

MenMap Quarterly Epidemiological Bulletin – 2nd Quarter, Year 2

2025

About This Bulletin

The Meningitis and Septicemia Mapping Network (MenMap) continues to monitor the evolving landscape of bacterial meningitis across Jordan, Egypt, and Iraq. This fifth issue summarizes key surveillance findings for the second quarter of Year 2 (March–May 2025) and builds on the network's ongoing efforts to strengthen data-driven disease control in the Eastern Mediterranean Region (EMR).

This quarter's bulletin highlights fluctuations in case enrollment and confirmation rates, the outcomes of cross-country refresher trainings, and operational updates including site transitions in Egypt and a temporary data disruption in Iraq. These findings illustrate the dynamic nature of field surveillance and the need for robust laboratory and data-management practices.

As MenMap expands its regional engagement, this bulletin reaffirms the network's commitment to improving early detection, laboratory confirmation, and evidence-informed policy responses.

1. Overview of Meningitis Case Counts and Trends

1.1 Total Cases Overview

Between March and May 2025, the MenMap network recorded the following key surveillance outputs:



299

suspected meningitis cases were reported across Jordan and Egypt



26

cases (8.70%) were laboratory-confirmed via Polymerase Chain Reaction (PCR) testing



17 out of 26

confirmed cases (65.4%) were attributed to *S. pneumoniae* and increasing number of cases attributed to *N. meningitidis* (7 cases)



April 2025

saw the highest number of suspected cases (n=132)



Egypt

reported the highest number of confirmed cases (n=22)



3 deaths

were reported in Egypt; all cases were laboratory-confirmed *S. pneumoniae*, but the cause of death remains unverified



6–14 years

was the most affected age group, comprising (46.2%) of all confirmed cases



All confirmed cases (n=26)

were hospitalized. All were confirmed through cerebrospinal fluid (CSF) samples, except for one case in Jordan, which was confirmed via blood

As of the end of May 2025, MenMap has documented a cumulative total of **2,899** suspected and **248** confirmed bacterial meningitis cases since surveillance began in December 2023.

1.2 Case Counts by Country ([Jordan](#), [Egypt](#), [Iraq](#))

Jordan

MenMap’s surveillance activities in Jordan **remained consistent** during this quarter, with data collected from four sentinel hospitals: Al-Basheer Hospital, Princess Rahma Pediatric Hospital, Al-Karak Hospital, and Zarqa Hospital. A total of **145 suspected meningitis cases** were enrolled from March to May 2025. Four cases were confirmed by PCR, including one case for each of *Haemophilus influenzae*, *Streptococcus pneumoniae*, and two cases of *Neisseria meningitidis*. Notably, this marks the first detection of *Neisseria meningitidis* in Jordan since the beginning of the MenMap project in December 2023. No deaths were reported this quarter.

Key Statistics

Total Suspected Cases: 145 ([Figure 1](#))

Gender Distribution: Female: **59 cases (40.7%)**, Male: **86 cases (59.3%)** ([Figure 2](#))

Top Age Group: <1 year (62.8% of enrolled cases) ([Figure 3](#))

Positive Cases Across Sentinel Hospitals: 4 (2.8%) confirmed cases, **2 *Neisseria meningitidis***, **1 *Streptococcus pneumoniae***, and **1 *Haemophilus influenzae***, with Al-Basheer Hospital accounting for the highest number (n=2). All were confirmed via CSF, except for one *N. meningitidis* case from Al Kara Public Hospital, which was confirmed via blood.) ([Figure 4](#))

Year-over-year comparison:

In Q2 of Year 1 (March–May 2024), Jordan reported **321 suspected cases with 6 confirmed**. This quarter reflects a **notable decline in suspected cases**, which may be attributed to improved adherence to case definitions and enhanced clinical judgment at sentinel sites. While the overall positivity rate remained modest, the detection of *Neisseria meningitidis* for the first time in Jordan marks a critical epidemiological development for the MenMap network.

