

EMPHNET's Efforts in the Area of Disease Control and Prevention

In contribution to global health security, EMPHNET supports countries in their efforts to reduce the burden of infectious diseases. It achieves this goal by enhancing detection and response capacities for emerging and re-emerging infections. Through coordinated efforts in risk identification, awareness raising, capacity building, and research, EMPHNET strengthens laboratory-based surveillance and disease detection, with a focus on zoonotic diseases and biorisk management.



Contributions and Strategic Directions

Strengthening Lab-Based Surveillance

Efforts to Limit Antimicrobial Resistance

Promoting One Health Approach

Supporting Lab Quality Management Systems

Strengthening Lab-based Surveillance

EMPHNET emphasizes the importance of robust disease surveillance systems to detect and respond to infectious diseases promptly by working on lab-based surveillance projects such as

1. Meningitis and Septicemia Mapping (MenMap) Network in the region.

2. Invasive Meningococcal Disease Surveillance in Iraq.

3. Laboratory-Based Surveillance of Brucellosis in Jordan and Pakistan, and of Anthrax in Bangladesh and Jordan.

Promoting One Health Approach

EMPHNET adopts the One Health approach to address zoonotic diseases and other health threats by working on projects related to

1. Enhancing diagnosis and surveillance capabilities for diseases like Anthrax and Brucellosis.

2. Working on an animal survey to identify ticks that transmit Crimean-Congo Haemorrhagic Fever (CCHF).

3. Reviewing systems for priority transboundary zoonotic diseases (TZDs) mapping.

Combating Antimicrobial Resistance (AMR)

EMPHNET joins global and regional efforts to combat antimicrobial resistance, a growing threat to public health by working on projects related to

1 AMR surveillance in farms and environments.

2 Infection prevention and control in healthcare settings.

3 COVID-19 Infection Prevention and Control course.

Being part of different partnerships and coalitions, including AMR Multi-Stakeholder Partnership Platform, AMR Communications Coalition (AMR-CC) Network, and Partnership for AMR Surveillance Excellence (PARSE).

Enhancing Laboratory Quality Management

EMPHNET supports the development of high-quality laboratory systems to ensure accurate disease detection and response by working on

Laboratories Biosafety and Biosecurity

Laboratory-Based Surveillance of Brucellosis in Jordan and Pakistan, and of Anthrax in Bangladesh and Jordan.

Conducting training on biological toxins handling, biosafety, and biosecurity practices for public health, veterinary, and animal health lab professionals.

Supporting multi-country threat reduction of weaponizable pathogens.

Strengthening laboratory biorisk management practices for public health and veterinary laboratories.

Assessing biosafety and biosecurity capacities of public health and animal health laboratories.

Promoting the security of biological samples and sustainable sample management in West Africa.

Training Activities (2016-2023)

Conducted **17** national and regional workshops

Training at least **440** lab managers and technicians

Participants were from **Afghanistan, Guinea, Iraq, Jordan, Liberia, Libya, Morocco, Tunisia, Yemen, and Egypt.**

Capacity Building and Training Areas

Laboratory Management and Operations such as samples and pathogens management and inventory, and lab accreditation.

Biosafety and Biosecurity areas such as biotoxins handling and detection, and low efforts toxins.


Cross-border and Zoonotic Disease Detection on topics related to TZDs detection and response, and biomedical waste management.

Professional Development such as training of trainers and bioethics workshops among others.


Knowledge Sharing and Networking

EMPHNET produces **Guidelines, Standard Operating Procedures (SOPs), and Educational Resources** to standardize practices and enhance knowledge dissemination. Its knowledge dissemination activities include


Developing Technical Material for Areas Related to




Biological and Chemical Waste Management



Managing Biological Toxins



Biosafety and Biosecurity




Biorisk Management

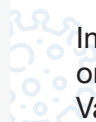


Bio Inventory Systems

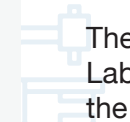
Organizing webinars on Different Public Health Topics such as



Monkeypox and its Implication on Global Health Security



Impact of COVID-19 Variants on Laboratory Tests and Vaccines Efficacy



The Role of Public Health Laboratories and Testing in the COVID-19 Response

Creating Networks with Other Entities Globally and Regionally



MenMap Network



Safeguarding Biosafety and Biosecurity Consortium



GHD|EMPHNET: Working Together for Better Health

The Eastern Mediterranean Public Health Network (EMPHNET) is a regional network that focuses on strengthening public health systems in the Eastern Mediterranean Region (EMR) and beyond. EMPHNET works in partnership with ministries of health, non-government organizations, international agencies, private sector, and relevant institutions from the region and the globe to promote public health and applied epidemiology. To advance the work of EMPHNET, Global Health Development (GHD) was initiated to build coordination mechanisms with partners and collaborators. Together, GHD|EMPHNET is dedicated to serving the region by supporting efforts to promote public health policies, strategic planning, sustainable financing, resource mobilization, public health programs, and other related areas.