



# Cerebrospinal Meningitis Situation Report

## FEBRUARY 2023 REPORT

Epidemiological week 05 - 09: (30 January to 05 March 2023)

### Key Points

Table 1: Summary of current week (9), cumulative Epi week 40 (2022) - 09 (2023)

Reporting Period	Suspected cases	Confirmed cases	Deaths (Confirmed cases)	Case Fatality Ratio (CFR)	States and LGAs affected (Confirmed cases)
Current week (week 9)	7	0	0	0%	State(s): 2 LGA(s): 5
Cumulative (Epi week 40 in 2022 – 09 2023)	628	157	52	8.3%	State(s): 21 LGA(s): 66

Table 2: Weekly trend of CSF collection & confirmed cases from week 5 - 9, 2023

Epi-Week	Sample Collection	Confirmed Cases	Positivity Rate	Serotype				
				NmC	NmW	NmX	Spn	HiB
5	68	21	30.9%	20	0	0	1	0
6	38	11	31.4%	11	0	0	0	0
7	35	15	42.8%	15	0	0	0	0
8	30	1	3.3%	1	0	0	0	0
9	49	0	0%	0	0	0	0	0
Total	220	48	21.8%	47	0	0	1	0

*N.B: Two states, Jigawa (47) and Zamfara (1) account for all positive cases recorded in epi week 5 – 9, 2023*

## Highlights

- From the beginning of the seasons, the following twenty (20) states reported suspected CSM cases in 2022/2023, Abia, Bauchi, Bayelsa, Benue, Borno, Ebonyi, Gombe, Imo, Jigawa, Kano, Katsina, Kebbi, Kogi, Nasarawa, Niger, Oyo, Plateau, Sokoto, Taraba, Yobe and Zamfara.
  - **Number of new suspected cases** in Epi week 09 (7), **decreased by 84%** compared with Epi week 08 (45)
  - National multi-sectoral Cerebrospinal Meningitis TWG continues to monitor response across states.
  
- **Reporting week 09 (07),**
  - seven (7) suspected cases were reported in two (2) states,
    - Jigawa (6 cases) - accounted for 85.7% of the reported suspected cases.
    - Bauchi (1 case).
  - No death recorded,
  - No ward crossed alert threshold,
  - No wards crossed epidemic threshold.
  
- **Jigawa state**
  - Has been in an outbreak since Epi week 40 (2022),
    - Eleven (11) LGAs affected,
    - Over 500 suspected cases as at week 09,
    - 160 confirmed cases,
      - Nm C = 147,
      - Streptococcus Pneumoniae = 11,
      - Nm X=1,
      - Hib= 1
  - **Epi week 09 (07)**
    - Seven (7) samples collected,
      - two (2) samples negative for both culture and PCR Tests
  - NCDC and Partners deployed RRT and Materials to support Jigawa State outbreak response.
  - **Reactive vaccination**
    - ICG approval for reactive vaccination was obtained by NPHCDA for the affected LGAs.
    - Plan in progress for reactive vaccination campaign at the affected LGAs

## Cumulative Epi-Summary

- As of 5<sup>th</sup> March 2023,
  - **Total of 628 suspected cases including 52 deaths (CFR 8.3%) reported from 21 states** in 2022/2023 CSM seasons,
  - **Total of 296 samples collected, 160 confirmed with 54% positivity rate** since beginning of the CSM seasons 2022/2023,
  - **Age group 5 -14 years** was the most affected age group,
  - **Males were 62%, females were 38%**
  - **91% of all cumulative cases were from four (4) states – Jigawa (509 cases), Bauchi (23 cases), Zamfara (22 cases) and Oyo (14 cases).**
  - **Ten LGAs across five states, Jigawa (7), Bauchi (1), Oyo (1), Plateau (1) and Zamfara (1),** reported more than 5 cases each this CSM seasons 2022/2023