Figure 1: Suspected vs Confirmed Meningitis Cases by Hospital Name in Jordan (March-May 2025)

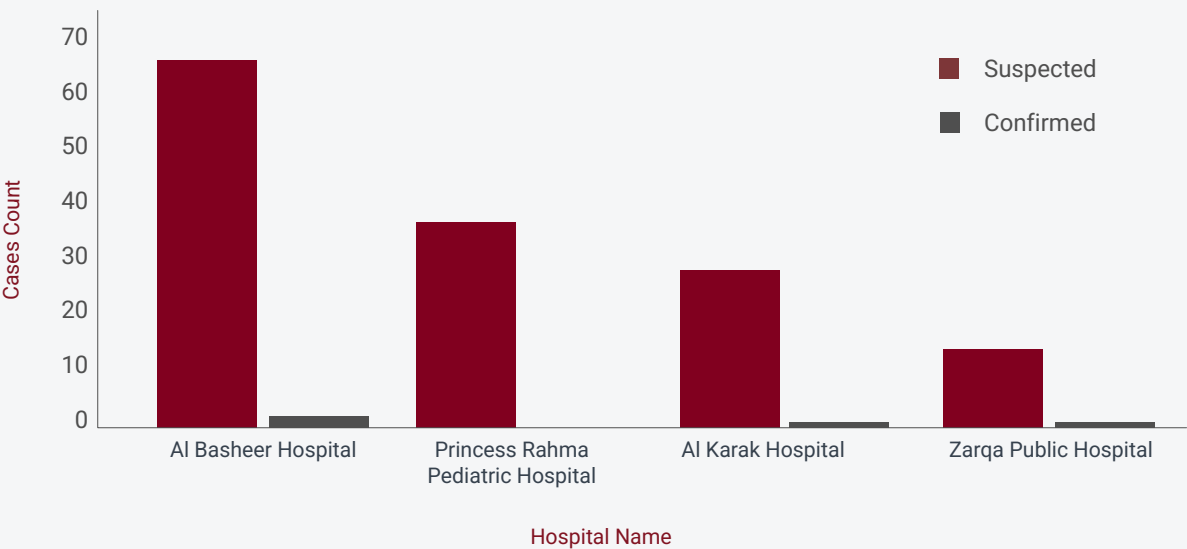


Figure 2: Gender Distribution of Enrolled Cases in Jordan
(March-May 2025)

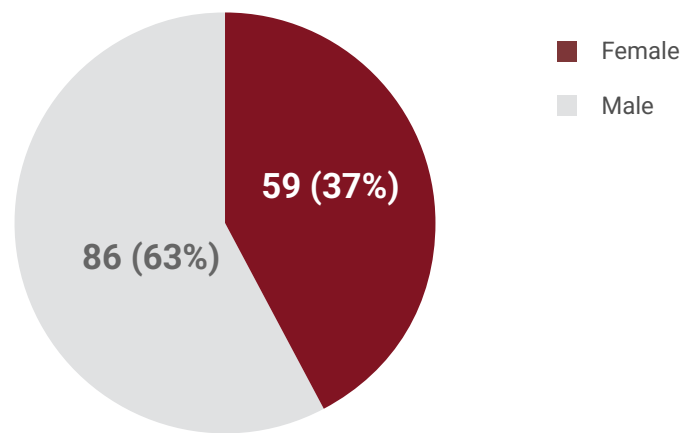


Figure 3: Percentage of Enrolled Cases According to Age Group in Jordan (March-May 2025)

