



المركز الخليجي للوقاية من الأمراض ومكافحتها
Gulf Center for Disease Prevention and Control

مجلس الصحة
لدول مجلس التعاون
Gulf Health Council



Gulf Public Health Emergency Preparedness Plan

2025 - 2030

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Foreword

In an era marked by increasing unpredictability, ensuring the health and safety of our communities has become paramount. As we face potential threats from infectious diseases such as pandemics, outbreaks of emerging pathogens, and antibiotic-resistant bacteria, it becomes imperative to fortify our resilience through meticulous planning and coordinated efforts. Recent global health crises have underscored the necessity of preparedness, highlighting how swiftly infectious diseases can disrupt daily life, strain healthcare systems, and challenge our collective well-being. As we navigate through various challenges and uncertainties, the need for a robust regional emergency preparedness plan attuned to the unique social, cultural, economic and health environment of the Gulf region cannot be overstated. It is with great pride that I present to you the Gulf Public Health Emergency Preparedness Plan (Gulf PHEPP).

The Gulf PHEPP is the result of tireless efforts, collaboration, and expertise from a multitude of dedicated individuals and organizations across the GCC, its six Member States and our regional and international partners. It was built on a foundational landscape report of the current emergency management capacities among GCC countries which identified areas of need in emergency preparedness and important areas of focus for regional

coordination. With a purpose to enhance public health emergency preparedness capacities, systems, and coordination, this plan serves as a cornerstone in safeguarding the well-being of the Gulf region.

Recognizing the diverse nature of potential health emergencies, whether natural disasters, infectious disease outbreaks, or other unforeseen events, this plan adopts a holistic all-hazards and One Health approach to emergency preparedness. By strengthening public health emergency training and knowledge sharing, developing clear regional guidelines and unlocking the value of public health assets, data and infrastructure across the region, we can minimize the impact of emergencies on our communities.

Furthermore, this plan emphasizes the importance of continuous improvement and evaluation. By regularly reviewing and updating the PHEPP in response to new threats, emerging trends, and lessons learned from past experiences, we remain agile and adaptable in the face of adversity.

I extend my deepest gratitude to all those who have contributed to the development of this plan. Your expertise, passion, and commitment have been instrumental in shaping a plan that exemplifies our collective resolve to safeguard public health. As we embark on the implementation of this plan, I urge all stakeholders to engage wholeheartedly, embrace their roles and responsibilities, and uphold the values of safety, integrity, and collaboration. With the Gulf PHEPP, we stand prepared, united, and vigilant to face any public health threat that may come our way.



H.E. Mr. Suleiman Aldakheel
General Manager, Gulf Health Council

Foreword

In recent years GCC member states have endured and responded rapidly to various emerging health threats, ranging from outbreaks of MERS-CoV, Rift Valley fever and legionellosis, pandemics of influenza H1N1pdm09 and most recently COVID-19. Natural threats linked to global warming, such as cyclones, flash floods and sandstorms regularly cause disruption of societies in the region. The increasing volume of petrochemical and chemical production and transport facilities create vulnerabilities for chemical spills and releases into air. With the increasing interconnectivity of GCC societies such threats are increasingly cross-border threats.

An important justification for the establishment of Gulf Center for Disease Prevention and Control by the Supreme Council of GCC was prevention, preparedness and response to human health threats. With this Public Health

Emergencies preparedness plan, we want to describe the core priorities and plan of action for GCC preparedness to such events from the public health perspective.

This plan has been prepared in consultation with multi-sectoral national and international stakeholders. We are thankful for their continued support in this crucial preparedness work. The plan will be followed by a GCC PHE response plan, which will identify roles and responsibilities and specific tasks and actions for Public Health organizations in the GCC.

There is no time for complacency in preparedness. We know that the next emergency will hit, we just don't know when. The human and societal costs of these emergencies will be determined by how well we are prepared, how rapidly we respond and how resilient we are to the impacts.



Pasi Penttinen, MD, MPH, PhD
CEO, Gulf CDC

Acknowledgements

The Gulf CDC would like to thank the GCC Member States, technical partners, stakeholders, entities, individual experts and Gulf CDC staff who have contributed to the development of this document. We are grateful for their close collaboration through consultations, virtual/in-person workshops, review and feedback throughout the development of the Gulf PHEPP. A list of key contributors (in alphabetical order) to this document is included below.

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Abbreviations

● Africa CDC	Africa Center for Disease Control and Prevention
● AMR	Antimicrobial Resistance
● BSL	Biosafety Level
● CBRNE	Chemical, Biological, Radiological, Nuclear and Environmental
● CCS	Country Cooperation Strategy
● China CDC	Chinese Center for Disease Control and Prevention
● CLO	Country Liaison Officer
● EC	European Commission
● ECDC	European Center for Disease Prevention and Control
● EIOS	Epidemic Intelligence from Open Sources
● EMA	European Medicines Agency
● EMPHNET	Eastern Mediterranean Public Health Network
● EOC	Emergency Operations Center
● EQA	External Quality Assessment
● EU	European Union
● EU CBRN	European Union Chemical, Biological, Radiological and Nuclear Risk Mitigation Centers of Excellence
● CoE	Centers of Excellence
● EVD-LabNet	Emerging Viral Diseases-Expert Laboratory Network
● EWARS	Early Warning and Response System
● FDA	Food and Drug Administration
● FETP	Field Epidemiology Training Programs
● GCC	Gulf Cooperation Council
● GCC EMC	Gulf Cooperation Council Emergency Management Center
● GCC-STAT	Gulf Cooperation Council Statistical Center
● GHC	Gulf Health Council
● GOARN	Global Outbreak Alert and Response Network
● Gulf CDC	Gulf Centre for Disease Prevention and Control
● IANPHI	International Association of National Public Health Institutes
● IHR	International Health Regulations
● IMS	Incident Management System
● JEE	Joint External Evaluation
● KSA	Kingdom of Saudi Arabia
● LIMS	Laboratory Information Management System
● MERS	Middle East Respiratory Syndrome
● MoH	Ministry of Health
● MOU	Memorandum of Understanding
● OIE	World Organization for Animal Health
● PAHO	Pan American Health Organization
● PCN	Permanent Communication Networks
● PHE	Public Health Emergency
● PHEOC	Public Health Emergency Operations Center
● PHEPP	Gulf Public Health Emergency Preparedness Plan
● PHEROP	Public Health Emergency Response Operations Plan
● PHEWG	Public Health Emergency Working Group
● PPEs	Personal Protective Equipment
● RRT	Rapid Response Team
● SimEx	Simulation Exercise
● SOPs	Standard Operating Procedures
● STAR	Strategic Toolkit for Assessing Risks
● TESSy	The European Surveillance System
● UKHSA	United Kingdom Health Security Agency
● US CDC	United States Center for Disease Prevention and Control
● WHO	World Health Organization
● WHO EMRO	WHO Office for the Eastern Mediterranean Region

Executive Summary



Impetus for the Gulf Public Health Emergency Preparedness Plan



العربي الخليجي للوقاية من الأمراض ومكافحتها
Gulf Center for Disease Prevention and Control

Public health events caused by emerging biological, chemical, radiological, nuclear and environmental hazards pose a significant threat to public health security across the Gulf region, including the Member States of the Gulf Cooperation Council (GCC)—United Arab Emirates, Kingdom of Bahrain, Kingdom of Saudi Arabia, Sultanate of Oman, State of Qatar and State of Kuwait. The Gulf region is at heightened risk of cross-border public health emergencies due to its high degree of interconnectedness with neighboring countries and the global community. Factors such as the free flow of GCC nationals, mass gatherings (such as the annual Hajj Pilgrimage), the introduction of a GCC visa for visitors and the movement of animals across borders significantly heightens the possibility of the rapid spread of diseases. Additionally, increasing number of GCC free trade agreements and common trade practices pose risks for the spread of foodborne and other common illnesses. These vulnerabilities pose health security threats that can overwhelm national response capacities with significant economic, social, political and security implications, highlighting the need for a coordinated approach to emergency preparedness and response as well as a common strategic direction for the region.

In January 2021, the Supreme Council of the Gulf Cooperation Council approved the establishment of the Gulf Centre for Disease Prevention and Control (Gulf CDC) with a mandate to strengthen public health

coordination, capacity building, evidence generation and emergency preparedness capacities across the six Member States of the GCC. Building on the extraordinary work of the GCC ministerial efforts in preparedness to-date and other regional agencies (such as GCC Emergency Management Center, EU CoE CRNE, US Regional Office, WHO EMRO) operating in the Gulf, the Gulf CDC recognizes a unique opportunity to strengthen regional partnerships and collaboration to identify synergies and improve public health emergency preparedness and response capabilities across the Gulf. Indeed, a 2023 landscape review of public health emergency management capacities commissioned by the Gulf CDC observed high variability in the structure and content of national emergency preparedness and response plans, some of which are due for renewal (incorporating lessons learned from their application throughout the COVID-19 pandemic). Furthermore, there are few comprehensive regional plans outlining coordinated emergency preparedness and response efforts across the Gulf.

To address the potential impact of cross-border health threats, strengthen public health emergency capacities and regional coordination mechanisms and increase the resilience and sustainability of the region, the Gulf CDC, in close collaboration with the GCC Member States and partners, developed the Gulf Public Health Emergency Preparedness Plan (PHEPP) 2025-2030.

Purpose, Scope, and Guiding Principles

Purpose, Scope, and Guiding Principles

Ultimately, the purpose of the PHEPP is to enhance preparedness capacities, systems and coordination for public health hazards of interest to the Gulf region. More specifically, the PHEPP provides:

- **A strategic framework** for action during peace time that gives common direction to Member States, Gulf CDC, and external partners to strengthen emergency management capacities, enhance regional coordination, advocate for the mobilization of financial and technical resources and collectively monitor progress.
- **A clear mandate for regional public health emergency management**, delineating the strategic role of the Gulf CDC in coordination with individual countries, other regional entities and international partners.
- **A reflection of Gulf CDC's foundational strategy**, as well as other regional plans and frameworks published by the WHO and peer organizations.
- **A One Health approach** towards public health emergency management that recognizes the interconnectedness of human, animal, and environmental health and fosters collaboration across sectors and disciplines.

Scope of the PHEPP

- While the PHEPP's **near-term focus is on biological hazards**, it has been designed through an all-hazards lens, ensuring flexibility to accommodate the diverse circumstances of individual Member States and enable effective implementation.
- The plan will be **implemented through 2025-2030**, with progress reviews every year.
- The PHEPP is **not intended to serve as a technical operations plan**. It enables the enhancement of regional emergency preparedness by focusing on the development of critical guidelines and processes during peacetime that will inform a more technical public health emergency response operations plan (PHEROP).

