



Cerebrospinal Meningitis Situation Report

MAY 2023 REPORT 05

Epidemiological week 19 - 22: (01 May to 04 June 2023)

Key Points

Table 1: Summary of current week (22), cumulative Epi week 40 (2022) - 22 (2023)

Reporting Period	Suspected cases	Confirmed cases	Deaths (Suspected cases)	Case Fatality Ratio (CFR)	States and LGAs affected
Current week (week 22)	3	0	0	0.0%	State(s): 1 LGA(s): 3
Cumulative (Epi week 40 in 2022 – Epi-week 22 2023)	2672	287	182	6.8%	State(s): 22 LGA(s): 121

Table 2: Weekly trend of CSF collection & confirmed cases from week 18 - 22, 2023

Epi-Week	Suspected Cases	Sample Collection	Confirmed Cases	CSF Collection Rate %	Serotype				
					NmC	NmW	NmX	Spn	HiB
18	113	5	2	4.42	2	0	0	0	0
19	83	1	0	1.20	0	0	0	0	0
20	21	0	0	0.00	0	0	0	0	0
21	14	0	0	0.00	0	0	0	0	0
22	3	0	0	0.00	0	0	0	0	0
Total	234	6	2	2.56	2	0	0	0	0

N.B: Two states, Jigawa (1 NmC) and Yobe (1 NmC) account for all positive cases recorded in epi week 18 – 22, 2023

Highlights

- From the beginning of the season, the following twenty-two (22) states reported suspected CSM cases in 2022/2023, Abia, Adamawa, 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 22 (3), **decreased by 79%** compared with Epi week 21 (14)
 - National multi-sectoral Cerebrospinal Meningitis TWG continues to monitor response across states.
- **Reporting week 22 (3),**
 - Three (3) suspected CSM cases were reported in one (1) state,
 - Katsina (3 cases)
 - No death recorded in epi week 22
 - No LGA crossed alert threshold
 - No LGA crossed epidemic threshold
- **Jigawa State**
 - Was in outbreak from Epi week 40 (2022) – week 20 (2023). Currently no LGA crossed the alert threshold in the past 3 weeks in Jigawa State. During the outbreak,
 - 22 LGAs affected,
 - Over 1508 suspected cases, 66 deaths with CFR 4.5% as at week 20,
 - 233 confirmed cases,
 - *Nm C* = 227,
 - *Streptococcus Pneumoniae* = 6,
 - *Nm X*=1,
 - **Epi week 22 (0)**
 - NCDC and partners deployed RRT and materials to support Jigawa, Yobe and Katsina States outbreak response.

Cumulative Epi-Summary

- As of 4th June 2023,
 - **Total of 2672 suspected cases including 182 deaths (CFR 6.8%) reported from 22 states** in 2022/2023 CSM season,
 - **Total of 645 samples collected (24%) from 2672 suspected cases from beginning of the outbreak, and 287 confirmed (45% positivity rate)**
 - **Age group 5 -14 years** was the most affected,
 - **54% of the total suspected cases were Males and others females**
 - **91% of all suspected cases were from six (6) states – Jigawa (1508 cases), Yobe (654 cases), Katsina (177 cases), Bauchi (123 cases), Adamawa (45 cases) and Zamfara (45 cases)**
 - **Nineteen LGAs across five states, Jigawa (10), Katsina (4), Yobe (2), Bauchi (2) and Zamfara (1), reported more than 20 cases each this CSM seasons 2022/2023**

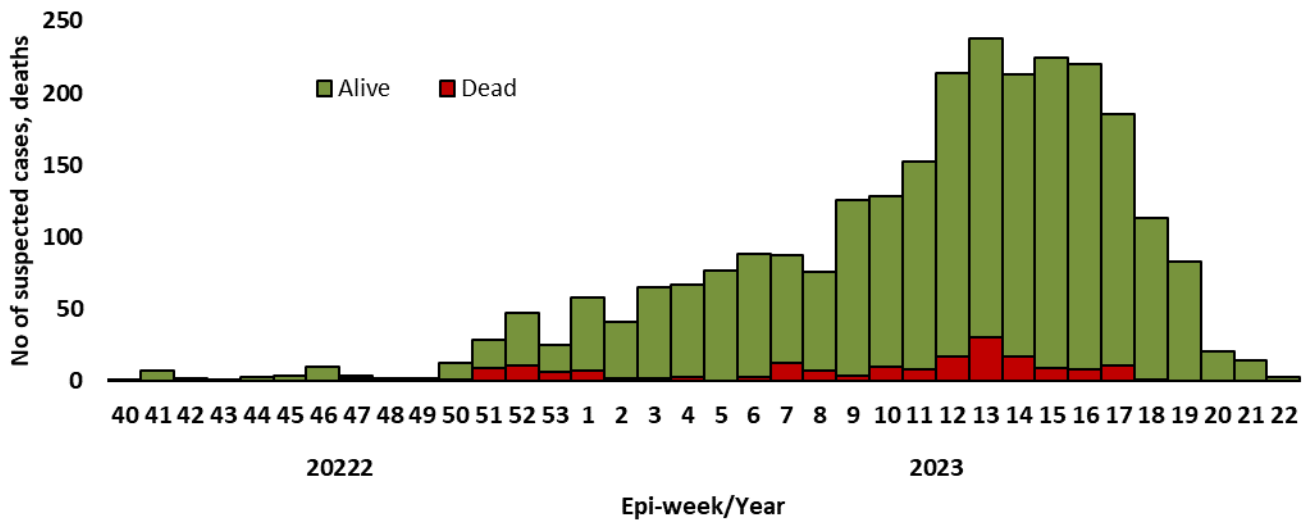


Figure 1: National Epidemic curve of weekly reported CSM cases, week 40, 2022 to week 22, 2023