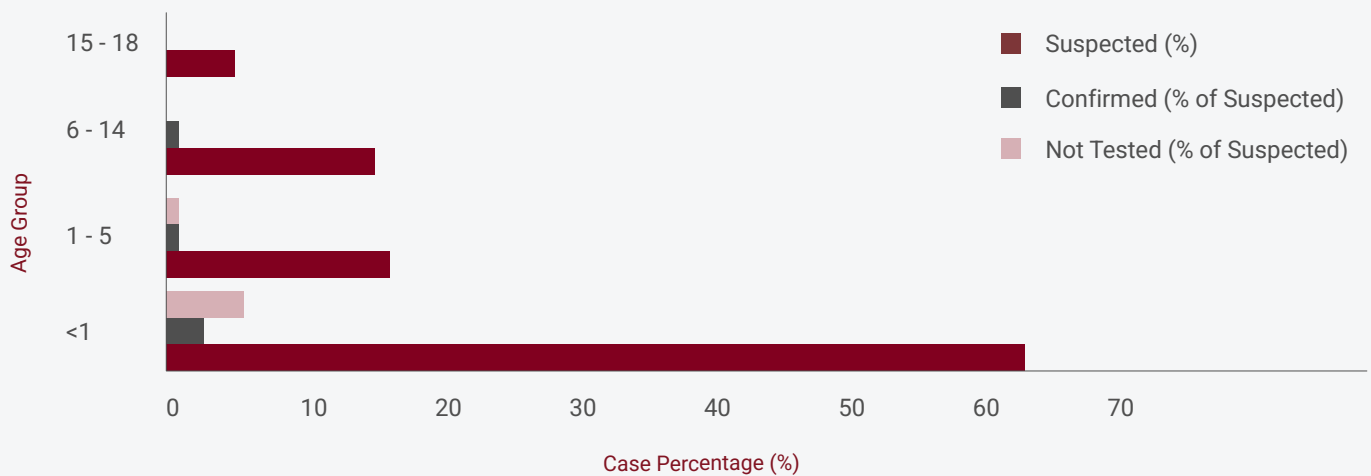
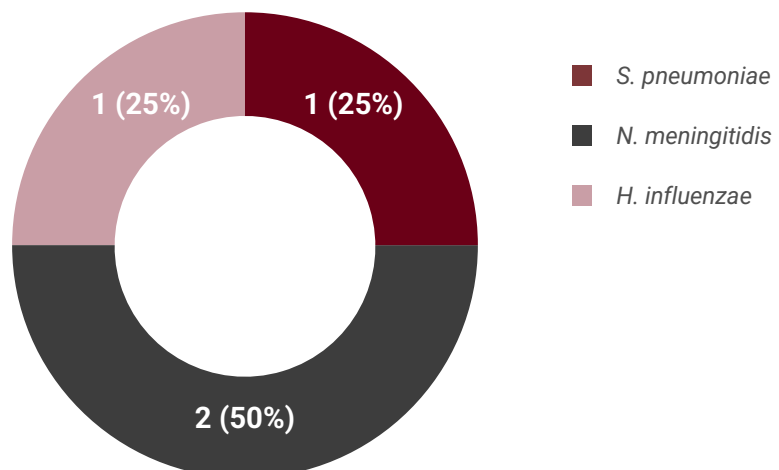


Figure 4: Pathogen Distribution in Laboratory-Confirmed Cases in Jordan (March-May 2025)



Egypt

In Egypt, meningitis surveillance continued across six sentinel hospitals in March 2025, after which the network was restructured to include only four sites, Abbasia Fever Hospital, Alexandria Fever Hospital, Minya Fever Hospital, and Zagazig Fever Hospital. Sohag and Hurghada hospitals were officially phased out at the end of March due to persistently low case flow and logistical challenges in timely sample transport.

Key Statistics

Total Suspected Cases: 154 ([Figure 5](#))

Gender Distribution: Female: **67** cases (**43.5%**), Male: **87** cases (**56.5%**) ([Figure 6](#))

Top Age Group: 6–14 years (**44.8%** of enrolled cases) ([Figure 7](#))