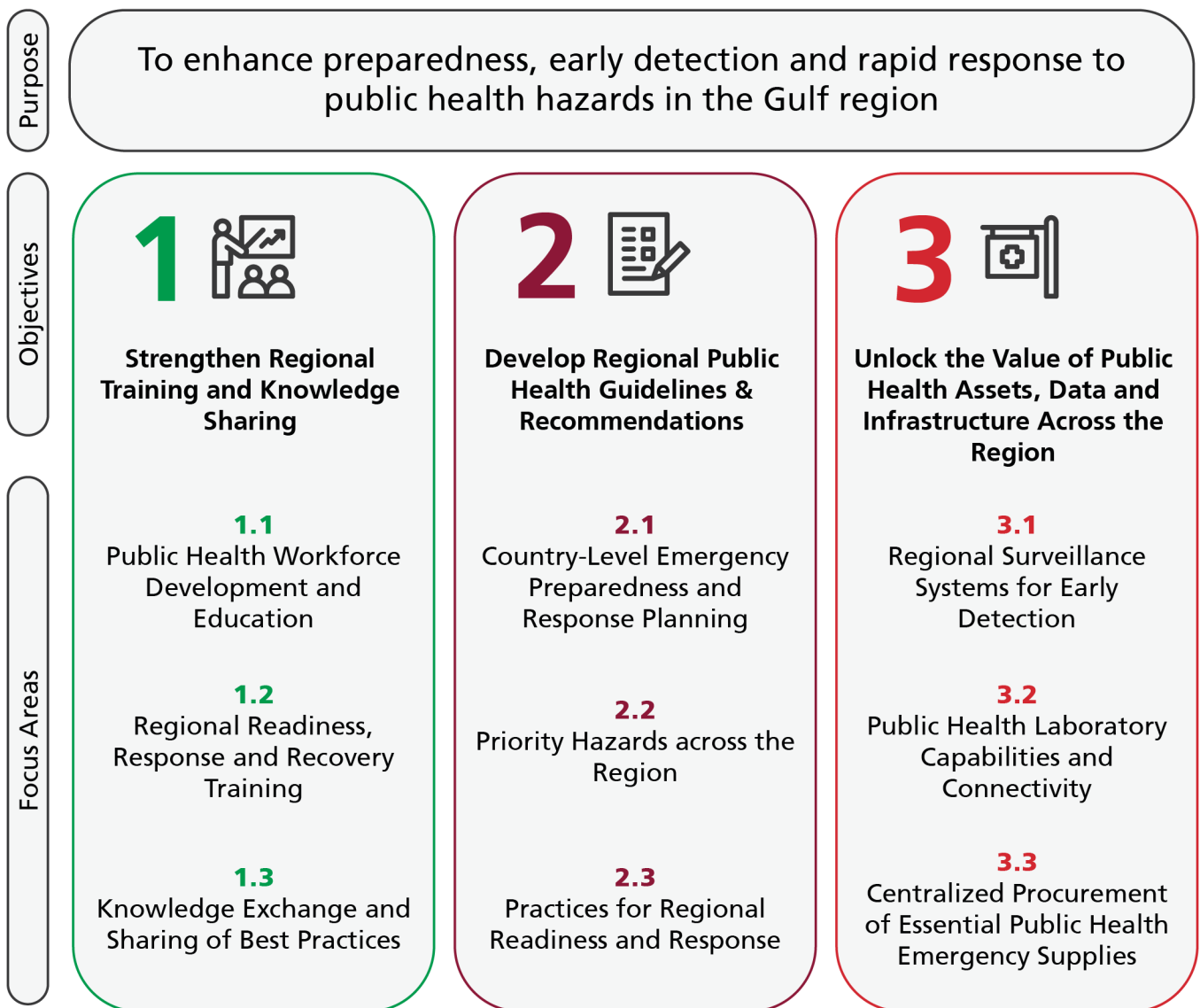
Guiding Principles of the PHEPP

- **GCC Country-Focused**: Places Member States and their communities at the centre of the plan.
- **All Hazards Approach**: A near-term focus on biological hazards that lays the foundation for an eventual expansion to all hazards.
- **Collaboration**: Emphasizes the importance of partnerships and regional coordination.
- **Continuous Improvement**: Promotes reflective practices aimed at enhancing regional capacity
- **One-Health Approach**: Applies a collaborative, multi-sectoral approach that integrates coordinated efforts across human health, animal health, agriculture and environmental sectors.

PHEPP Framework

The PHEPP framework encompasses Gulf CDC’s central role as a coordinating body and its mandate to enhance preparedness, detection, and rapid response to public health hazards across the Gulf. Overall framework includes

3 core public health emergency preparedness Objectives and 9 Focus Areas, summarized in the figure below and discussed in greater detail on pages 29-34.



Role of the GCDC, National, Regional and International Partners

The Gulf CDC's ability to fulfill its central role in coordinating regional public health emergency preparedness and response will fundamentally rely on seamless collaboration with national, regional and international partners. A summary of the role of Gulf CDC and its partners in executing the PHEPP is provided below.

– Role of GCDC

The Gulf CDC's primary role in the PHEPP is to be a coordinating regional body to strengthen public health emergency preparedness capacity across the Gulf. More specifically, to fulfill its mandate, the Gulf CDC will:

- Support the development of collaborative public health emergency programs, policies, practices, and reference frameworks.
- Strengthen regional public health emergency training (e.g. public health emergency training workshops, simulation exercises), knowledge sharing and capability building.
- Enable the collection, integration, and utilization of public health data across key indicators through surveillance and research.
- Coordinate regional systems for expertise, assets and infrastructure related to emergency preparedness (e.g. data-sharing system for surveillance and alerts, reference laboratory network, joint procurement system for medical supplies)
- Facilitate the communication between national ministries, including MoH and non-MoH as it relates to regional PHE.

See Page 23 for functions beyond Gulf CDC's mandate

– Role of National Partners

Various stakeholders from the Member States will serve as key national partners in implementing the PHEPP at the regional and national levels. Example of national partners and their roles include:

- **CLOs (formally known as the Gulf CDC Technical Committee):** Main liaisons between the Member State and the Gulf CDC including for emergency preparedness and response related matters.
- **Permanent Communication Networks** including the PHE Network which brings together national leaders in emergency preparedness and response who will provide strategic and technical advice to the Gulf CDC including priority setting in the PHEPP.
- **Broader GCC stakeholders at various levels within Ministry of Health** will be those primarily involved in supporting the national coordination, input, and execution of Gulf CDC/regional recommendations.
- **Broader GCC stakeholders beyond the Ministry of Health or Ministry of Public Health** will be engaged on an as-needed basis through project-driven initiatives. Given that the organizational structures vary between Member States, specific engagement for necessary expertise will be confirmed and coordinated by the designated CLOs. See examples of non-MOH GCC stakeholders listed on page 36.

Role of Regional Partners

Regional partners include existing GCC organizations with a regional mandate that have previously and currently played a role in public health emergency preparedness and response. The specific role and responsibilities of regional partners will follow the Regional Model of Collaboration outlined in the PHEPP and will be described in further detail in the Implementation of Actions. Example of Relevant Partners include:

- **GCC Emergency Management Center** (see details on pages 36-38)
- **GCC Statistical Center (GCC-STAT)**
- Other Departments or Centers under the GCC General Secretariat involved in all-hazard public health emergency



Role of International Partners

International partners include existing and future Gulf CDC partners who are international or global public health organizations that are active in emergency preparedness and response—many of which have existing experience and local presence in the Gulf region. International Partners will be actively engaged through the PHE Network and PHE Working Groups as observers/advisors across all PHEPP objectives. The type and level of involvement will vary based on the Action. Of note, a key partner, WHO EMRO, will be closely engaged by the GDCDC to identify synergies and reduce the risk of duplicative efforts. List of international partners can be found and areas of involvement are outlined on Pages 37-38.



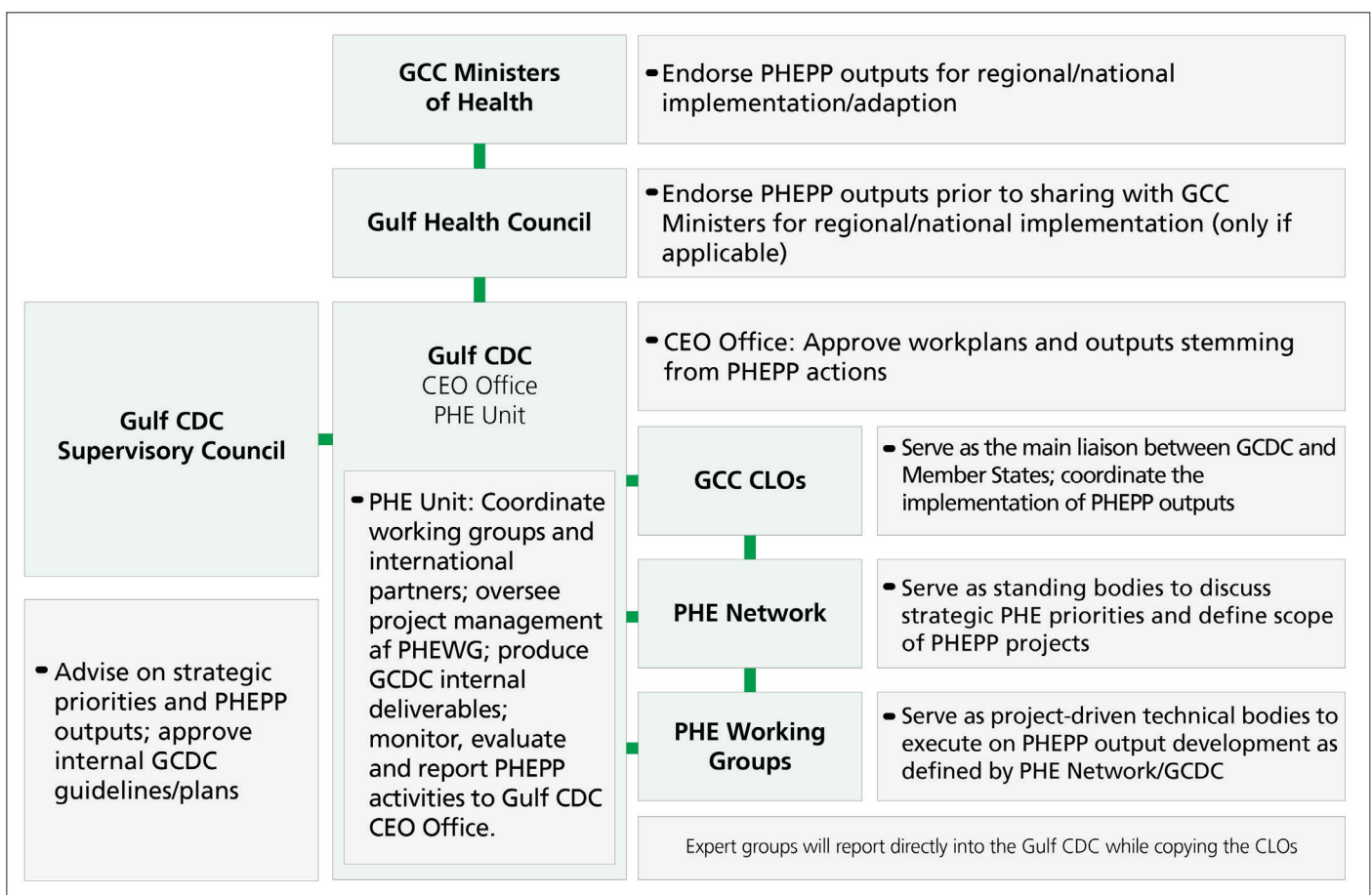
Regional Model of Collaboration



As the Gulf CDC accelerates regional public health emergency capacity building efforts including implementation of the PHEPP, the organization will need to ensure a regional model of collaboration is in place to support efficient decision-making and active technical expertise contributions from the Member States. The existing structure of the Gulf CDC remains largely amenable to the required

model of collaboration to implement the PHEPP. As such, the associated roles/responsibilities are summarized in the figure below. Greater detail of the composition and responsibilities of key stakeholder groups involved in the model are described on pages 39-42.