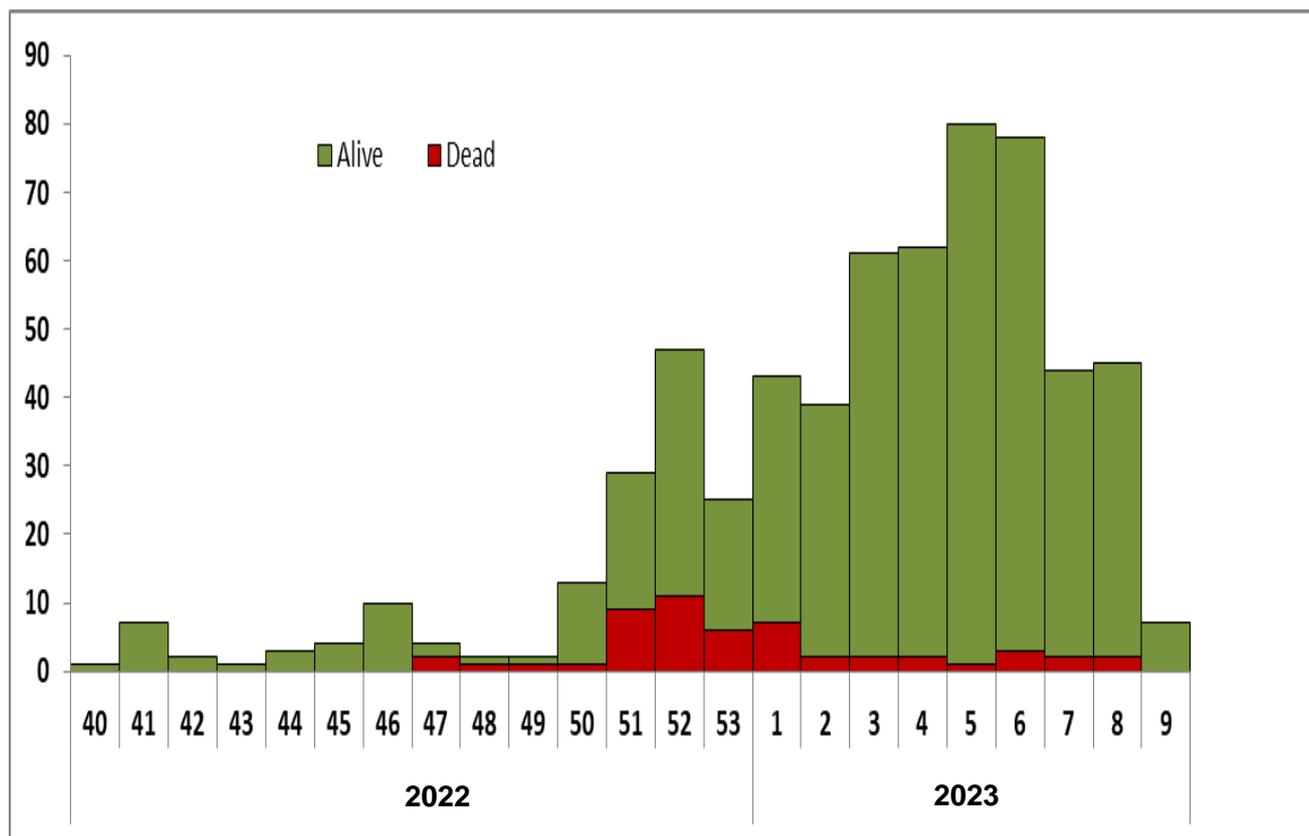


Figure 1: National Epidemic curve of weekly reported CSM cases, week 40, 2022 to week 09, 2023