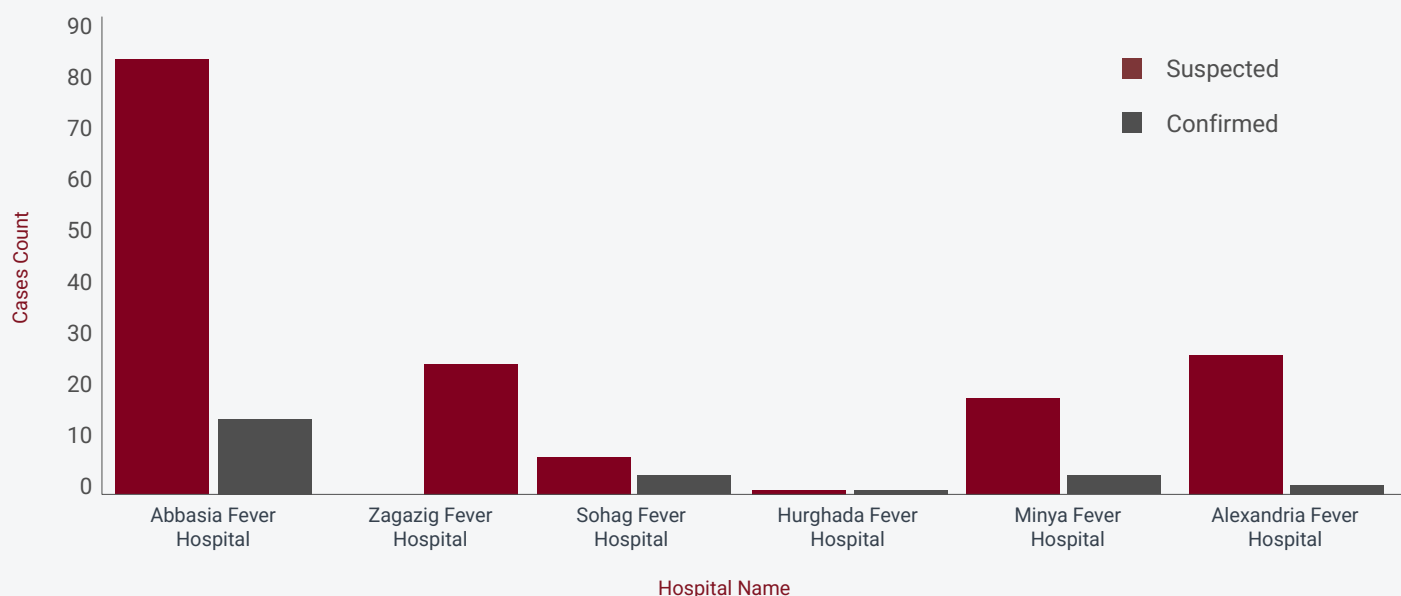
Positive Cases Across Sentinel Hospitals: 22 (14.3%) confirmed cases, all via CSF, **16** *Streptococcus pneumoniae*, **5** *Neisseria meningitidis*, and **1** *Haemophilus influenzae*. Abbasia Fever Hospital accounted for the highest number of confirmed cases (n=13) ([Figure 8](#))

Three hospitalized cases with confirmed *S. pneumoniae* infections, age groups <1 year, 6–14 years, and 15–18 years, **were reported dead**.

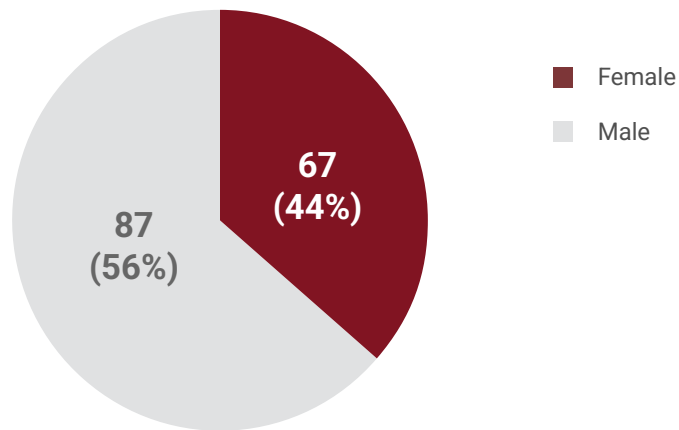
Year-over-year comparison:

In Q2 of Year 1 (March–May 2024), Egypt reported **69 suspected and 11 confirmed cases**. This quarter reflects a **123% increase** in suspected cases and a **100% increase** in confirmed cases. The rise is partially attributed to better improved lab capacity and can be due to the fact that, during March 2025, all six sentinel hospitals were active, some of which were added at the start of the month and others phased out by its end, resulting in broader coverage for that period before the network was restructured.