Regional Model of Collaboration – Roles and Responsibilities



Role of the Gulf CDC in CRNE Preparedness Planning

While the Gulf CDC will not be the primary lead in responding to a CRNE event, it will provide support to the designated leads (e.g. GCC EMC, National Emergency Committees) in preparing

for public health interventions related to such events. Supporting activities that the Gulf CDC will participate in related to CRNE preparedness and response is detailed on page 42.

Actions and Overview of Implementation Plans

A key section of the PHEPP outlines Actions and their implementation plans that will help achieve the 3 Objectives and 9 Focus Areas outlined in the PHEPP Strategic Framework. Each Objective/Focus Area includes associated priority (9 total) and non-priority Actions (8 total). All actions were derived from a consensus-driven effort with GCC stakeholders through several workshops, foundational landscape report, consultations and best practices of peer organizations. Priority actions are defined as near-term (up to 5 years) focus in efforts for the region.

Each action includes an implementation plan that provides an overview the action's rationale, key output, implementation steps, roles and responsibilities and evaluation measures and targets. Each implementation step has an assigned lead and supporting/advisory group(s). Lead roles will take ownership of that step (e.g. developing the content, outreach). Supporting/advisory roles are informed stakeholder groups that provide input and updated on progress.

As the PHEPP is expected to be refreshed on a regular cadence (e.g. every 5 years), additional actions will be identified or reprioritized in the future. The Gulf CDC will conduct annual evaluations against the measures and targets outlined for each action.

The actions within each focus area/objective are listed below. Detailed implementation plan is confidential and not provided in this document.



Objective 1: Strengthen Regional Training and Knowledge Sharing

1.1 Public Health Workforce Development and Education

- 1.1.1 Conduct a needs assessment on public health expertise across the region
- 1.1.2 Establish professional development courses, fellowship exchange programs and virtual tools

1.2 Regional Readiness, Response and Recovery Training

- 1.2.1 Conduct regional tabletop simulation exercises, scenario planning and training drills
- 1.2.2 Establish and train a regional roster of public health experts to support Member States during an emergency

1.3 Knowledge Exchange and Sharing of Best Practices

- 1.3.1 Leverage existing platforms to coordinate knowledge exchange between Member States
- 1.3.2 Develop an asset database of known emergency management assets and infrastructures across Member States

- **Objective 2: Develop Regional Public Health Guidelines & Recommendations**

- 2.1 Country-Level Emergency Preparedness and Response Planning**

- 2.1.1 Explore the suitability of developing a secondary capability evaluation tailored to the Gulf region
- 2.1.2 Develop guidelines/frameworks to support Member State emergency preparedness and response planning

- 2.2 Priority Hazards across the region**

- 2.2.1 Identify and annually review a list of well-defined priority biological hazards for the region
- 2.2.2 Develop general risk/hazard reference profiles and guidelines for the region

- 2.3 Practices for Regional Readiness and Response**

- 2.3.1 Conduct continuous risk assessments to identify, evaluate and respond to potential threats of regional interest
- 2.3.2 Develop a flexible, adaptable and scalable incident management system (IMS) that enables a unified organizational response
- 2.3.3 Develop a business case for a public health regional emergency operations center

- **Objective 3: Unlock the Value of Public Health Assets, Data and Infrastructure Across the Region**

- 3.1 Regional Surveillance Systems for Early Detection**

- 3.1.1 Support real-time sharing of surveillance intelligence data (including Gulf CDC-generated surveillance reports)

- 3.2 Public Health Laboratory Capabilities and Connectivity**

- 3.2.1 Establish a regional reference public health laboratory network among Member States

- 3.3 Centralized Procurement of Essential Public Health Emergency Supplies**

- 3.3.1 Strengthen existing regional joint procurement and stockpiling systems to ensure capacity for public health emergencies
- 3.3.2 Identify opportunities for enhancement of regional manufacturing capacity for vaccines, drugs and other medical supplies



Anticipated Impact

The Gulf Emergency Preparedness Plan will enhance the collective public health emergency preparedness and response capacity and effective collaboration across the region, ultimately safeguarding the health and well-being of Gulf populations and fostering regional resilience and prosperity.



Introduction to the Plan



Context

Public health events caused by emerging biological, chemical, radiological, nuclear and environmental hazards pose a significant threat to public health security across the Gulf region, including the Member States of the Gulf Cooperation Council (GCC)– United Arab Emirates, Kingdom of Bahrain, Kingdom of Saudi Arabia, Sultanate of Oman, State of Qatar and State of Kuwait.

The impact of the COVID-19 pandemic has demonstrated the critical importance of epidemic and pandemic preparedness. Globalization, climate change, mass gatherings and antimicrobial resistance patterns are amongst the myriad of factors that increase risks of emergence and spread of diseases. As several GCC countries are hubs for international tourism and business, as well as hosts of large international mass gatherings, they are vulnerable to the importation and exportation of diseases. Moreover, the GCC countries are all ambitious working towards fulfilling their national transformation strategies, highlighting economic stability and prosperity as a national priority. In parallel, transformations of healthcare systems are ongoing in multiple GCC countries. These initiatives present an opportunity for increasing public health emergency preparedness capacities.

The GCC countries have tackled several outbreaks in the past. These include dengue fever, legionnaires disease, Crimean–Congo haemorrhagic fever and Rift Valley Fever. Emergence of novel pathogens, such as the Middle East respiratory syndrome coronavirus (MERS-CoV) and Alkhurma hemorrhagic fever virus, has also occurred in the Region and has been tackled. These experiences have significantly shaped the current preparedness and response systems in place. However, several risks to emergence of new pathogens and spread of epidemic and pandemic prone

diseases remain. Examples include the presence of competent vectors as well as the imminent threat posed by potential human-to-human transmission of zoonotic viruses like the highly pathogenic avian influenza A viruses.

Additionally, the presence of other threats including environmental, chemical, radiological, and nuclear emergencies present additional vulnerabilities to the region. As such, there is a pressing need to enhance preparedness and response capabilities in the region to mitigate the impact of public health emergencies on health, social, and economic systems and contribute to the achievement of Sustainable Development Goals.

In 2005, GCC Member States and 190 other countries across the globe agreed to implement International Health Regulations (2005)—a legal framework “to prevent, protect against, control, and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks”. While GCC Member States have continually worked to implement, strengthen, and improve core capacities outlined in IHR (2005), much of this progress has occurred at the national level, public health emergency preparedness at the regional level requires further investment and coordination. Indeed, such regional efforts in public health emergency preparedness—particularly for biological/ infectious disease hazards—complements well with previous or ongoing work by the GCC General Secretariat and Gulf Health Council (GCC-SG) as well as the Emergency Management Center (GCC EMC).

As such, in January 2021, the Supreme Council of the Gulf Cooperation Council approved the establishment of the Gulf Centre for Disease Prevention and Control (Gulf CDC) with a mandate to strengthen public health coordination, capacity building, evidence generation and emergency preparedness capacities across the six Member States of the GCC.

Impetus for the Gulf Public Health Emergency Preparedness Plan

Emerging Cross-Border Health Risks

Public health emergencies become increasingly complex with a more expansive geographic reach. The Gulf region is at heightened risk for cross-border public health emergencies due to:

- Gulf region's interconnectedness with neighbouring countries and the global community risking importation and exportation of diseases.
- Free flow of GCC nationals, mass gatherings (such as the annual Hajj Pilgrimage), the upcoming introduction of a GCC visa for visitors and the movement of animals across borders that heightens the possibility of the rapid spread of diseases.
- Increasing number of expected GCC free trade agreements and common trade patterns, increasing the potential spread of respiratory, foodborne and other common illnesses.

Such vulnerabilities pose health security threats that can overwhelm national response capacities with significant economic, social, political and security implications, highlighting the need for a coordinated approach to emergency preparedness and response as well as a common strategic direction for the region. To address the impact of cross-border health threats and increase the resilience and sustainability of the region, a standard framework is needed to strengthen capacities, systems and regional coordination mechanisms to anticipate risks and respond rapidly to identified threats.

Existing National Public Health Plans Across the Gulf Region

In 2023, Gulf CDC commissioned a comprehensive information gathering exercise to develop a landscape report of existing emergency preparedness capacities in the Gulf region, including a detailed review of over 100 national public health documents (e.g. preparedness and response plans and guidelines) to uncover insights into current stakeholder roles, communication strategies, risk assessment tools, and approaches to managing stockpiles and infrastructure. This assessment uncovered that:

- There is variability across GCC countries in terms of the structure and content of existing plans, guidelines.
- Many of the country-level plans are due for renewal.
- There are very few regional plans outlining coordinated efforts across the Gulf, with some notable exceptions, such as the Pandemic Preparedness and Response Plan (2022) and the GCC Infection Prevention and Control Manual (2018), the GCC-SG Gulf Framework for Public Health Emergency Preparedness and Response (2020), and the GCC-SG Early Warning Health System Guide (2020)

Importance of Regional Emergency Management Planning

To combat the risk of emerging cross-border health threats, enhanced regional coordination is paramount. Internationally recognized organizations such as the European Centre for Disease Control and Prevention (ECDC), US Centers for Disease Control and Prevention (US-CDC) as well as the World Health Organization (WHO) and its regional offices (such as EMRO and PAHO) have set a precedent by placing regional coordination at the centre of their emergency management activities.

Many of these organizations have developed (or are in the process of developing) regional emergency preparedness plans that provide high-level strategic direction to strengthen emergency preparedness and response capacities, improve coordination and cooperation between countries and advance the implementation of IHR (2005). While many of these plans have been developed with an all-hazards approach, others have been developed to target high-priority pathogens (e.g. WHO

EMRO COVID-19 Preparedness Plan).

Over the last ~50 years, the Gulf Health Council (GHC) has worked to advance the process of cooperation and joint Gulf health action to achieve sustainable health across the region. Since its establishment, the GHC has expanded in its programs and organizations (Figure 1)—including the Gulf CDC—to advance its strategy in prevention, awareness, development and health support for the Gulf region.