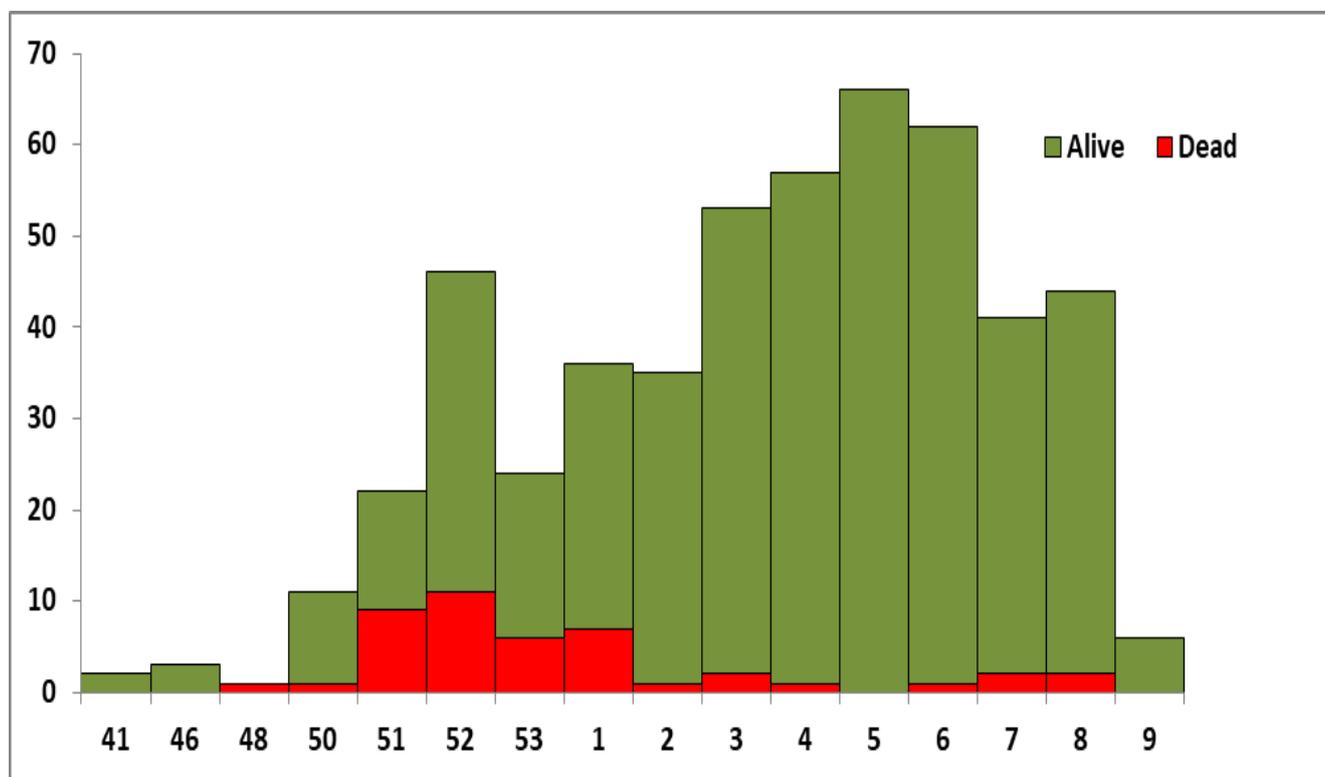


Figure 2: Jigawa epidemic curve, Week 40, 2022 - Week 09, 2023

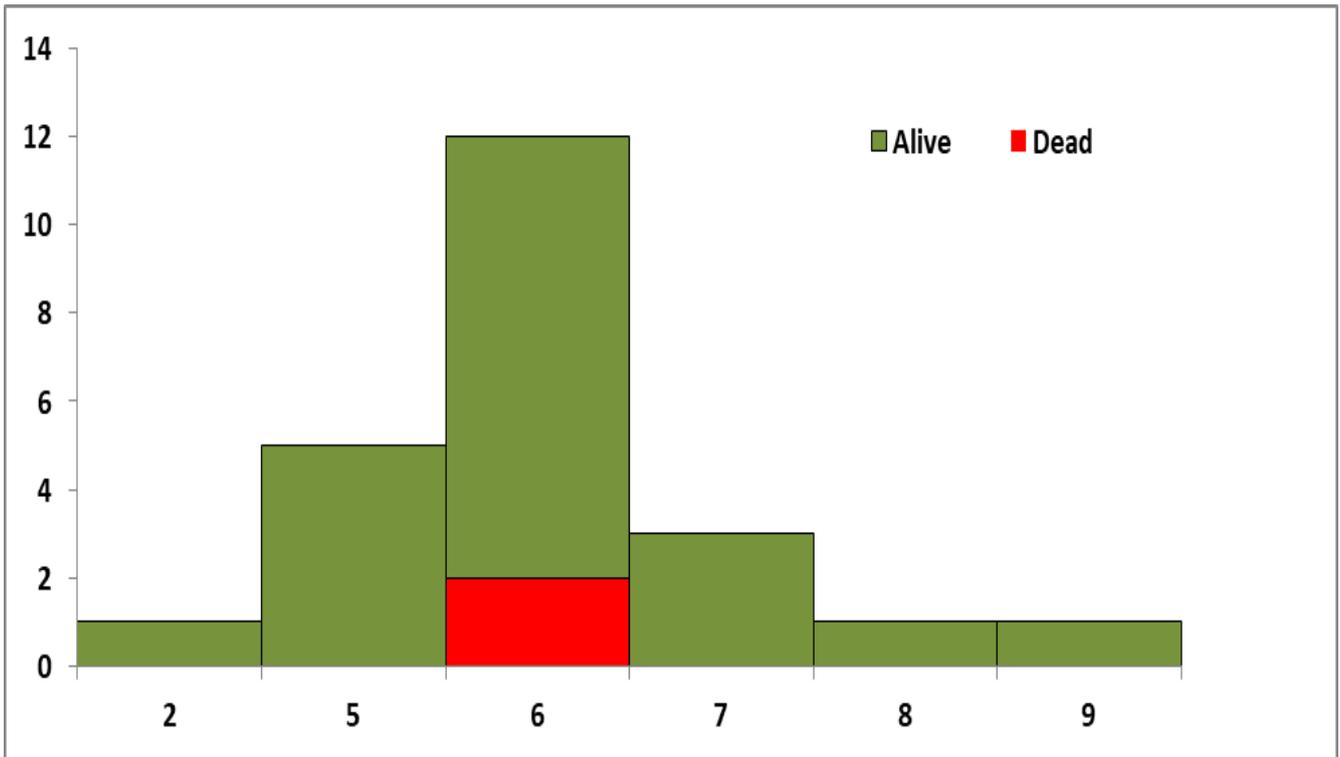