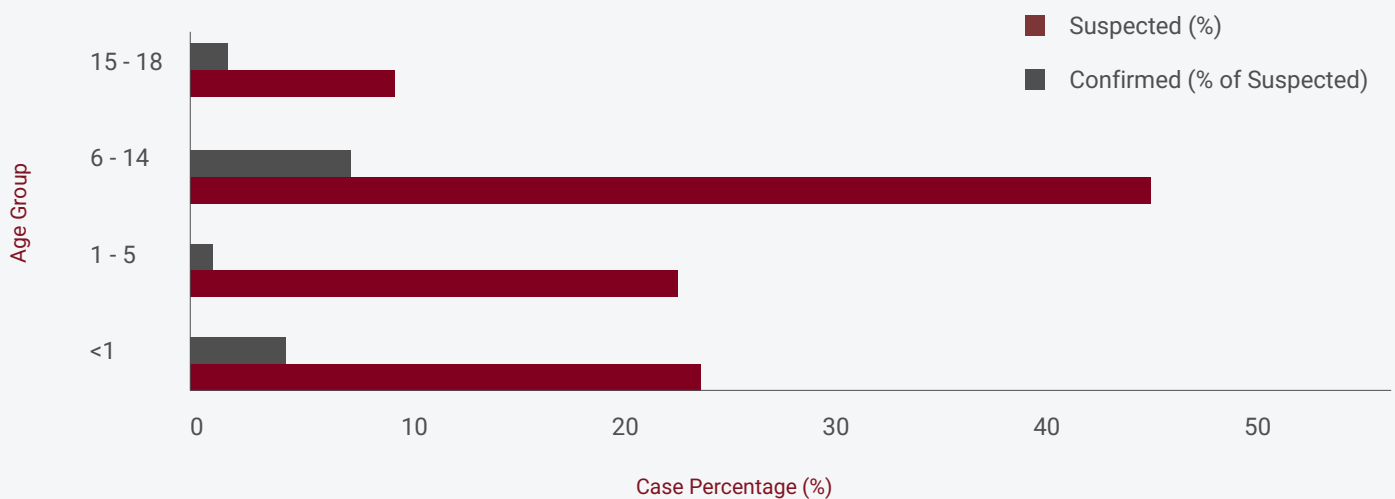
Figure 5: Suspected vs Confirmed Meningitis Cases by Hospital Name in Egypt (March-May 2025)



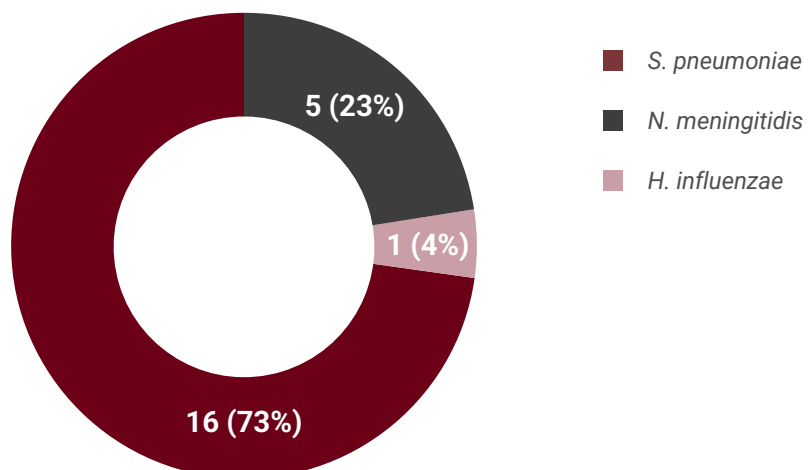
**Figure 6: Gender Distribution of Enrolled Cases in Egypt
(March-May 2025)**



**Figure 7: Percentage of Enrolled Cases According to Age Group in
Egypt (March-May 2025)**



**Figure 8: Pathogen Distribution in Laboratory-Confirmed Cases in Egypt
(March-May 2025)**



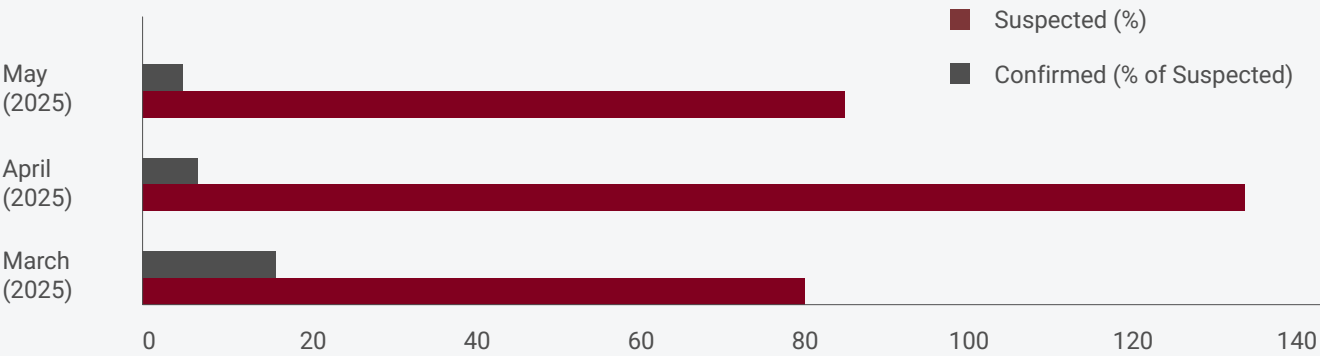
Due to ongoing operational challenges, no meningitis case data were reported from Iraq during the second quarter of Year 2 (March–May 2025). Surveillance activities at sentinel sites have been temporarily suspended.