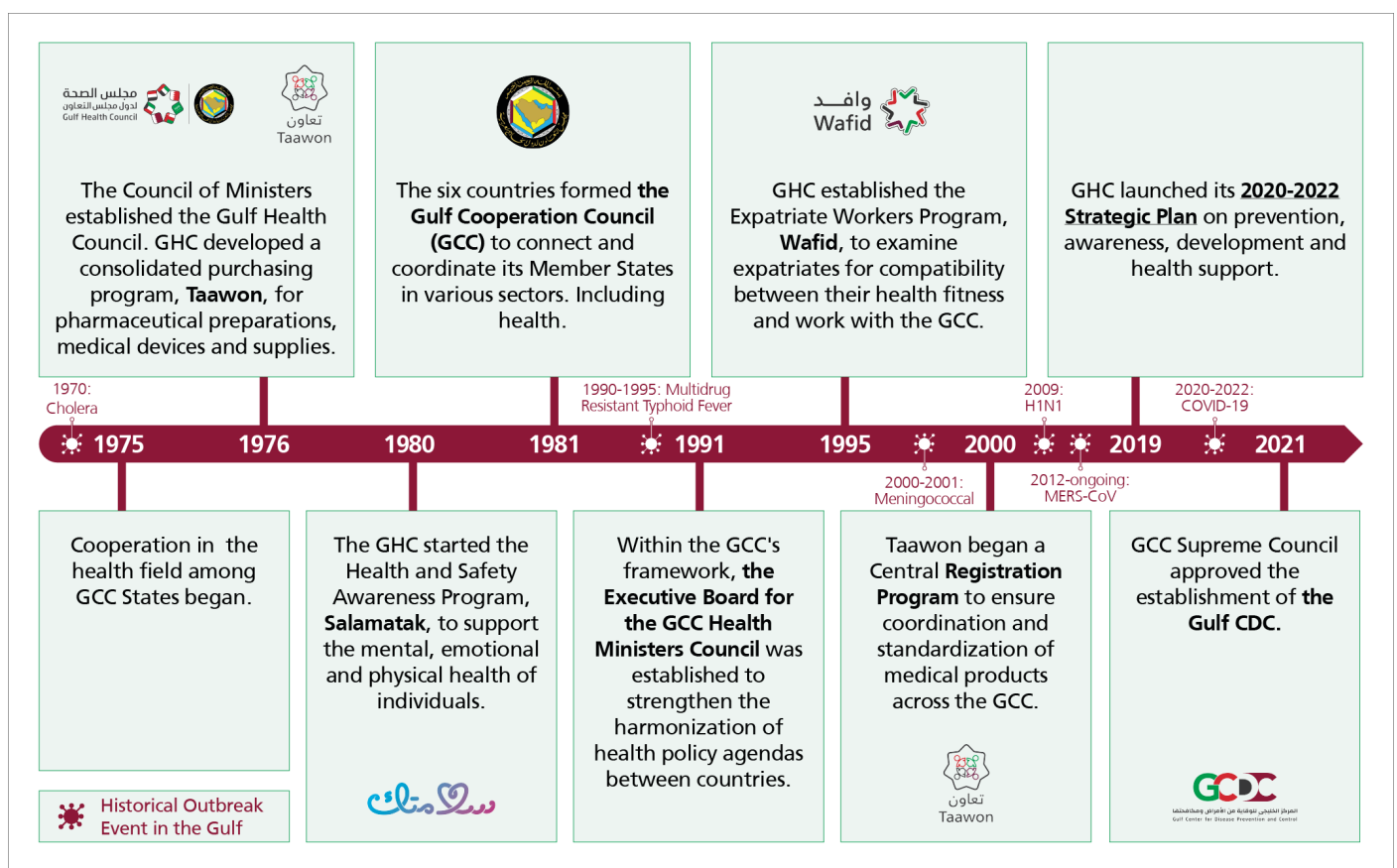


Figure 1. Historical Evolution of the Gulf Health Council

Since its inception in 2021, Gulf CDC and its partners have established a robust foundation for regional emergency management planning, drawing on lessons learned from past events and existing regional strategies. Gulf CDC also acknowledges the impact and extraordinary work of other regional agencies (such as GCC Emergency Management Center, EU CoE CRNE, US Regional Office, WHO EMRO)

operating in the Gulf and recognizes a unique opportunity to strengthen regional partnerships and collaboration to identify synergies and improve emergency preparedness and response capabilities across the Gulf. Developing the Gulf Public Health Emergency Preparedness Plan (PHEPP) and ensuring its alignment with existing regional efforts and plans is a foundational step in realizing this opportunity.

Gulf Public Health Emergency Preparedness Plan 2025 - 2030



Approach to Developing the PHEPP

The PHEPP was informed by an initial landscape report aimed at reviewing emergency management capacities across all GCC countries. The Plan was developed through an iterative and collaborative approach with numerous GCC stakeholders and external public health experts (i.e. Public Health Agency of Sweden, peer regional organizations). This

approach gathered diverse perspectives from 40+ stakeholders, enabling Gulf CDC to develop a plan tailored to the unique needs of the Gulf region, while continuing to advance global public health commitments (e.g. IHR 2005) and strengthen relationships with national, regional, and international partners.



GCC Document Review

Through secondary research and the support of the Gulf CDC and CLOs, over 100 documents on emergency management capacity across GCC countries were analyzed to understand existing capacities and identify potential synergies and gaps across the region.



Benchmark Scan

Secondary research was conducted on 4 leading peer agencies-to understand global best practices in regional coordination for emergency preparedness and response.



Consultations

To supplement and fill gaps in secondary research, 33 interviews were conducted with representatives from GCC health authorities and 6 experts in peer regional organizations in a series of 1:1 consultations and focus groups.



GCC Meetings/Workshops

Using an iterative process, a series of technical meetings were conducted with CLOs (and other GCC stakeholders) to gather feedback, refine, and enhance the emergency preparedness plan and establish consensus among GCC stakeholders.

Key Insights from the Landscape Report

The information gathered through the landscape report provided critical insights that underscore Gulf CDC's pivotal role in navigating the dynamic and intricate public health environment in the

Gulf. Overall, GCC stakeholders favoured the development a regional plan for emergency preparedness and response, emphasizing Gulf CDC's central coordinating role in knowledge,

data and asset exchange and sharing across GCC countries. Key areas of support identified for Gulf CDC include:

- Strengthening training (e.g. public health training workshops, simulation exercises and knowledge sharing across the Gulf).
- Developing standardized reference frameworks and guidelines to support Member states (e.g. coordinated response plan, methodology for risk assessment).
- Coordinating regional systems for expertise, assets and infrastructure (e.g. data-sharing system for surveillance and alerts, reference laboratory network, joint procurement system for medical supplies)

Similarly, engagement with peer regional organizations revealed significant insights into Gulf CDC's approach to emergency preparedness and response planning:

- Most peer regional organizations expressed a desire to collaborate and forge partnerships with Gulf CDC to advance regional (and global) emergency management objectives.
- Peer organizations were aligned with GCC

stakeholders on priority areas for Gulf CDC including regional capacity building, establishing centralized systems and standardized frameworks, and fostering regional coordination.

- Peer organizations also noted critical emergency functions that should be captured in Gulf CDC's planning efforts including risk and crisis communication, emergency grading, incident management systems, rapid response teams and aiding with regional recovery (post-emergency).
- Peer organizations provided valuable insights pertaining to the structure, design, and development of emergency management plans, which have been integrated to the development of the PHEPP.

As such the following PHEPP was built on the diverse perspectives and lessons learned captured through a comprehensive and rigorous stakeholder engagement process across the Gulf region and globally.



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Gulf Center for Disease Prevention and Control

Role of Gulf CDC in PHEPP

Insights from GCC stakeholder and peer organization consultations underpin critical considerations for Gulf CDC as it defines its role in PHEPP, namely:

- It will be important for **Gulf CDC to clearly define and communicate an overarching mandate and goals in public health emergency management** that delineates its strategic role in relation to those of countries and other regional players.
- There are expectations for the **Gulf CDC to serve as a regional coordinator** and thought leader to strengthen emergency preparedness and long-term local capacity across the Gulf.
- With **no single 'gold standard' model**, Gulf CDC has flexibility to tailor the structure and level of detail of its emergency preparedness and response plans to best align with the Gulf's regional needs, ensure its applicability to Member States and internal capabilities.
- It will be critical to **define a clear strategic role for Gulf CDC and secure regional buy-in** prior to launching into detailed operational planning components.
- Success factors include **building trust with Member States, prioritizing the most tangible and common hazards** within the region and **developing mutually beneficial strategic partnerships** with synergistic roles and responsibilities.

Based on the above considerations and in line with the Gulf CDC's broader purpose as a regional public health centre aimed at strengthening public health coordination, capacity building and evidence generation

across the six member states of the GCC, the core functions of Gulf CDC in emergency preparedness and areas outside of its mandate are outlined below.

Core Functions of Gulf CDC in Public Health Emergency Preparedness

- Support the development of collaborative public health emergency programs, policies, practices, and reference frameworks.
- Strengthen regional public health emergency training (e.g. public health emergency training workshops, simulation exercises), knowledge sharing and capability building.
- Enable the collection, integration, and utilization of public health data across key indicators through surveillance and research.
- Coordinate regional systems for expertise, assets and infrastructure related to emergency preparedness (e.g. data-sharing system for surveillance and alerts, reference laboratory network, joint procurement system for medical supplies)
- Facilitate the communication and knowledge exchange between GCC Member States as it relates to regional PHE.

Functions Beyond Gulf CDC's Mandate

- Gulf CDC does not act as a legislative body that proposes or interferes with laws and policies in Member States (e.g. the development of a national CDC) but is a critical resource in the establishment of public health capacity and expertise across the region.
- Gulf CDC does not act as a legislative body that proposes or interferes with laws and policies in Member States
- Gulf CDC does not maintain a significant physical footprint (e.g. owning and operating major laboratories).
- Gulf CDC is not a funding body that financially supports major infrastructure projects or programs in Member States.



Role of GHC in PHEPP

Additionally, given the historical involvement and experience of the GHC in coordination across the region including during public health emergencies (e.g. COVID-19 pandemic), the GHC remains a significant player in the development and implementation of the PHEPP.

There will be likely opportunities to leverage existing regional infrastructure and systems developed by the GHC (e.g. Gulf Central Drug Registration Program/GCC Joint Procurement System) to support public health emergency preparedness and response.

Purpose, Scope and Guiding Principles of the PHEPP

Purpose of the PHEPP

Building on the GCC landscape exercise, active dialogue with GCC stakeholders and best practices from peer organizations, Gulf CDC, in collaboration with Member States and partners, has developed the Gulf Public Health Emergency Preparedness Plan (PHEPP) 2025-2030. The PHEPP has been crafted to build on existing regional plans, address regional gaps, incorporate the distinct priorities of Member States, draw on lessons learned from past health emergencies and adapt to the environmental and demographic dynamics specific to the Gulf.