Figure 3: Bauchi epidemic curve, Week 40, 2022 to Week 09, 2023

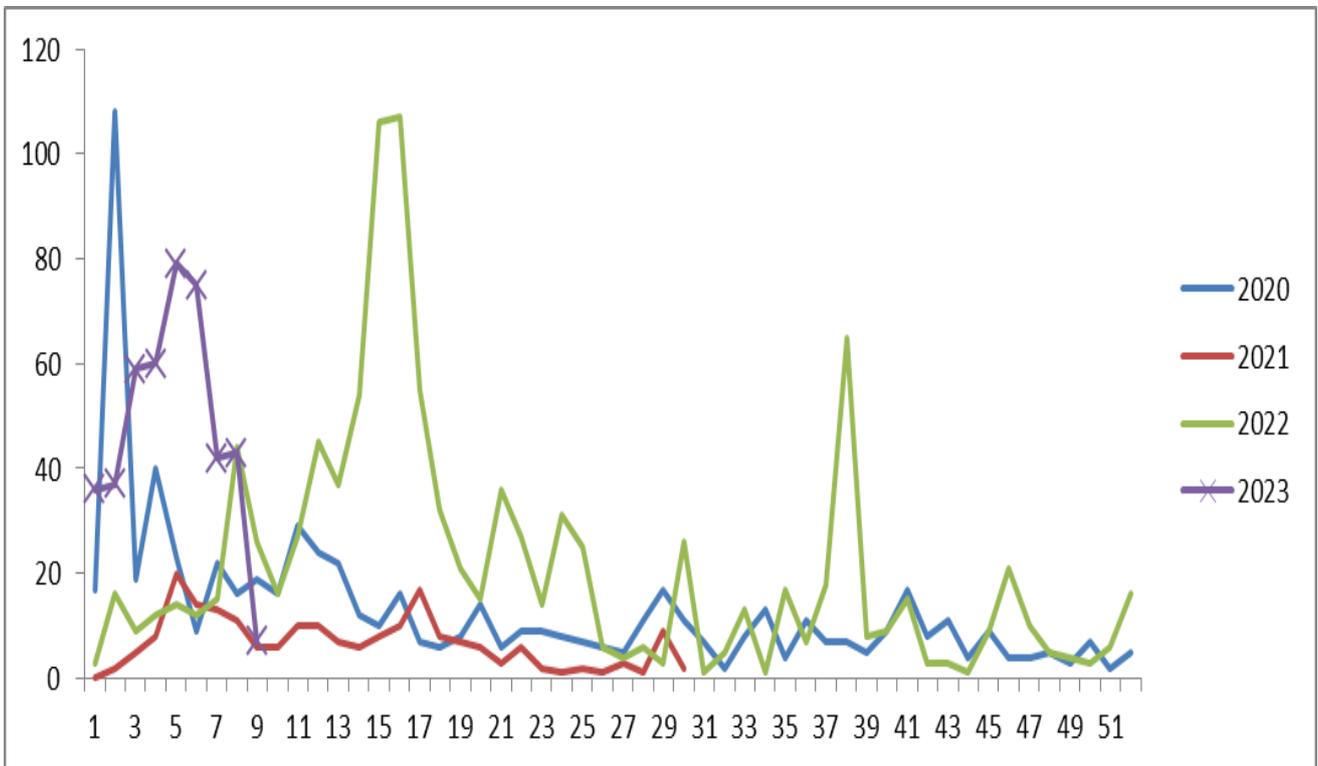


Figure 4: Weekly epidemiological trend of CSM cases from 2020 to 2023

