



Nigeria Centre for Disease Control and Prevention

Protecting the health of Nigerians

www.ncdc.gov.ng

PLOT 801 EBITU UKIWE STREET, JABI ABUJA, NIGERIA.

TOLL FREE CALL: 6232. Email: info@ncdc.gov.ng

@NCDCgov

# Cerebrospinal Meningitis Situation Report

## REPORT 12

Epidemiological week 48 - 52: (27 November to 31 December 2023)

### Key Points

Table 1: Summary of current week (52), cumulative Epi week 48 – 52 (2023/2024 Season)

Reporting Period	Suspected cases	Confirmed cases	Deaths (Suspected cases)	Case Fatality Ratio (CFR)	States and LGAs affected
Current week (Week 52)	5	10	1	20.0%	State(s): 1 LGA(s): 2
Cumulative (Epi week 40 - 52 in 2023/2024)	115	12	16	13.45%	State(s): 15 LGA(s): 36

Table 2: Weekly trend of CSF collection & confirmed cases from week 48 - 52, 2023/2024

Epi-Week	Suspected Cases	Sample Collection	Confirmed Cases	CSF Collection Rate %	Serotype				
					NmC	NmW	NmX	Spn	HiB
48	9	1	0	0.00	0	0	0	0	0
49	29	5	2	40.00	2	0	0	0	0
50	17	11	5	45.45	4	0	0	1	0
51	17	6	3	0.00	4	0	0	0	0
52	5	0	0	0.00	0	0	0	0	0
<b>Total</b>	<b>77</b>	<b>23</b>	<b>10</b>	<b>43.48</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>

Epi-Week	Suspected Cases	Sample Collection	Confirmed Cases	CSF Collection Rate %	Serotype				
					NmC	NmW	NmX	Spn	HiB
35	1	0	0	0.00	0	0	0	0	0
36	2	1	0	50.00	0	0	0	0	0
37	8	4	0	50.00	0	0	0	0	0
38	5	1	0	20.00	0	0	0	0	0

39	2	0	0	0.00	0	0	0	0	0
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## Highlights

- From the beginning of Epi week 40 of 2023 to Epi week 52, 2023 the following fifteen (15) states reported suspected CSM cases: Bayelsa, Borno, Delta, Ebonyi, Edo, Jigawa, Kaduna, Kano, Katsina, Kebbi, Kwara, Niger, Osun, Oyo, and Plateau
  - Reporting week 52 (5),**
    - 5 suspected CSM cases were reported from two states ( Katsina – 5) from 2 LGAs
    - One (1) death recorded
    - No LGA crossed the alert threshold
    - No LGA crossed the epidemic threshold
    - National multi-sectoral Cerebrospinal Meningitis TWG continues to monitor response across states.

## In the reporting month

- 11 States have reported 77 suspected cases of CSM, Jigawa (45), Katsina (12), Oyo (6), Kebbi (5), Kano (3), Kaduna (2), Kwara, Niger, Osun and Edo reporting (1) case each
- 16 Deaths were recorded with CFR = 20.7%
- 23 PCR tests were conducted and 11 tested positive with serotype (10 NmC and 1 Spn) from Jigawa and Katsina
- 2 LGAs in one state have crossed the alert threshold (Jigawa - Gumel and Gagrawa)
- 1 LGA in one state have crossed the epidemic threshold (Jigawa Sule Tankarkar)

**Table 3: comparison of cumulative cases 2022/2023 & 2023/2024 seasons**

Summary	Week		% Change
	40 - 52		
	2022/2023 Season	2023/2024 Season	
Suspected Cases	154	115	-25.30
Deaths	30	16	-84.00
CFR%	19.48	13.91	-86.09

## Cumulative Epi-Summary

- As of 31<sup>st</sup> December 2023,
  - A total of 115 suspected cases including 16 death (CFR 13.9%) have been reported from 15 states in this 2023/2024 CSM season,
  - A total of 37 samples collected (32.17%) from 115 suspected cases from beginning of the outbreak, and 12 confirmed (32% positivity rate)
  - The 5 -14-year-old age group was the most affected,
  - 53% of the total suspected cases were Males.
  - 82% of all suspected cases were from five (5) states – Jigawa (53 cases), katsina (21 cases), Oyo (15 cases) and Kano (5 cases).
  - Eighteen LGAs across four states, Jigawa (11), Katsina (4), Oyo (2) and Kebbi (1), reported more than two suspected cases each this 2023/2024 CSM season.