Despite this pause in reporting, Iraq remains a key partner in the MenMap network. Efforts are underway to resume data collection and testing in the upcoming quarter. Supportive measures, including technical assistance and targeted follow-up, are being explored in coordination with national stakeholders.

1.3 Temporal Trends within the Quarter

Analysis of monthly trends from March to May 2025 shows notable variation in suspected and confirmed meningitis cases across Jordan and Egypt.

Figure 9: Temporal Distribution of Suspected and Confirmed Meningitis Cases (March-May 2025)



April 2025 recorded the highest number of suspected cases (n=132), followed by May (n=87). In contrast, the highest number of confirmed cases occurred in March (n=15), potentially influenced by increased social gatherings during the holy month of Ramadan and heightened regional travel associated with the peak Umrah season.

1.4 Cross-Quarter Performance Snapshot

When compared to the second quarter of Year 1, the period of March to May 2025 presents a measurable shift in case detection performance across the MenMap network.

Metric	Second Quarter (Year 1)*	Second Quarter (Year 2)	Change (%)
Enrolled Cases	662	299	▼ 54.8
Confirmed Cases	53	26	▼ 50.9
Positivity Rate (%)	8.0	8.7	▲ 8.8

*Iraq’s data were included in the second quarter of Year 1 to ensure a valid temporal comparison in line with CDC-recommended surveillance practices.

While the number of suspected cases declined by 54.8%, this is primarily due to the absence of data from Iraq this quarter. Despite the reduced volume, the number of confirmed cases declined less sharply (50.9%), leading to an 8.8% increase in the positivity rate. This trend may reflect improved targeting of suspected cases and more efficient diagnostic procedures, particularly in Egypt, which maintained high testing performance despite sentinel site restructuring.

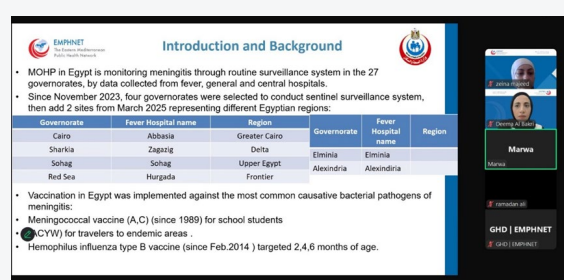
A particularly notable development is the detection of more confirmed *Neisseria meningitidis* cases in the first half of 2025 than during the entire previous year. This includes Jordan's first-ever *N. meningitidis* detections under MenMap, indicating either enhanced diagnostic capability or a potential shift in circulating pathogen dynamics.

2. Key Events and Activities This Quarter

In addition to surveillance operations, several milestones and collaborative efforts took place during this reporting period:

• Refresher Training Conducted Across All Countries

A coordinated refresher training was delivered in early May 2025 for focal points, clinicians, and laboratory staff from Jordan, Egypt, and Iraq. The sessions emphasized improved adherence to case definitions, optimized sample handling, and reinforced standardized data reporting practices.



• Joint Steering and Scientific Committee Meeting

A combined virtual session brought together country focal points and technical experts to review Year 2 objectives, assess implementation progress, and align on upcoming strategic priorities.

• MenMap at 17th EMGM Congress

The MenMap project was featured in an oral presentation at the **17th European Meningococcal and Haemophilus Disease Society (EMGM) Congress** held in May 2025. The presentation highlighted Year 1 achievements and introduced regional findings to a wider scientific audience, helping raise international awareness and visibility of the project.



Upcoming Webinar Announcement



EMPHNET WEBi Series
MenMap



August 2025

Stay tuned for an insightful webinar spot-lighting MenMap's growing role in strengthening meningitis surveillance and response across the region.