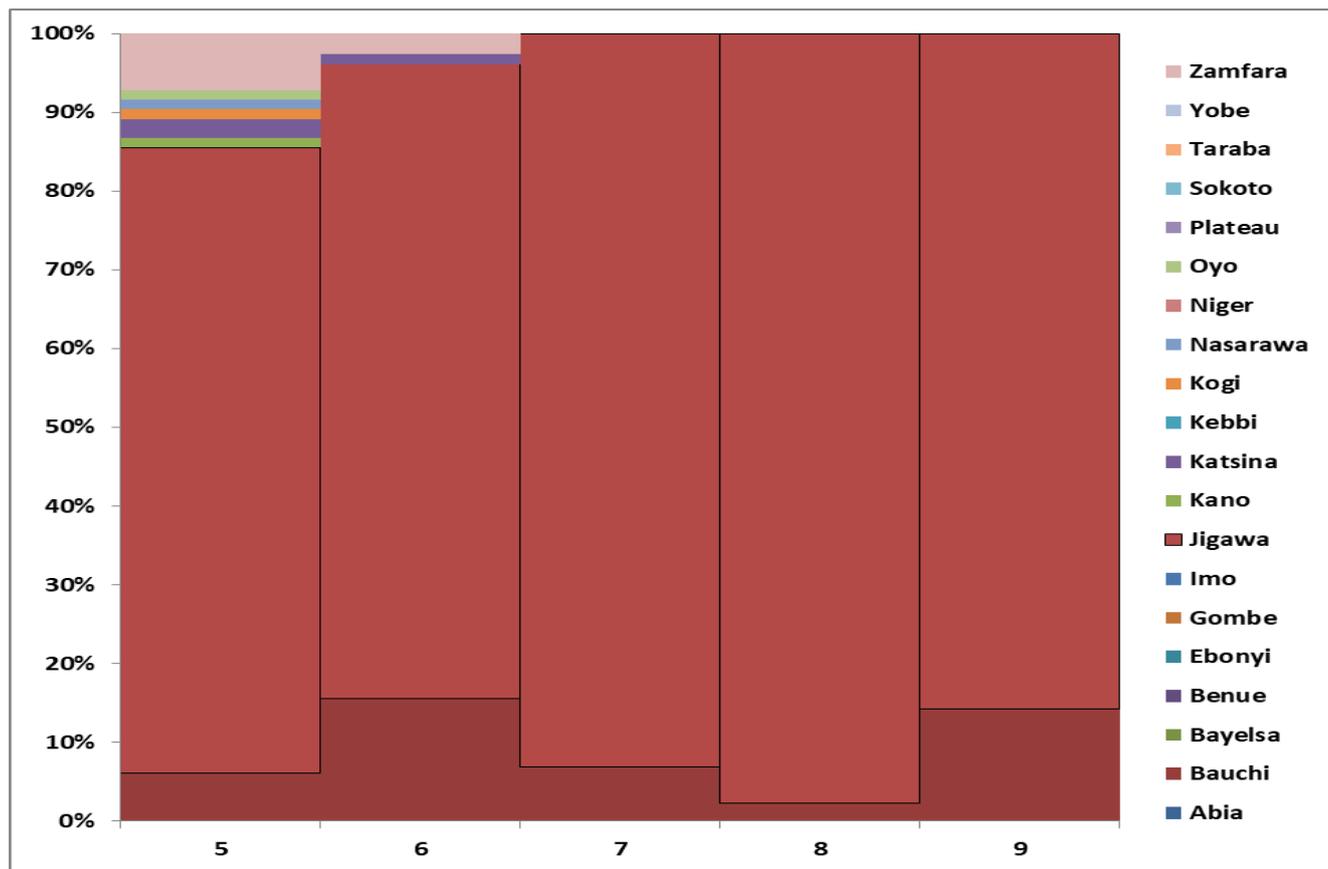


Figure 5: Percentage contribution of weekly cases by state in recent 5 weeks, week 5 - 9, 2023