The PHEPP provides:

- **A strategic framework for action during peace time** that gives common direction to Member States, Gulf CDC, and external partners to strengthen emergency management capacities, enhance regional coordination, advocate for the mobilization of financial and technical resources and collectively monitor progress.
- **A clear mandate for regional public health emergency management**, delineating the strategic role of the Gulf CDC in coordination with individual countries, other regional entities and international partners.
- **A reflection of Gulf CDC's foundational strategy**, as well as other regional plans and frameworks published by the WHO and peer organizations.
- **A One Health approach** towards public health emergency management that recognizes the interconnectedness of human, animal, and environmental health and fosters collaboration across sectors and disciplines.

Ultimately, the purpose of the PHEPP is to enhance emergency preparedness capacities, systems and coordination for public health hazards of interest to the Gulf region.

Scope of the PHEPP

While the near-term focus of the Plan revolves around biological hazards, it has been designed through an all-hazards lens, ensuring flexibility to accommodate the diverse circumstances of individual Member States and enable effective implementation. **The plan will be implemented through 2025-2030, with reviews every year.**

While some elements of the PHEPP (e.g. development of rapid response teams, asset databases and incident management systems) also relate to response activities, it is not intended to serve as a technical operations plan. The PHEPP enables the enhancement of regional emergency preparedness with focus on the development of critical processes, guidelines, and frameworks (to be developed during peacetime) that will inform a more technical **public health emergency response operations plan (PHEROP)**.

Guiding Principles to the PHEPP

- **GCC Country-Focused:** Places Member States and their communities at the centre of the plan
- **All Hazards Approach:** A near-term focus on biological hazards that lays the foundation for an eventual expansion to all hazards.
- **Collaboration:** Emphasizes the importance of partnerships and regional coordination
- **Continuous Improvement:** Promotes reflective practices aimed at enhancing regional capacity
- **One-Health Approach:** Applies a collaborative, multi-sectoral approach that integrates coordinated efforts across human health, animal health, agriculture and environmental sectors.

Gulf Public Health Emergency Preparedness Plan Framework



Drawing on global best practices and insights gleaned through the landscape report, Gulf CDC, in collaboration with GCC stakeholders and input from peer organizations, formulated a comprehensive framework to guide regional preparedness efforts (Figure 2). The PHEPP framework encompasses Gulf CDC’s central role as a coordinating body and its mandate to enhance preparedness, detection, and rapid response to public health hazards across the Gulf. The framework is organized by 3 core preparedness objectives, each accompanied by specific focus areas and actions. Collectively, the PHEPP framework ensures that Gulf CDC and GCC Member States are adequately prepared and equipped to effectively respond to regional, cross-border public health emergencies as they arise.

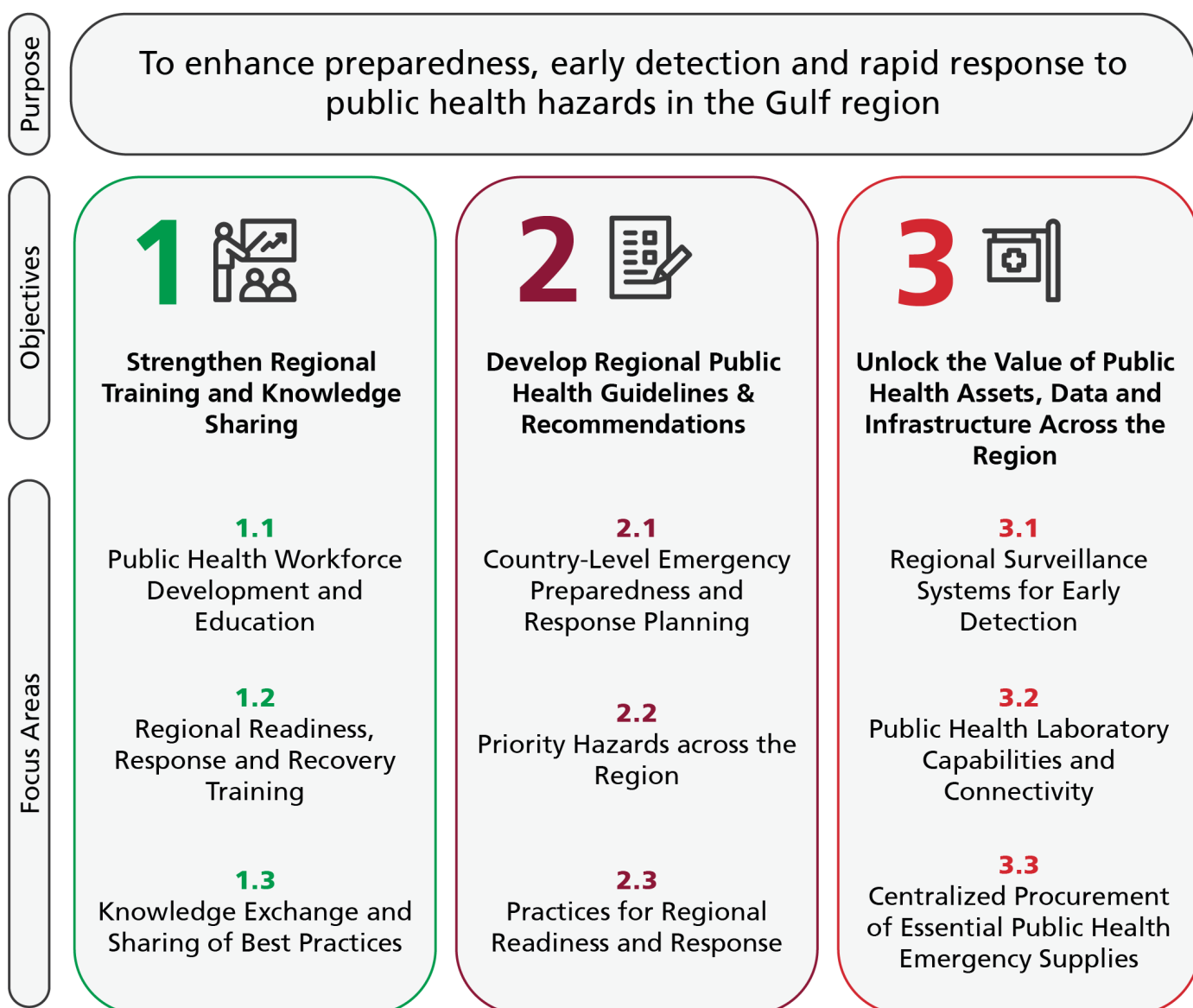


Figure 2. Overview of the Gulf Public Health Emergency Preparedness Plan.

Objectives and Focus Areas



What?

Who?

agreement or
instrument, on
condition, preparedness
with a view to its
Article 19 or other
WHO Constitution.

intergovernmental negotiating body
(INB) open to all Member States and
Associate Members (and regional
economic integration organizations,
as appropriate)

1. MoA (health attaches)
2. MoU

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Context for Objectives and Focus Areas

The Objectives and Focus Areas of this plan have been carefully selected to center around the needs of Member States and their communities. The Objectives and Focus Areas were informed by GCC stakeholder inputs and expert insights from international partners gathered as part of the recent landscape report. The foundational framework also aligns with peer organization documents including the WHO Emergency Preparedness Framework.

Designed for flexibility, the plan accommodates a range of hazards and builds upon lessons learned from previous

health emergencies. It specifically addresses regional gaps and integrates the unique priorities of Member States, considering the specific environmental and demographic characteristics of the Gulf region. Additionally, the objectives are crafted to be flexible and adaptable, allowing for evolution and expansion into further focus areas as new challenges and opportunities arise. Relevant peer organizations frameworks have been referenced in detail for each action within the objectives and are fully integrated into the implementation plans.



Objectives

The Gulf Public Health Emergency Preparedness Plan focuses on three key Objectives:

1. Strengthen Regional Training and Knowledge Sharing
2. Develop Regional Public Health Guidelines & Recommendations
3. Unlock the Value of Public Health Assets, Data and Infrastructure Across the Region

Objective 1: Strengthen Regional Training and Knowledge Sharing

Context

Regional training and knowledge sharing is key to ensuring consistency and coordination in emergency management practices across the Gulf, facilitating a rapid response attuned to local contexts and enhancing regional capacity to reduce reliance on external assistance. Regional training is a core emergency preparedness activity prioritized by international public health organizations who offer professional development programs, virtual tools and research training and support. Engagement with GCC stakeholders and peer organizations have identified the following areas that would benefit from regional support:

Support Areas Highlighted by GCC Stakeholders



- Region-wide public health educational programs on emergency management (e.g. exchange fellowships) and tools to foster consistency in training and qualifications (e.g. a shared understanding of terminology).
- Reinforcement of the caliber of the public health workforce across Member States through Gulf training initiatives for emergency management (e.g. simulation

exercises).

- Knowledge sharing of best practices, expertise, lessons learned and resources across Member States to strengthen emergency management and long-term capacity and efficiency.

By achieving this objective, Member States will establish a diverse pool of well-trained public health experts who can collaborate effectively across country borders and draw on lessons learned from past experiences to enable more coordinated and efficient emergency preparedness and response planning.

Focus Areas

1.1 Public Health Workforce Development and Education

A robust public health workforce serves as the backbone for timely, coordinated, and effective actions before, during and after emergencies.

Alignment with GCC Stakeholder Priorities



- Variabilities in public health-related qualifications between Member States and limited investment in fostering public health talent development are areas of regional concern noted by GCC stakeholders.
- Understanding existing or forecasted workforce needs, including the development of competencies essential for intersectoral work for emergency response, and enhancing workforce sustainability (e.g. through improved career pathways and working conditions), will equip Gulf CDC and Member States with the capacity to support technical, operational, strategic, and leadership elements associated with preparing for and responding to public health emergencies in the region.

1.2 Regional Readiness, Response, and Recovery Training

Regional readiness, response, and recovery training is vital for the development of specialized skills across Member States to manage potential cross-border public health threats effectively and collaboratively.

Alignment with GCC Stakeholder Priorities



- GCC stakeholders emphasized the importance of regional exercises, such as simulation exercises, for building professional relationships, sharing best practices, and testing a coordinated response to emergencies.
- Gulf CDC also plays a crucial role in ongoing training for members of regional rapid response teams to ensure effective deployment and ability to operate within a regional context.

1.3 Knowledge Exchange and Sharing of Best Practices

Given the diversity in public health expertise and experiences across the Gulf region, Member States are uniquely positioned to collaborate and learn from each other to accelerate regional emergency management objectives.

Alignment with GCC Stakeholder Priorities



- GCC stakeholders suggested creating or leveraging existing mechanisms and platforms to facilitate the exchange of knowledge, assets, and events related to emergency preparedness and response among Member States.
- Such a platform could notify Member States of relevant professional/training events being held across the region to optimize resources and minimize redundancies in country-level preparedness and response activities.