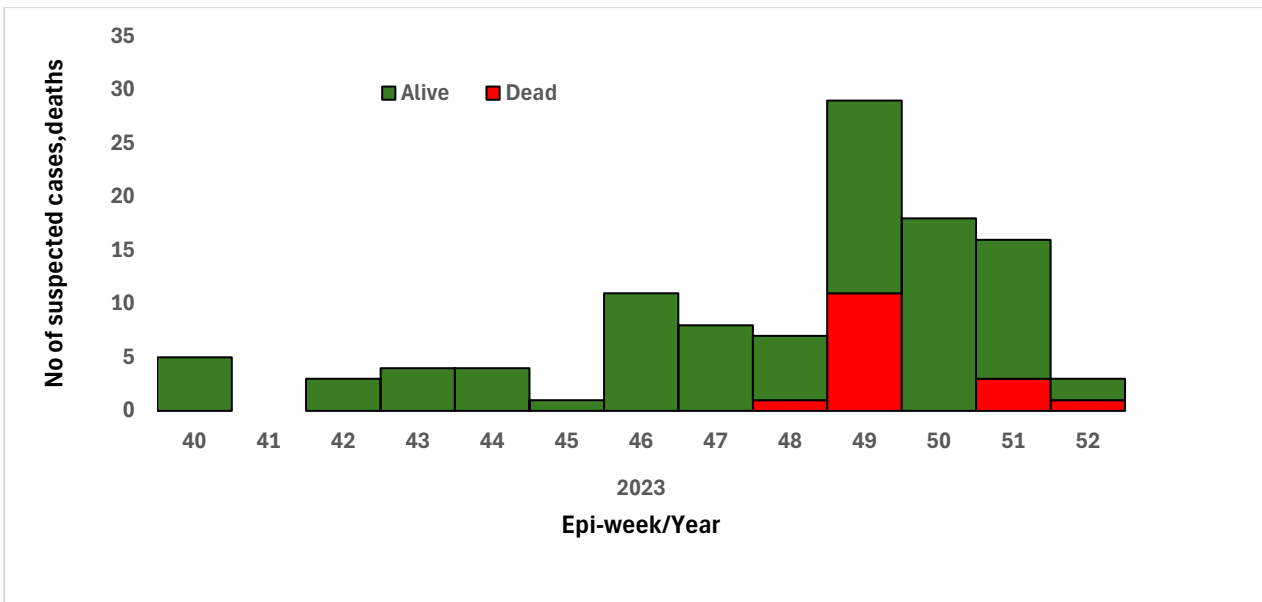


Figure 1: National Epidemic Curve for CSM cases, 2023/2024 season.

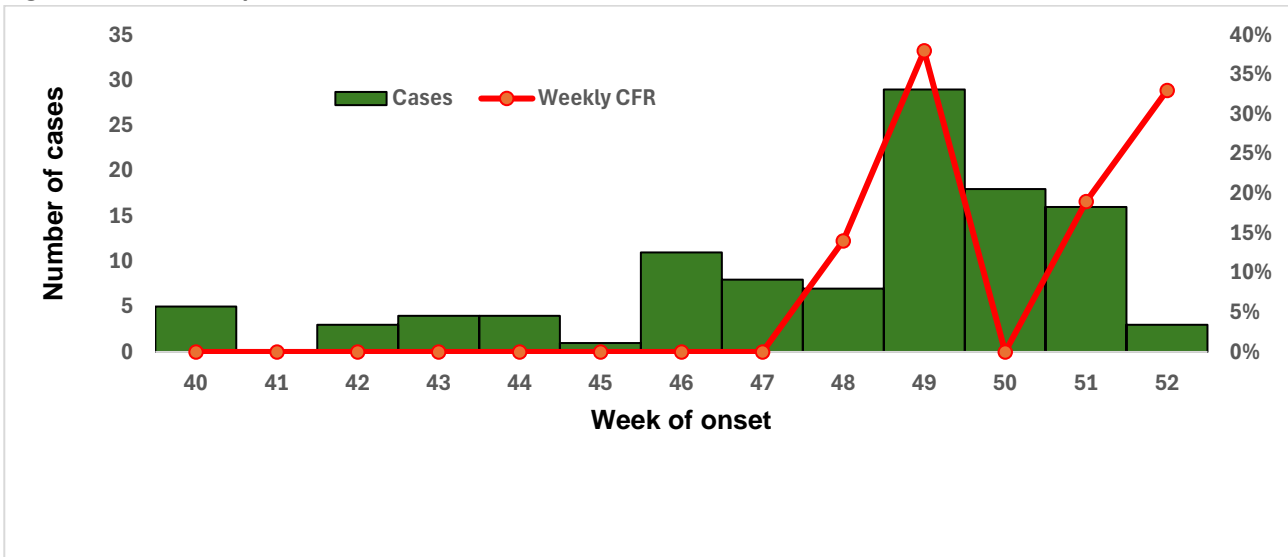


Figure 2: Trend in Case Fatality Ratio (CFR), Epi weeks 40 – 52, 2023/2024 season.