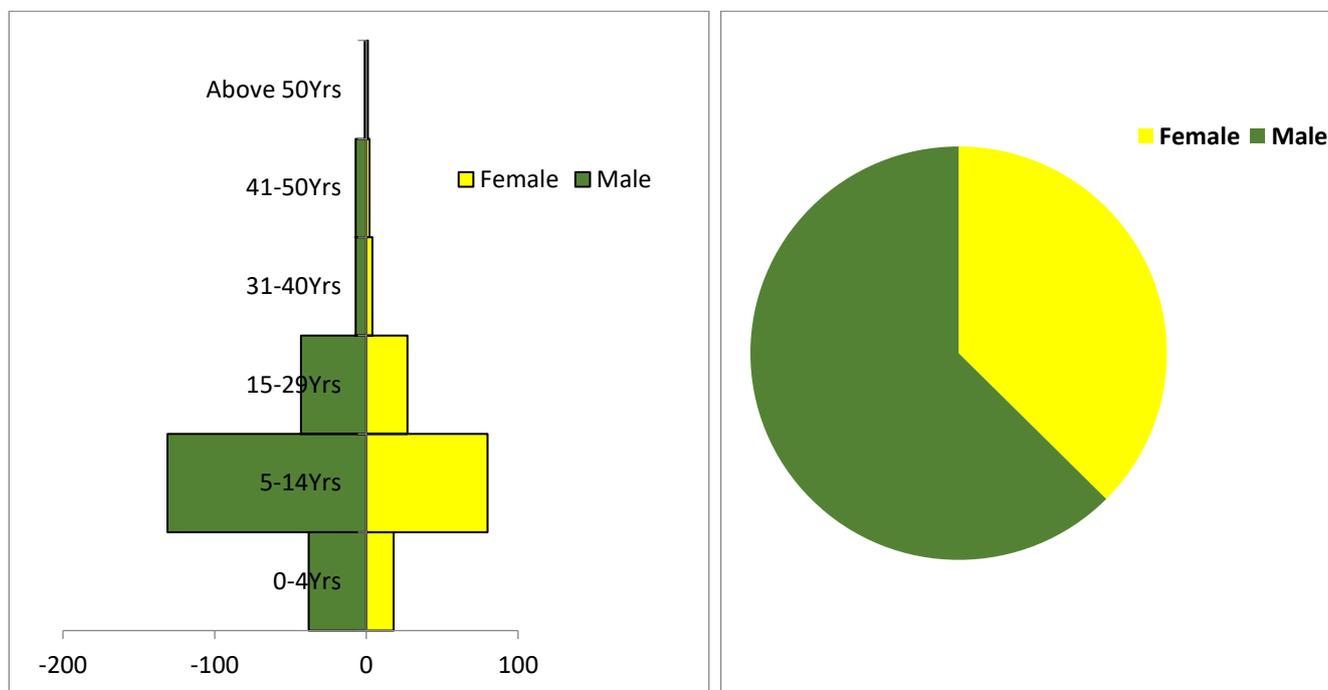


Figure 6: Age – Sex Pyramid and Sex Aggregation for CSM cases week 40, 2022 - 09, 2023.