See Actions and Implementation section for relevant tangible actions that will achieve this Objective and its Focus Areas.

Objective 2: Develop Regional Public Health Guidelines & Recommendations

Context

Having regional guidelines and recommendations in place enable evidence-based decision making at regional and national levels, effective coordination of resources within Member States and cohesive preparedness and response efforts across the region. Indeed, well-coordinated emergency preparedness plans and protocols are a top priority for international organizations, all of whom have developed frameworks, guidelines and protocols to support countries within their jurisdictions in handling emergencies. Of note, regional plans intentionally build in flexibility to adapt to local contexts and Member State needs. Currently, GCC Member States have independently developed documents and procedures for emergency preparedness and response that vary in scope and detail. As such, GCC stakeholders have noted several opportunities for regional support to improve the coordination and quality of emergency preparedness and response plans and protocols across the Gulf including:

Support Areas Highlighted by GCC Stakeholders



- Support in country-level emergency preparedness and response planning (e.g. capability assessment, communication plans) that reflects the Gulf's unique environmental context.
- Alignment across Member States on the approach (e.g. case reporting, clinical case management) to managing potential hazards of regional interest.
- Establishment of mechanisms (e.g. risk assessment, emergency grading) to rapidly scale and mobilize regional and national resources once an emergency is triggered.

Achieving this objective will result in consistent, clear and evidence-based public health emergency guidelines and processes to efficiently mitigate the impact of public health crises across the region.

Focus Areas

2.1 Country-Level Emergency Preparedness and Response Planning

Robust country-level emergency management capabilities play a critical role in reducing the impact of cross-border health threats and enable better coordination between Member States. Review of over 99 national plans and other documents suggests that GCC Member States have taken independent approaches to emergency preparedness and response planning at the country-level, resulting in inconsistencies across the region with variability in details across these documents.

Alignment with GCC Stakeholder Priorities



- Currently, there is limited support and guidance available to individual Member States regarding preparedness and response planning that considers the unique regional nuances present in the Gulf.
- The implementation of regional guidelines, evaluations, and reference frameworks adaptable to the Member State environment will enable a stronger and more effective regional and national public health emergency management.

2.2 Priority Hazards Across the Region

Inconsistencies in how neighbouring countries manage cross-border public health threats (e.g. case reporting, clinical case management, travel policies) can significantly influence public health risks and outcomes, economic impact, and diplomatic relations.

Alignment with GCC Stakeholder Priorities



- Having regional frameworks or guidance on the management of various broad hazard types (e.g. biological, chemical, radiological, nuclear, environmental) that could be feasibly adapted by Member States to specific hazards once detected would ensure a more cohesive

regional response to any public health event. Overall, such guidelines would reduce regional vulnerabilities to high-impact public health threats.

2.3 Practices for Regional Readiness and Response

Continuous regional risk assessments help identify common threats and vulnerabilities that may require collaboration between Member States and regional organizations to develop strategies to address them collectively.

Alignment with GCC Stakeholder Priorities



- In addition to supporting in-country readiness and response, the region must have mechanisms in place to support the detection, evaluation and response to potential regional threats.
- It is imperative to establish an incident management system to ensure Gulf CDC's resources and personnel are mobilized adequately and efficiently to meet the needs of the event at hand as determined by risk assessments.
- Establishing clear guidelines delineating the triggers for response and outlining Gulf CDC's response strategies and the role for various Member States stakeholders will enable a cohesive response to all levels of public health emergencies.

See *Actions and Implementation* section for relevant tangible actions that will achieve this Objective and its Focus Areas.

Objective 3: Unlock the Value of Public Health Assets, Data and Infrastructure Across the Region

Context

The landscape reporting exercise has revealed that while nearly all GCC countries have established Emergency Operations Centers (EOCs) and robust surveillance systems to detect biological hazards there is significant variation in the complexity and capabilities of EOCs and the digitalization of surveillance systems between countries. Additionally, while all GCC countries have reference laboratories, there are disparities in biosafety certifications and testing capabilities for priority diseases. Enhanced sharing of these resources among member states is essential as:

- It will improve the region's preparedness by harmonizing capabilities and ensuring a more unified and effective response to emergencies.
- Having shared public health assets, data, and infrastructure networks across the region is also essential to improving timely surveillance and monitoring of healthcare data, facilitating data-driven decision-making and optimizing resource allocation across borders.
- Given the critical role of public health assets, data and infrastructure in effective emergency management, international regional public health organizations have prioritized and actively supported the development of centralized surveillance systems (e.g. European Surveillance System—TESSy), reference laboratory networks (e.g. COVID-19 reference laboratory network), and stockpiling/procurement capacities (e.g. regional stockpiles and pooled procurement mechanisms).

Similarly, GCC stakeholders share the need for improved data-sharing, communication and collaboration among public health assets and infrastructure. Key opportunities for regional support highlighted by GCC stakeholders include:

Support Areas Highlighted by GCC Stakeholders



- Enhancement of the level of timely sharing of clinical, laboratory and epidemiological data amongst Member States, particularly in the surveillance of priority hazards to facilitate early detection and rapid emergency responses.
- Better interconnectivity of public health reference laboratories across the Gulf to foster greater communication and collaboration to strengthen laboratory capabilities (e.g. detection and diagnosis of high-threat pathogens and sharing and optimising protocols).
- Expansion of the existing procurement system in the region for joint procurement of essential public health emergency supplies leveraging potential financial and volume advantages.

The development of interconnected regional networks of public health assets, data and infrastructure will equip the Gulf region with a seamless coordinated emergency management system to address future public health emergencies.

Focus Areas

3.1 Regional Surveillance Systems for Early Detection

Currently, as part of its event-based surveillance efforts, the Gulf CDC daily screens 30,000+ open sources (utilizing an artificial intelligence software), including ones on social media, to identify potential threats to the region and conduct risk assessments. The Gulf CDC actively publishes these epidemic intelligence findings in comprehensive reports on a weekly, monthly, and annual basis to inform evidence-based decision-making by Member States. As a part of this initiative, to increase regional screening coverage, Gulf CDC's future plans will include training GCC Member States on the Epidemic Intelligence from Open Sources (EIOS) System, enabling them to utilize and integrate national signals of potential threats into the existing system via EIOS boards. Also, leveraging this existing initiative, Gulf CDC can bolster indicator-based surveillance efforts in the Gulf region by fostering real-time sharing of surveillance data of high threat pathogens (of regional priority) between Member States and Gulf CDC and establishing alert thresholds for early warnings.

Alignment with GCC Stakeholder Priorities



- Integrated regional surveillance systems would provide comprehensive geographical coverage of the Gulf region by incorporating data from multiple countries and sources, to provide early warning of emerging health threats—particularly those that may transcend national borders. Such systems allow for more seamless information sharing, joint response planning, and coordinated action in the event of public health emergencies or outbreaks that affect

multiple areas within the region.

- GCC stakeholders underline the initiative's importance, particularly for signal validation and tracking transnational hazards, emphasizing the need for real-time epidemiological data sharing, automated clinical and laboratory data submission, and ensuring data quality and confidentiality.

3.2 Public Health Laboratory Capabilities and Connectivity

The establishment of a regional reference public health laboratory network among Member States will be a critical step in strengthening public health laboratory capacities in the Gulf region. This network is expected to collectively pool and share resources, expertise and best practices to enhance diagnostic capacity across the region.

Alignment with GCC Stakeholder Priorities



- The network provides a forum to Member States to address laboratory capacity challenges and have backup capabilities to ensure continuity of diagnostic and confirmatory services should a disruption or emergency occur.
- GCC stakeholders emphasized the importance of identifying and designating centers of excellence based on unique strengths, liaising with environmental and veterinary labs to address prevalent threats like MERS-CoV, setting policies for sample sharing, and ensuring data confidentiality and proprietary rights across borders.
- Additional opportunities include development of a shared database for

high-threat pathogen diagnostics and protocols and proactive integration of laboratory research capabilities with emerging insights from latest surveillance data and epidemiological trends.

3.3 Centralized Procurement of Essential Public Health Emergency Supplies

Centralizing the procurement of essential public health emergency supplies is pivotal for the Gulf region's resilience in facing health crises and long-term sustainability in health security.

emergencies.

- Global supply chain disruptions during the COVID-19 pandemic highlighted the vulnerability of relying on external supplies, prompting recommendations by GCC stakeholders to establish a regional center for manufacturing vaccines, drugs, and medical supplies.

See Actions and Implementation section for relevant tangible actions that will achieve this Objective and its Focus Areas.

Alignment with GCC Stakeholder Priorities



- Current arrangements for procurement and stockpiling among GCC countries are fragmented and lack transparency, with minimal public information available due to security concerns.
- While some GCC countries have developed domestic production capabilities, the majority of supplies are imported.
- Although a Gulf joint procurement system exists to support the stockpiling of essential supplies for six months across the region, there is no regional strategy to enhance production capacity or standardize stockpiling practices among member states.
- Joint procurement across the region enables economies of scale, efficiency, increased market access and risk sharing among Member States. As such, there is an opportunity to strengthen and expand the utilization of existing regional joint procurement systems to meet resource needs of public health

Partnerships and Model of Collaboration



National, Regional and International Partners in Emergency Preparedness and Response

The success of the PHEPP is critically dependent on the involvement and contribution of national, regional and international partners brought together through the Gulf CDC. Building on foundational relationships with the Gulf CDC to-date, partners will remain closely involved in providing strategic and technical guidance to achieve various objectives of the PHEPP.

National Partners

Various stakeholders from the Member States will serve as key national partners in implementing the PHEPP at the national and regional levels. Example of relevant partners include:

- **Gulf CDC Country Liaison Officers (CLOs)** (formally known as the Gulf CDC Technical Committee) who are the main liaisons between the Member State and the Gulf CDC including for emergency preparedness and response related matters.
- **Gulf CDC PHE Network** which includes national leaders in emergency preparedness and response (e.g. International Health Regulations Focal Point, Ministry of Health Communicable Disease Directors, and National Public Health Laboratory Directors) and provide strategic and technical advice to the Gulf CDC including priority setting in the PHEPP.
- **Gulf CDC Other Permanent Communication Networks (PCNs)** who may be consulted on or involved in relevant topics. These include the PCNs of Communicable Disease, Research, Surveillance, Health Promotion, and Training in the Gulf CDC.
- **Broader GCC stakeholders at various levels within Ministry of Health** will be those primarily involved in supporting the national coordination, input, and execution of Gulf CDC/regional recommendations.

Potential groups to be activated include:

- Dedicated implementation task forces within the Ministry of Health
- IHR Committee
- Department of Disease Surveillance and Control
- Department of Communication, Public Health Directorate and Centers, Poison Centers)
- Relevant national health systems (e.g. administrators, hospitals)

- **Broader GCC stakeholders beyond the Ministry of Health or Ministry of Public Health** will be engaged on an as-needed basis through project-driven initiatives. Given that the organizational structures vary between Member States, specific engagement for necessary expertise will be confirmed and coordinated by the designated CLOs. Potential non-Health national ministries and departments to be consulted include:
 - Nuclear Authorization and Safety Agencies
 - National Committees for Disaster Management
 - National Centers for Radiological Protection
 - Ministries of Climate, Environment and Agriculture
 - Ministries of Civil Defense

Generally, the PHEPP will be shared broadly with these non-health stakeholders to build awareness and identify potential synergies and collaboration opportunities.

