ul style="list-style-type: none"> • PHEOC Handbook. • Map of areas affected. • Suspected disease. • Number sick/ dead/ injured. • Staff lists of those on Alert or Response mode. • Contacts of District or Upazila Health care staff of areas affected.

References:

- 1) WHO Emergency Operations Center framework, 2015
- 2) Public health events of initially unknown etiology: A framework for preparedness and response in the African Region, 2013
- 3) Summary report of systematic reviews for public health emergency operations centers plans and procedures; communication, 2015
- 4) <http://www.ianphi.org/membercountries/memberinformation/bangladesh.html>
- 5) All hazards public health Incident and Emergency Response Plan (IERP), Ministry of Health and Sanitation, The Republic of Sierra Leone
- 6) Standard operating procedures for the Public Health Emergency Operations Center (PHEOC) Ministry of Health, Community Development, Gender, Elderly and Children, United Republic of Tanzania, 2016