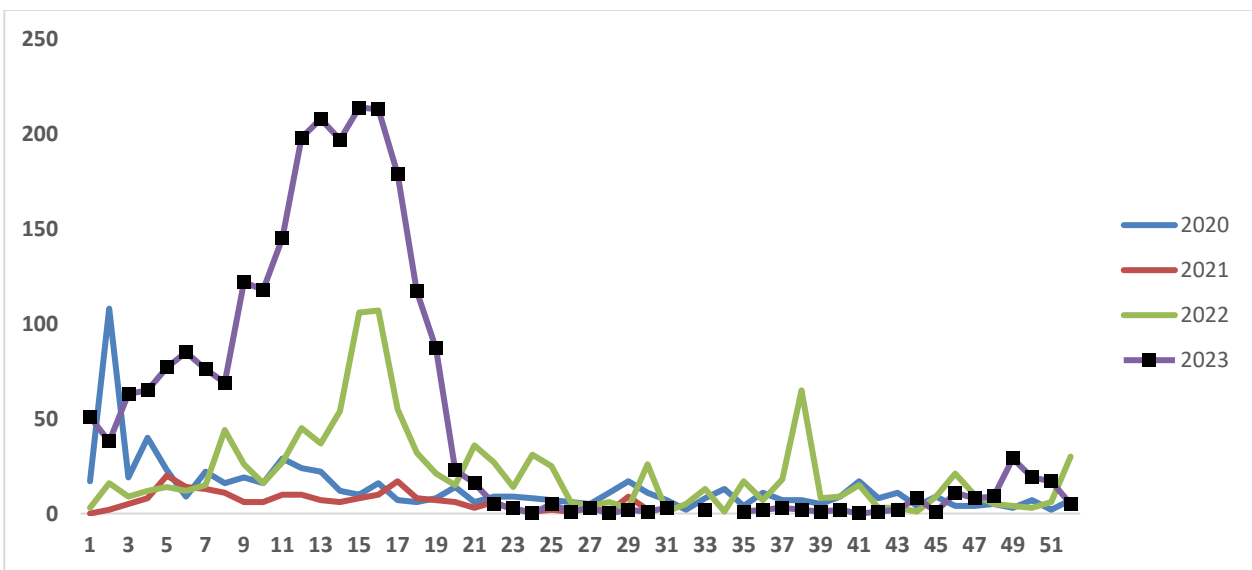


Figure 3: Weekly epidemiological trend of CSM cases nationwide from 2020 to 2023

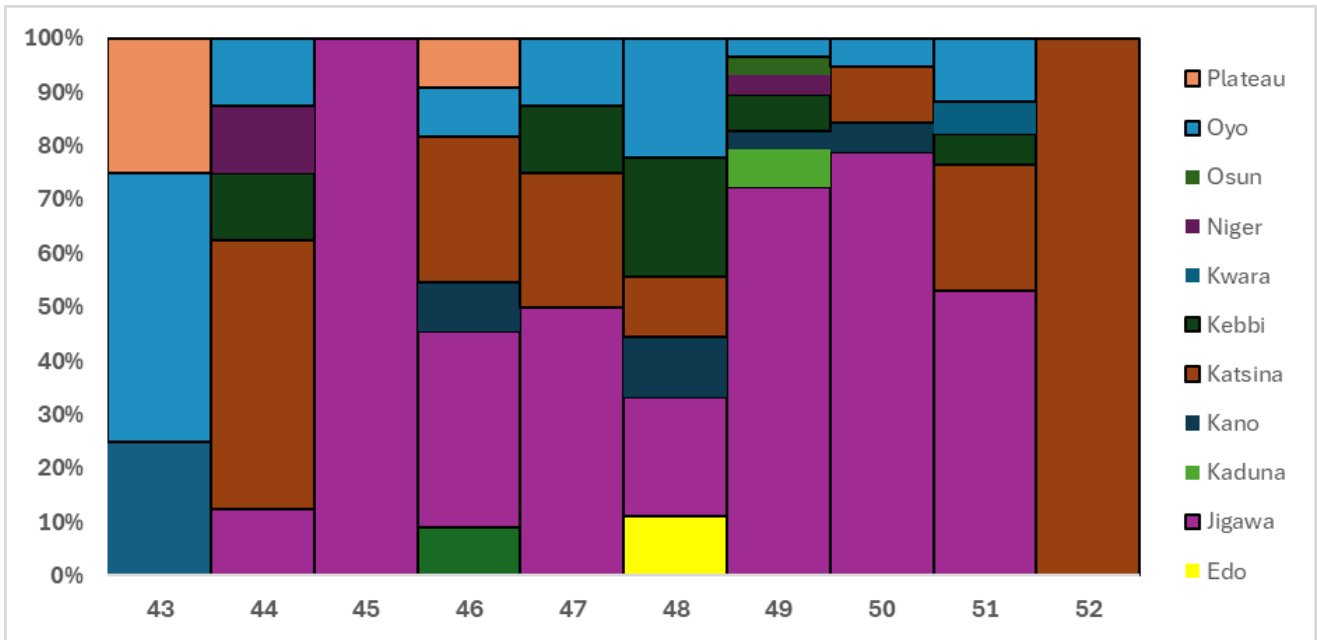


Figure 4: Percentage contribution