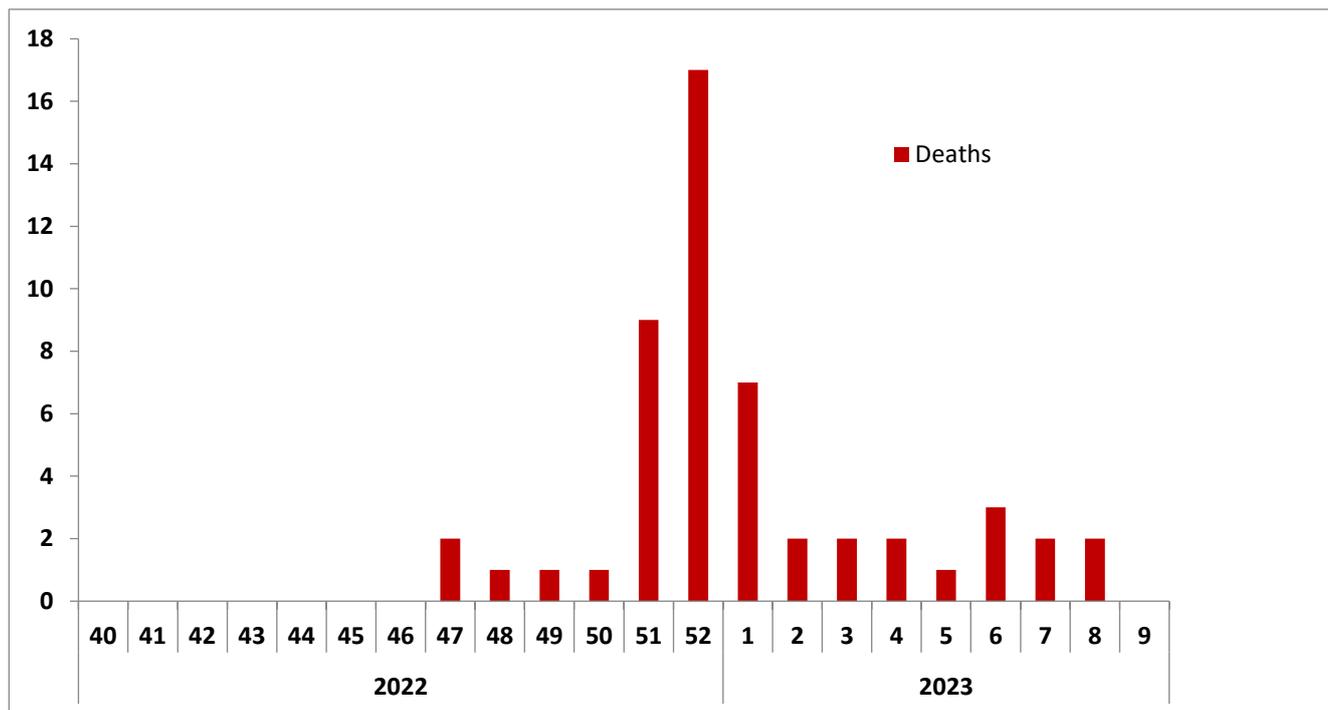


Figure 7: Trends in deaths, week 40, 2022 - 09, 2023, Nigeria

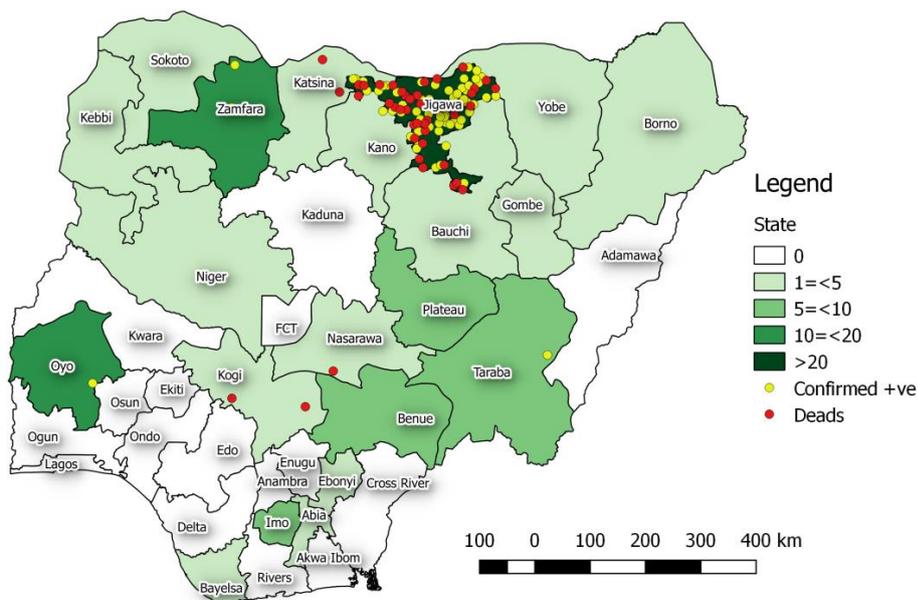
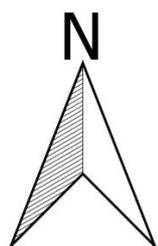


Figure 8. Map of Nigeria showing states with confirmed positive cases and dead, week 40, 2022 - 09, 2023

Table 3: Response activities

Pillar	Activities to date	Next steps
<b>Coordination</b>	<ul style="list-style-type: none"> <li>The National multi-sectoral TWG hosted at NCDC, is coordinating response activities in collaboration with Federal Ministry of Health (FMOH), National Primary Health Care Development Agency (NPHCDA), NIMET and development partners.</li> </ul>	<ul style="list-style-type: none"> <li>Continue response coordination by the TWG.</li> <li>Continue sub-national level preparedness and response support.</li> <li>Continue ongoing onsite and offsite support outbreaks to Jigawa and Zamfara.</li> </ul>
<b>Surveillance</b>	<ul style="list-style-type: none"> <li>Ongoing surveillance in all states through routine Integrated Disease Surveillance and Response (IDSR) and Event-Based Surveillance (EBS)</li> <li>Providing offsite/onsite support to states and follow up for daily reporting and progress with response activities</li> </ul>	<ul style="list-style-type: none"> <li>Continue data collation and harmonisation.</li> <li>Enhanced surveillance (active case search and contact tracing) in affected states and LGAs,</li> <li>Deployment of SORMAS application to secondary and tertiary HFs.</li> </ul>
<b>Case Management &amp; IPC</b>	<ul style="list-style-type: none"> <li>Provision of technical support and response commodities to affected states,</li> <li>Management of Suspected/confirmed cases at designated treatment centers across the states.</li> </ul>	<ul style="list-style-type: none"> <li>Continue providing technical support on case management and IPC to states</li> <li>Continue training of Health Care Workers (HCW) on management of CSM and LP procedures</li> <li>Continuous follow up with states for updates and support</li> </ul>
<b>Laboratory</b>	<ul style="list-style-type: none"> <li>CSM culture testing across state-level laboratories</li> <li>Sample shipment of aliquots samples to PCR NCDC National Reference Laboratory (NRL) and CPHL Yaba-Lagos for molecular diagnosis (PCR)</li> </ul>	<ul style="list-style-type: none"> <li>Continue to support ongoing CSM culture testing across state-level laboratories</li> <li>Continue shipment of aliquots samples to PCR NCDC National Reference Laboratory (NRL) and CPHL Yaba-Lagos for molecular diagnosis (PCR)</li> </ul>
<b>Logistics</b>	<ul style="list-style-type: none"> <li>Distribution of essential response commodities to all CSM affected states</li> </ul>	<ul style="list-style-type: none"> <li>Continue supporting affected states with essential response commodities</li> </ul>
<b>Vaccination (led by NPHCDA)</b>	<ul style="list-style-type: none"> <li>Monitoring of epidemiological trend to guide plans for reactive vaccination campaigns,</li> <li>Planning for Implementation of CSM reactive vaccination campaign in high burden LGAs/Wards in Jigawa state</li> </ul>	<ul style="list-style-type: none"> <li>Continue monitoring epidemiological trend to guide plans for vaccination campaigns,</li> <li>Continue implementation of CSM reactive vaccination campaign in high burden LGAs/Wards in Jigawa state</li> </ul>
<b>Risk communication</b>	<ul style="list-style-type: none"> <li>Implementation of targeted risk communication activities across high-risk states</li> <li>CSM jingles are being aired in English and local</li> </ul>	<ul style="list-style-type: none"> <li>Continue airing of CSM jingles and distribution of IEC materials.</li> <li>Continue media engagement meetings and training of journalists, other media professionals</li> <li>Continued follow-up with states for update on risk communication</li> </ul>

