



Invasive bacterial disease surveillance network in Africa, Middle East, and Eurasia: Meningitis and Septicemia Mapping Network (MenMap)

Project Information

- ◆ Department: Public Health Programs
- ◆ Unit: Disease Control and Prevention

OBJECTIVES

The main goal of the MenMap project is to create a network that supports the implementation of real-time PCR testing techniques to improve the diagnosis of Invasive Bacterial Disease (IBD) caused by *Neisseria meningitidis*, *Streptococcus pneumoniae*, and *Haemophilus influenzae* in the region through a laboratory network (the MenMap laboratories).

REGIONS OF WORK

MenMap operates in three countries (Egypt, Iraq, and Jordan).

PROJECT DESCRIPTION

The Meningitis and Septicemia Mapping Network (MenMap) was an initiative led by Global Health Development (GHD) in collaboration with Sanofi and international partners. The project aimed to establish a surveillance network for vaccine-preventable invasive bacterial diseases (IBDs) in the region, focusing on *Neisseria meningitidis*, *Streptococcus pneumoniae*, and *Haemophilus influenzae* type b (Hib).

During its first year, MenMap engaged Egypt, Jordan, and Iraq, established 16 sentinel sites, and provided essential training in surveillance and molecular diagnostics. The project also developed a Data Protection Policy, communication plan, protocol, Statistical Data Analysis Plan, and an Advocacy Plan and launched a secure website for project updates and data sharing.

In its second year, MenMap enhanced diagnostic capacities through the use of real-time PCR technology, strengthened surveillance systems, and built local capacity through targeted training activities. Strong collaboration was maintained with international partners and local Ministries of Health to ensure effective knowledge sharing.

BENEFICIARIES

The beneficiaries were public health institutions, Ministries of Health, and hospitals from three countries (Egypt, Iraq, and Jordan). Additional beneficiaries included researchers, epidemiologists, and public health professionals engaged in meningitis surveillance and response, including academic institutions, research centers, and public health laboratories in the region.

PROJECT PHASES

The MenMap project involved three phases:

Phase I – Preparations: Countries were onboarded to the network and assessment tools were designed to review the existing diagnostic landscape in the targeted countries.

Phase II – Hospital assessments were conducted, trainings were delivered, laboratory supplies were provided, and case enrollment, sample and data collection, reporting, and analysis were carried out.

Phase III – Closing: Final reporting was completed.

Project Start and End Date

December 01, 2024 – November 30, 2025

Partner Organizations

Ministry of Health (Egypt), Ministry of Health (Iraq), Ministry of Health (Jordan).

Funded by

SANOFI PASTEUR S.A.

Currently . . .

Bacterial meningitis was a significant global public health concern, responsible for substantial morbidity and mortality, particularly among infants and young children, and remained an important cause of endemic and epidemic disease in many parts of the region. Limited published data on meningococcal disease in the region had constrained evidence-based decision-making for effective vaccine intervention strategies, underscoring the need for strengthened surveillance systems such as MenMap.

What's next . . .

Through its phased implementation and multisectoral engagement, the MenMap Network advanced research on surveillance and laboratory diagnosis of vaccine-preventable IBDs, supported public health policy development for the prevention of these infections, and improved clinical practices for the prevention and treatment of bacterial meningitis and septicemia. The project strengthened knowledge infrastructure, research capacity, and communication mechanisms across participating network countries. Building on the achievements of the MenMap Network, EMPHNET aims to continue data collection and sustain, expand, and institutionalize the network to ensure its long-term impact and sustainability.

By the Numbers

Year One

Year Two

Total Suspected Cases	2,104	1,881
Total Confirmed Cases	191	123
Positivity Rate (%)	9.1%	6.5%

GHD|EMPHNET Information: Global Health Development (GHD) Eastern Mediterranean Public Health Network (EMPHNET) works at achieving its mission by responding to public health needs with deliberate efforts that allow for health promotion and disease prevention.

- ◆ Abdallah Ben Abbas St, Building No. 42, Amman, Jordan
- ◆ Email: comm@emphnet.net

- ◆ Tel: +962-6-5519962
- ◆ Fax: +962-6-5519963
- ◆ www.emphnet.net