of weekly cases by state from Epi-week 43 - 52, 2023 (past 9 weeks)

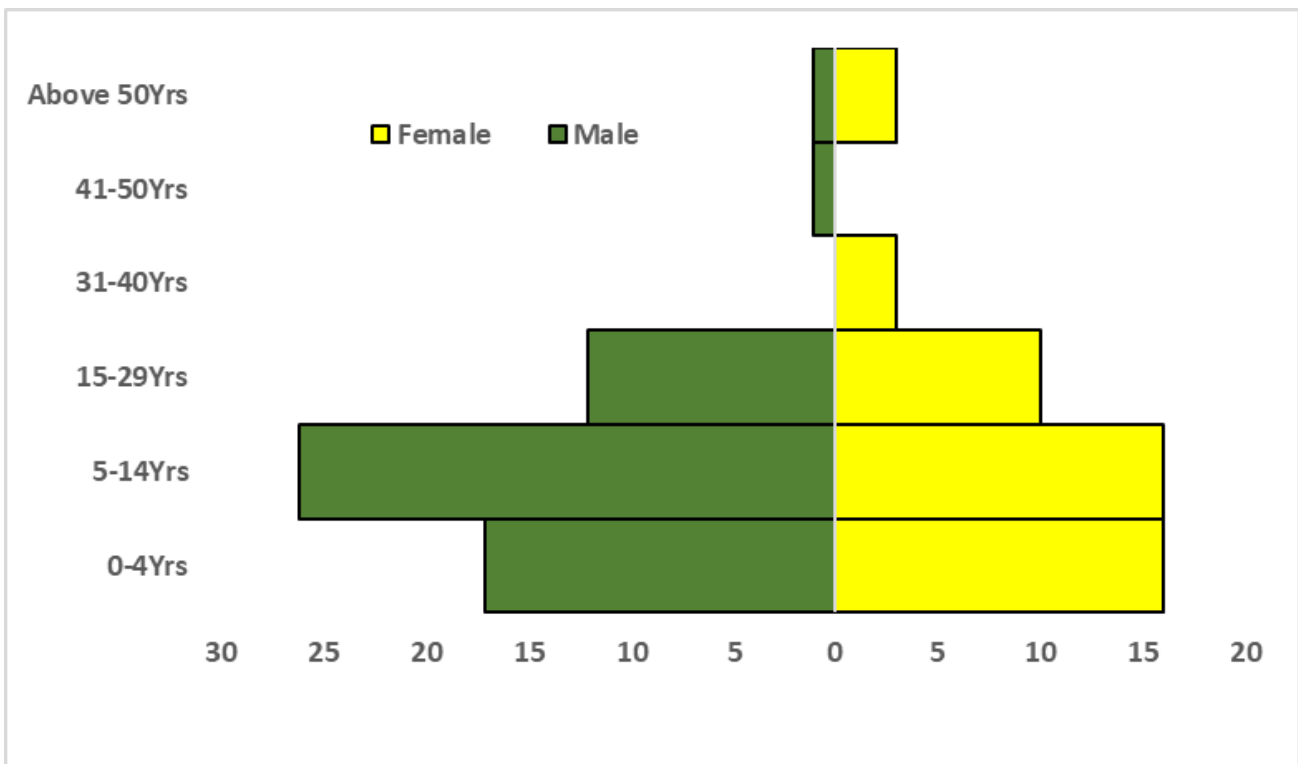


Figure 5: Age – Sex disaggregation for CSM cases week 40, - 52, 2023/2024 season.