	<p>languages in all affected states</p> <ul style="list-style-type: none"> <li>• Community social mobilisation, media interviews, distribution of Information, Education and Communication (IEC) materials and awareness campaigns ongoing in affected communities</li> <li>• CSM advisory developed and circulated across high-risk states.</li> </ul>	
<b>State Response</b>	Multi-sectoral State-level Emergency Operation Centres (EOCs) was activated in Jigawa state and ICC also in operation in Gombe state	Continue supporting state response activities and implementation of CSM IAP for ownership and sustainability

### Challenges

- Difficulty in accessing some communities due to security concerns (i.e., Zamfara)
- Inadequate trained personnel in states for case management (i.e., LP procedures)
- Poor and inconsistent reporting from states
- Poor health seeking behaviour due to (Poor terrain, high cost of transportation to the treatment centres hard to reach communities)
- Poor personal and community hygiene promotion

### Next Steps

- Maintain communication with and support to states for data reporting and response
- Continue advocacy to State Governments to fund CSM IAP for ownership and sustainability
- Continue distributing response commodities across states
- Build capacity for sample collection, transportation, laboratory diagnosis and data management.
- Planned CSM surveillance evaluation across states
- Scale up risk communication.

### Notes on the report

#### Data Source

Information for this disease was from routine case-based data and outbreak line-lists retrieved by the National CSM Technical Working Group

**Case definitions**

**Suspected case:** Any person with a sudden onset of fever (>38.5C rectal or 38.0C axillary) and one of the following meningeal signs: neck stiffness, altered consciousness or other meningeal signs like Kernings, Bruzinski, nuchal rigidity, raised intracranial pressure including bulging fontanelle in toddlers.

**In infants:** Any toddler with sudden onset of fever (>38.5 C rectal or 38.0 C axillary) and one of the following signs: neck stiffness, or flaccid neck, bulging fontanelle, convulsion, or other meningeal signs.

**Probable meningitis case:** Any suspected case with cerebrospinal fluid (CSF) turbid, cloudy, or purulent on visual inspection; or with a CSF leukocyte count >10 cells/mm<sup>3</sup> on doing a cell count or with bacteria identified by Gram Stain of CSF.

**Confirmed case:** A suspected case that is laboratory-confirmed (positive IgM antibody, PCR or virus isolation) or epidemiologically linked to a laboratory-confirmed case

<b>ALERT THRESHOLD</b>	<b>DEFINITION</b>
<b>Populations 30,000 – 100,000</b>	Attack Rate of 3 suspected cases per 100,000 Inhabitants in one week
<b>Populations &lt; 30,000</b>	2 suspected cases in one week OR Increase in number of cases compared to previous Non-epidemic years
<b>EPIDEMIC THRESHOLD</b>	<b>DEFINITION</b>
<b>Populations 30,000 – 100,000</b>	Attack Rate of 10 suspected cases per 100,000 inhabitants
<b>Populations &lt; 30,000</b>	5 suspected cases in one week OR Doubling of number of cases over a three-week period

DATA AS REPORTED AND ACCURATE BY NCDC AS AT MIDNIGHT 5<sup>th</sup> March 2023