Further detail of the involvement of national partners will follow the Regional Model of Collaboration outlined below and will be specific to the action as further described in the Actions and Implementation section.

Regional Partners

Regional partners include existing GCC organizations with a regional mandate that have previously and currently played a role in public health emergency preparedness and response. These partners include:

- **GCC Emergency Management Center (GCC EMC)**
- **GCC Statistical Center (GCC-STAT)**
- Other Departments or Centers under the GCC General Secretariat involved in all-hazard public health emergency

Importantly, the actions of the of PHEPP led by the Gulf CDC complements the ongoing work by the **GCC EMC** in enhancing emergency readiness and response to chemical, radiological and nuclear emergencies. Recognizing the common goal in supporting emergency preparedness and response among GCC Member States, the Gulf CDC and GCC EMC will share knowledge and expertise in our respective areas and identify opportunities for synergy and collaboration. More specifically, the GCC EMC can help bring a broader all-hazard/non-biological hazard lens to regional preparedness planning in Gulf-CDC-related outputs.

Specific role and responsibilities of regional partners will follow the Regional Model of Collaboration outlined in the next section and will be further described in the Actions and Implementation section.



(GCC Emergency Management Center)



International Partners

International partners include existing and future Gulf CDC partners who are international or global public health organizations that are active in emergency preparedness and response—many of which have existing experience and local presence in the Gulf region. As such, their support is essential to ensure implementation of the PHEPP is guided by best practices and lessons learned drawn from global and GCC experience.

Current international partners with a local presence in the Gulf include:

- WHO Regional Office for the Eastern Mediterranean (WHO EMRO)
- US Centers for Disease Control and Prevention (US CDC) Oman Regional Office
- European Union (EU) Chemical, Biological, Radiological and Nuclear (CBRN) Risk Mitigation Centres of Excellence (CoE) (EU CBRN Centres of Excellence)

Current international partners who collaborate or provide support at an arms-length include:

- European Centre for Disease Prevention and Control (ECDC)
- Chinese Center for Disease Control and Prevention (China CDC)
- Africa Centres for Disease Control and Prevention (Africa CDC)
- UK Health Security Agency (UK HSA)
- International Association of National Public Health Institutes (IANPHI)
- The Eastern Mediterranean Public Health Network (EMPHNET)

Given similarities in mandate and geography, **WHO Eastern Mediterranean Regional Office (WHO EMRO)** is a key strategic partner for Gulf CDC. The Gulf CDC will continue the close engagement with EMRO to identify synergies and reduce the risk of duplicative efforts. GCC and EMRO stakeholders have agreed that regular communication will be critical to aligning on regional priorities and identifying opportunities for collaboration (on an annual basis).

Suggested opportunities for technical collaboration between WHO EMRO and Gulf CDC include activities related to:






- Regional surveillance
- Rapid response capacity
- Emergency operations centers
- Joint risk assessments
- Development of regional frameworks and guidelines

Based on the vast expertise and experience of international partners (ex, they will be actively engaged through PHE Network and PHE Working Groups as observers/advisors to provide input on regional outputs and activities across all PHEPP objectives (see section on Regional Model of Collaboration). The level of involvement will vary based on the activity. For example, partners may be more technically/ operationally involved in the development of training programs whereas they may be consulted on an ad-hoc basis for hazard-specific guideline development. Details on the relevant partner and their involvement in supporting the PHEPP are shown in Figure 3 below and are further described in the Regional Model of Collaboration and Actions and Implementation section below.

Partners (in no particular order):



Figure 3. Existing and potential areas of collaboration with regional and international partners based on PHEPP Objectives

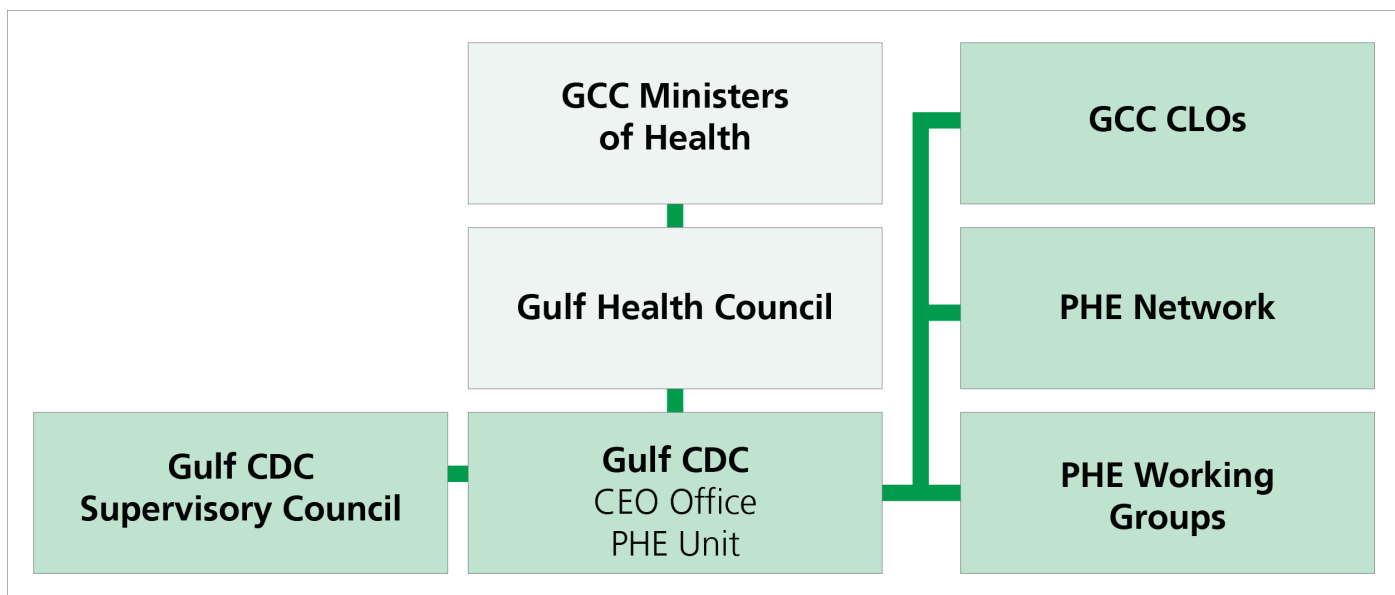
Objective 1	Objective 2	Objective 3
Strengthen Regional Training and Knowledge Sharing	Develop Regional Public Health Guidelines & Recommendations	Unlock the Value of Public Health Assets, Data and Infrastructure Across the Region
<p>Support in the development of training programs (based on identified needs):</p> 	<p>All GCC and non-GCC partners can lend their expertise to the development of regional guidance and recommendations. Ideal partner contribution will depend on specific area of interest (i.e. hazard type)</p>	<p>Liaise to leverage existing GHC infrastructure and systems for emergency management (i.e. procurement):</p>  <p>Support in the development of surveillance and laboratory networks that meet international standards:</p> 
 (GCC Emergency Management Center) <p>Collaborate and support non-biological hazard activities (e.g. training, guidelines, response coordination)</p>  <p>Advise and provide support on all elements of PHE and EMP objectives</p>		

Regional Model of Collaboration

As the Gulf CDC accelerates regional public health emergency capacity building efforts including implementation of the PHEPP, the organization will need to ensure a regional model of collaboration during peace time is in place to support efficient decision-making and active technical expertise contribution from

the Member States. The existing structure of the Gulf CDC remains largely amenable to the required model of collaboration to implement the PHEPP. As such, the model is described below in the context of the collaboration required to conduct public health emergency preparedness activities outlined in the PHEPP.

Figure 4. Regional Model of Collaboration for the Implementation of the PHEPP



Important: This model is meant for collaborations during “peace time”. Collaboration models during a public health emergency will be described in the Emergency Response Operations Plan (i.e. Incident Management System).

Gulf CDC PHE Department and Other Gulf CDC Departments

The Gulf CDC Public Health Emergency Department (PHE Director, PHE Manager, Preparedness Lead and Specialist and Response Lead and Specialist) will be primarily responsible for the coordination of resources and oversight of the Actions execution.

The PHE Department will bring together the necessary experts who will be formally nominated by the Gulf CDC Supervisory Council or Permanent Communication Networks (based on recommendations from Gulf CDC, GCC CLOs

and partners) to form PHE Working Groups and oversee its operations and the project management of the deliverables/initiatives developed by the Working Groups. In some instances, the Gulf CDC PHE Department may lead the development of Gulf CDC internal deliverables with input from the national, regional and/or international partners, if needed. Of note, certain actions or outputs will involve (and in some cases require the leadership) of other Gulf CDC Departments including the Training and Capacity Building, Public Health Information and/or the Public Health Programs & Policies units. In all cases, the

Gulf CDC PHE Department will be responsible for the reporting of activities related to the implementation of the PHEPP and its Actions to Gulf CDC CEO Office. The PHE unit will also play a role in monitoring and evaluating the implementation of the PHEPP (on an annual basis) at the regional and national levels alongside the Member States.

GCC Country Liaison Officers (CLOs)

The GCC CLOs (formally known as the Gulf CDC Technical Committee) will continue to serve as the main liaison between Gulf CDC and Member States, including for matters related to public health emergency preparedness and response. The CLOs will also be the primary contact and coordinator for the implementation of Gulf CDC regional recommendations at the national levels. CLOs are to be included in all communications between the PHE Network, PHE Working Groups and the Gulf CDC.

PHE Network

The Public Health Emergency Network (PHE Network)—one of Gulf CDC’s Permanent Communication Networks (PCN)—will be a standing strategic body that provides guidance and input to the Gulf CDC related to emergency preparedness and response priorities. Importantly, the PHE Network will help to prioritize and define the scope of PHEPP-related projects to be executed by PHE Working Groups.

Currently, the composition of the PHE Network includes International Health Regulations Focal Point, Ministry of Health Communicable Disease Directors and National Public Health Laboratory Directors or appointed representatives on their behalf. The Director of the Gulf CDC PHE Department is the de facto Chair of the Network unless otherwise determined. Members of other Permanent Communication Networks (e.g. Communicable Disease, Health Promotion and Lifestyle, Capacity Building/ Training, Surveillance) may be consulted by

the PHE Network should other specialities become relevant depending on the topic of discussion. Regional or international partners may also contribute to PHE Network meetings and outputs as observers/advisors, if deemed appropriate by the PHE Network Chair.