Figure 6. Map of Nigeria showing states with confirmed positive cases and deaths, week 40, 2022 - 52, 2023

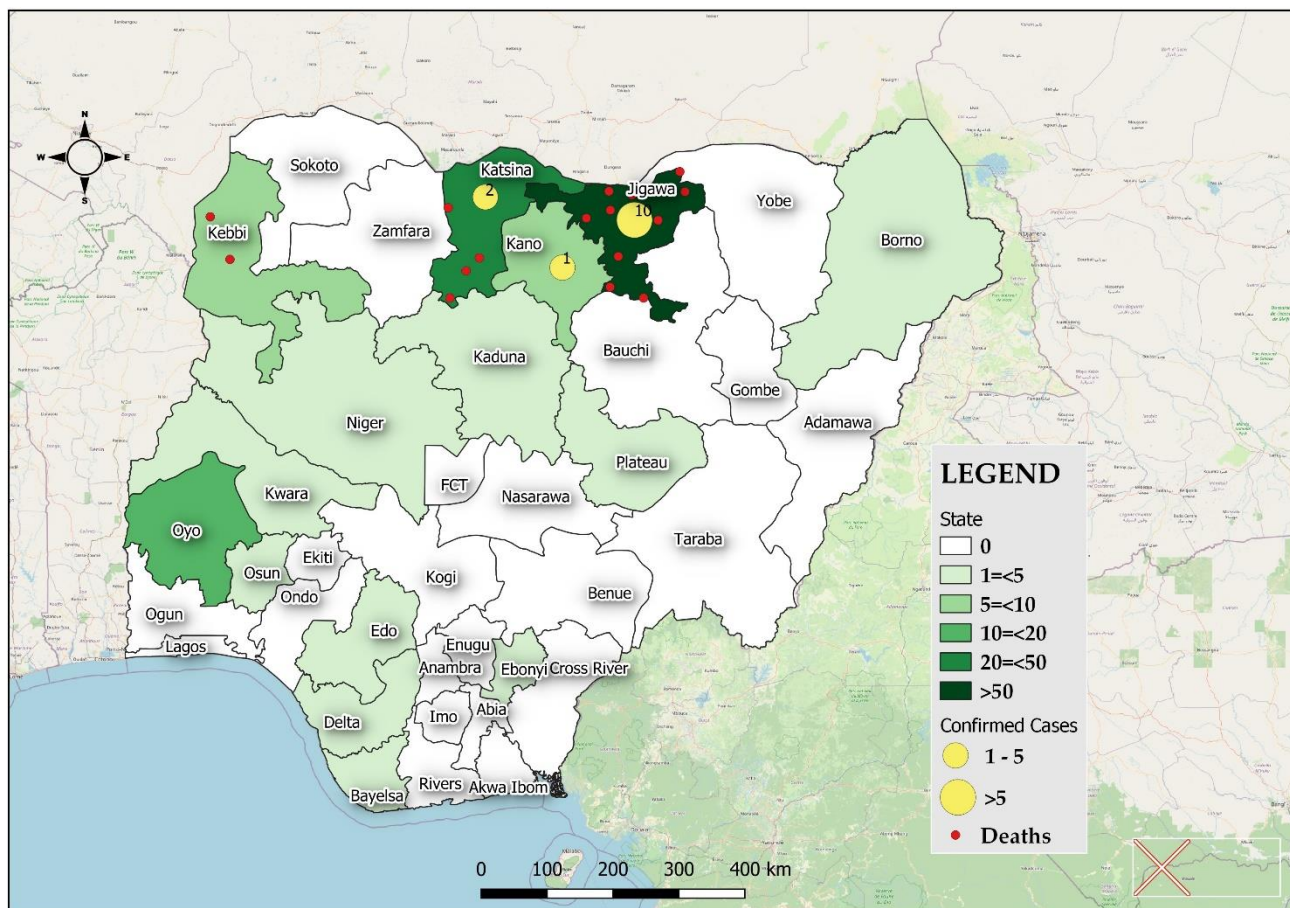


Table 4. Reporting Status for Weekly & Cumulative number of CSM Cases, for 2023/2024 season

States	Current week: (Week 52, 2023)										Cumulative (Week 40 - Week 52, 2023)											
	Cases										Cases											
	Suspected	Trend of outbreaks status	Number of LGAs on alert	Number of LGAs with epidemic	Deaths	CFR%	sample collection	Sample collection Rate %	Confirmation PCR% Positive	Suspected	Deaths	CFR %	Sample Collection	Sample collection Rate %	Confirmation PCR% Positive	Serotype						
															NmA	NmC	NmW	NmX	Spn	Hib		
1	Bayelsa									1	0	0.00	0	0.00	0(0.0%)	0	0	0	0	0	0	0
2	Borno									1	0	0.00	1	100.00	0(0.0%)	0	0	0	0	0	0	0
3	Delta									1	0	0.00	0	0.00	0(0.0%)	0	0	0	0	0	0	0
4	Ebonyi									1	0	0.00	0	0.00	0(0.0%)	0	0	0	0	0	0	0
5	Edo									1	0	0.00	0	0.00	0(0.0%)	0	0	0	0	0	0	0
6	Jigawa									53	10	18.87	20	37.74	10(50.0%)	0	9	0	0	1	0	
7	Kaduna									2	0	0.00	2	100.00	0(0.0%)	0	0	0	0	0	0	0
8	Kano									5	0	0.00	1	20.00	1(100%)	0	0	0	0	0	0	0
9	Katsina	5	0	0	0	1	20.00	0.00	0	21	4	19.05	3	14.29	2(66.7%)	0	2	0	0	0	0	0
10	Kebbi									8	2	25.00	1	12.50	0(0.0%)	0	0	0	0	0	0	0
11	Kwara									1	0	0.00	0	0.00	0(0.0%)	0	0	0	0	0	0	0
12	Niger									2	0	0.00	0	0.00	0(0.0%)	0	0	0	0	0	0	0
13	Osun									1	0	0.00	1	100.00	0(0.0%)	0	0	0	0	0	0	0
14	Oyo									15	0	0.00	8	53.33	0(0.0%)	0	0	0	0	0	0	0
15	Plateau									2	0	0.00	0	0.00	0(0.0%)	0	0	0	0	0	0	0
	Total	5	0	0	0	1	20	0	0	0(0.0%)	115	16	13.91	37	32.17	12(32.4%)	0	11	0	0	1	0

Table 5: Response activities

Pillar	Activities to date	Next steps
Coordination	<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</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 to high burden States</li> </ul>

	(FMOH), National Primary Health Care Development Agency (NPHCDA), NIMET and development partners.	<ul style="list-style-type: none"> <li>Ongoing efforts at addressing challenges encountered during the last epidemic phase as the new season sets in</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 centres 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>Planned 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> <li>Regular feedback on Laboratory surveillance</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>Implementation of CSM reactive vaccination campaign in high burden LGAs/Wards in Jigawa state led by NPHCDA</li> </ul>	<ul style="list-style-type: none"> <li>Continue monitoring epidemiological trend to guide plans for vaccination campaigns</li> <li>Continue planning for CSM preventive and reactive vaccination campaigns in high burden LGAs/Wards in Jigawa state and other States</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 languages in all affected states</li> <li>Community social mobilisation, media interviews, distribution of</li> </ul>	<ul style="list-style-type: none"> <li>Continue airing of CSM jingles and distribution of Information, Education and Communication (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>IEC materials and awareness campaigns ongoing in affected communities</p> <ul style="list-style-type: none"> <li>• CSM advisory developed and circulated across high-risk states.</li> </ul>	
<b>State Response</b>	<p>Multi-sectoral State-level Emergency Operation Centres (EOCs) was activated in Jigawa and Yobe and ICC also in operation in Katsina, Bauchi and Gombe states</p>	<p>Continue supporting state response activities and implementation of CSM IAP for ownership and sustainability</p>

## Challenges

- 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.
- Scale up risk communications.

## 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>
Populations 30,000 – 100,000	Attack Rate of 3 suspected cases per 100,000 Inhabitants in one week
Populations < 30,000	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>
Populations 30,000 – 100,000	Attack Rate of 10 suspected cases per 100,000 inhabitants
Populations < 30,000	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 31<sup>st</sup> December 2023**