PHE Technical Working Groups

PHE Technical Working Groups (PHE-TWGs) are project-driven technical bodies that:

- Operate on a well-defined project objective, output and timeline as identified by the PHE Network and Gulf CDC PHE Department.
- Develop expert consensus-driven plans, guidelines, or recommendations related to specific hazards/public health functions that advance the PHEPP.
- Consult other GCC stakeholders (e.g. frontline healthcare workers and health system administrators)—through coordination by the Gulf CDC PHE Department and GCC CLOs—to gain additional perspectives and gather evidence.
- Regularly update (via PHE-TWG Chair) the Gulf CDC PHE Department and GCC CLOs on the Group’s activities, progress and timelines.

The composition of each PHE-TWG includes up to 6-10 members (~1-2 per Member State) comprised of the most relevant technical/operational experts and a Chair of the Working Group, all of whom are formally nominated by the PCNs or Gulf CDC Supervisory Council. A call for nominees will be issued for input by Member States including CLOs, PHE Network, and other Gulf CDC Permanent Communication Networks. Relevant regional or international partners will be invited to join as observers/advisors to PHE-TWGs through the Gulf CDC Supervisory Council (based on recommendation by the Chair of the PHE-TWGs). It is important to note that not all Actions will require the establishment of a PHE-TWG as there may be short-term or Gulf CDC internal projects that can be fulfilled by the PHE Network and/ or Gulf CDC PHE Department. Further detail of potential PHE-TWGs and specific partner involvement can be found in the Actions and Implementation section.

Gulf CDC CEO Office

The leadership team at the Gulf CDC will provide review and approve of workplans of the Gulf CDC PHE Department, PHE Network and PHE Technical Working Groups and the resulting regional recommendations/outputs prior to sharing with the Supervisory Council, Gulf Health Council and GCC Ministers of Health.

Gulf CDC Supervisory Council

The Gulf CDC Supervisory Council will advise on strategic priorities put forward by the PHE Network, provide strategic review of Gulf CDC PHE Department and PHE-TWG outputs and recommendations and provide approval of proposed internal GCDC guidelines/plans presented by the Gulf CDC CEO Office.

Gulf Health Council

In some cases, the Gulf Health Council may also endorse Gulf CDC-approved outputs (including those developed by the PHE Network and PHE-TWG and internal Gulf CDC proposals, plans and guidance) prior to sharing with GCC Ministers of Health for regional/national implementation (if applicable).

GCC Ministers of Health

The Ministers of Health within Member States will provide ultimate endorsement of the plans, guidance and/or recommendations developed by the PHE Network and PHE-TWGs behalf of the Gulf CDC to trigger their implementation and adoption. Depending on the scope of the output and as each country finds suitable, other ministries of non-health sectors within Member States may need to review and endorse the plans, guidance and/or recommendations prior to or during regional/national implementation and adoption.



Figure 5. Example Flow of Project-Driven Initiatives and Actions

The following flow diagram illustrates the lifecycle and decision-making process of a project-driven initiative coordinated by the Gulf CDC.



* Note: Not all Actions of the PHEPP will require the establishment of a PHE-TWG as there may be short-term or Gulf CDC internal projects that can be fulfilled by the PHE Network and/or Gulf CDC PHE Unit.

Role of the Gulf CDC in CRNE Preparedness Planning

While the Gulf CDC will not be the primary lead in responding to a CRNE event, it will provide support to the designated leads (e.g. GCC EMC, National Emergency Committees) in preparing for public health interventions related to such events. CRNE preparedness activities that the Gulf CDC will participate in could include:

- Developing guidelines and risk profiles for public health preparedness to hazards
- Establishing communication across relevant

entities (public health and non-public health) and facilitating knowledge exchange during peacetime

- Support public health training for emergency preparedness and rapid response to CRNE hazards including co-facilitating joint simulation exercises.

The collaboration model for the Gulf CDC in supporting an emergency response to a CRNE event will be detailed in the PHEROP.

Actions and Implementation



Overview

The following section outlines relevant Actions in each Focus Area across the 3 Objectives of the PHEPP. Each Focus Area includes **priority Actions** and non-priority Actions. Priority actions are central to the strengthening of regional public health emergency preparedness in the **near-term** (could take up to 5 years to complete) and were derived from a consensus-driven effort with GCC stakeholders through several workshops leveraging insights gathered through the foundational landscape report, consultations with GCC stakeholders and best practices of the WHO and other peer organizations. Non-priority actions are important activities for the region to pursue once fundamental regional preparedness activities are in place and thus are deprioritized to the medium term.

Each action has a detailed implementation plan that provides an overview of the rationale, key output, implementation steps, roles and responsibilities of key stakeholders and evaluation measures and targets for each action. Further, each implementation step has an assigned lead and supporting/advisory group(s). **Lead** roles are meant to take ownership of that step (e.g. developing the content, outreach) while supporting/advisory roles are informed stakeholder groups that provide input and are aware of the progress associated with that step. For priority actions, the implementation steps provide greater granularity and include a general timeline and critical considerations for successful implementation. The implementation plans are confidential and not provided in this document.

As the PHEPP is expected to be refreshed on a regular cadence (e.g. every 5 years), additional actions will be identified or reprioritized in the future. The Gulf CDC will conduct annual evaluations against the measures and targets outlined for each action.

List of Actions

*Bold indicates near-term priority actions

Objective 1: Strengthen Regional Training and Knowledge Sharing	
Focus Area	Actions
1.1 Public Health Workforce Development and Education	<p>1.1.1 Conduct a needs assessment on public health expertise across the region</p> <p>1.1.2 Establish professional development courses, fellowship exchange programs and virtual tools</p>
1.2 Regional Readiness, Response and Recovery Training	<p>1.2.1 Conduct regional tabletop simulation exercises, scenario planning and training drills</p> <p>1.2.2 Establish and train a regional roster of public health experts to support Member States during an emergency</p>
1.3 Knowledge Exchange and Sharing of Best Practices	<p>1.3.1 Leverage existing platforms to coordinate knowledge exchange between Member States</p> <p>1.3.2 Develop an asset database of known emergency management assets and infrastructures across Member States</p>
Objective 2: Develop Regional Public Health Guidelines & Recommendations	
Focus Area	Actions
2.1 Country-Level Emergency Preparedness and Response Planning	<p>2.1.1 Explore the suitability of developing a secondary capability evaluation tailored to the Gulf region</p> <p>2.1.2 Develop guidelines/frameworks to support Member State emergency preparedness and response planning</p>
2.2 Priority Hazards across the region	<p>2.2.1 Identify and annually review a list of well-defined priority biological hazards for the region</p> <p>2.2.2 Develop general risk/hazard reference profiles and guidelines for the region</p>
2.3 Practices for Regional Readiness and Response	<p>2.3.1 Conduct continuous risk assessments to identify, evaluate and respond to potential threats of regional interest</p> <p>2.3.2 Develop a flexible, adaptable and scalable incident management system (IMS) that enables a unified organizational response</p> <p>2.3.3 Develop a business case for a public health regional emergency operations center</p>

Objective 3: Unlock the Value of Public Health Assets, Data and Infrastructure Across the Region

Focus Area	Actions
3.1 Regional Surveillance Systems for Early Detection	3.1.1 Support real-time sharing of surveillance intelligence data (including Gulf CDC-generated surveillance reports)
3.2 Public Health Laboratory Capabilities and Connectivity	3.2.1 Establish a regional reference public health laboratory network among Member States
3.3 Centralized Procurement of Essential Public Health Emergency Supplies	<p>3.3.1 Strengthen existing regional joint procurement and stockpiling systems to ensure capacity for public health emergencies</p> <p>3.3.2 Identify opportunities for enhancement of regional manufacturing capacity for vaccines, drugs and other medical supplies</p>





Impact

The Gulf Emergency Preparedness Plan will enhance the collective public health emergency preparedness and response capacity and effective collaboration across region, ultimately safeguarding the health and well-being of Gulf populations and fostering regional resilience and prosperity.

Glossary

Emergency operations centre (EOC) A facility and function for preparedness planning, strategic policy and coordinated response (logistics and operations) to public health emergencies, including support to field-based responders and response agencies.

Emerging diseases Infections that newly appear in a population, or have existed but are rapidly increasing in incidence or geographic range, including new diseases as well as re-emerging and resurging known diseases, and known epidemic-prone diseases. The term «emerging diseases» is used interchangeably with emerging infectious diseases (EIDs).

Field Epidemiology Training Programme A practical training programme to build capacity for field epidemiology covering data analysis, surveillance system evaluation, outbreak investigation and operational research.

Hazard A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Incident management system (IMS) An emergency management structure and set of protocols that provides an approach for guiding government agencies, the private sector, nongovernmental organizations and other actors to work in a coordinated manner, primarily to respond to and mitigate the effects of all types of emergencies. The incident management system (IMS) may also be utilized to support other aspects of emergency management, including preparedness and recovery.

Monitoring and Evaluation (M&E) Monitoring refers to the process of regular supervision of the implementation of activities, seeking to ensure that input deliveries, work schedules, targeted outputs and other required actions are proceeding as planned. Evaluation refers to a process that attempts to determine as systematically and objectively as possible the relevance, effectiveness and impact of activities in light of their objectives.

One Health Coordinated global activities to address health risks at the animal–human–ecosystems interfaces to attain optimal health for people, domestic animals, wildlife, plants and our environment.

Preparedness Capability of the public health and health care systems, communities, and individuals, to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities. Preparedness involves a coordinated and continuous process of planning and implementation that relies on measuring performance and taking corrective action.

Public health security The proactive and reactive activities required to minimize vulnerability to acute public health events that endanger the collective health of national populations. Regional public health security widens this definition to include acute public health events that endanger the collective health of populations living across the Gulf region. Lack of regional health security may have an impact on economic or political stability, trade, tourism, access to goods and services in the Gulf.

Public health risk Public health risk is defined as a likelihood of an event that may affect adversely the health of human populations, with an emphasis on an event that may spread internationally or may present a serious and direct danger.

Public health emergency An occurrence or imminent threat of significant illness or health condition, caused by acute exposure to hazards, including biological, chemical, radiological, natural and technological hazards. For the purpose of this document, a public health emergency mainly refers to an emergency caused by emerging diseases and/or other acute public health events that are managed by national public health authorities. If not managed quickly, it may go beyond national borders and cause a public health emergency of international concern, such as an influenza pandemic.

Rapid response team A multidisciplinary team that can be mobilized on short notice for routine and rapid investigation of and response to public health events at any level, nationally or internationally.

Risk The likelihood of the occurrence and the likely magnitude of the consequences of an adverse event during a specified period.

Risk assessment An ongoing systematic process of organizing multiple sources of information within a risk management framework to determine a level of risk to guide decision-making. A risk assessment has two facets: (I) identification and characterization of threats; and (II) analysis and evaluation of risks associated with exposure to those threats including vulnerabilities and coping capacities.

Adapted from the World Health Organization



GCDC

المركز الخليجي للوقاية من الأمراض ومكافحتها
Gulf Center for Disease Prevention and Control

مجلس الصحة
لدول مجلس التعاون
Gulf Health Council