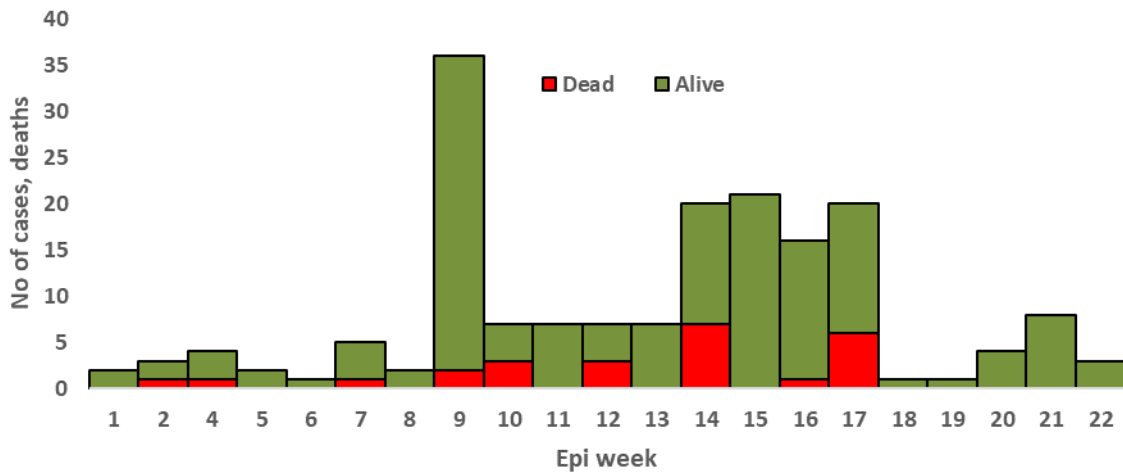


Figure 2: Katsina epidemic curve, Week 40, 2022 - Week 22, 2023

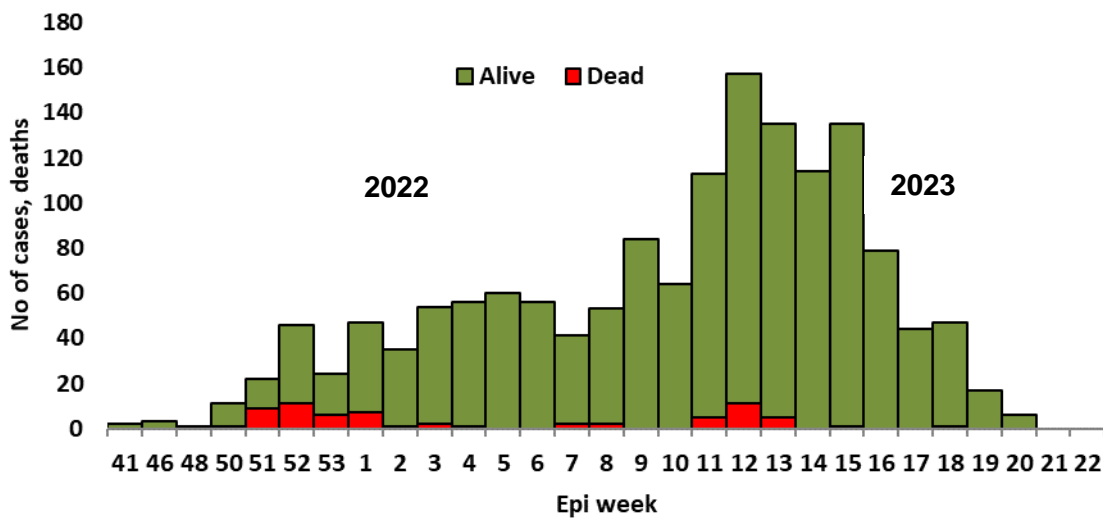


Figure 3: Jigawa epidemic curve, Week 40, 2022 to Week 22, 2023

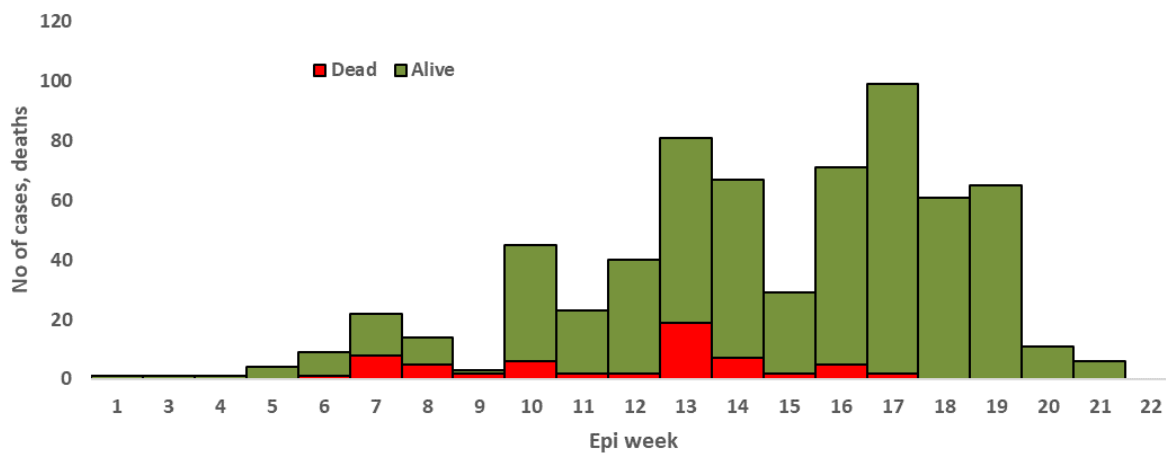


Figure 4: Yobe epidemic curve, Week 40, 2022 to Week 22, 2023

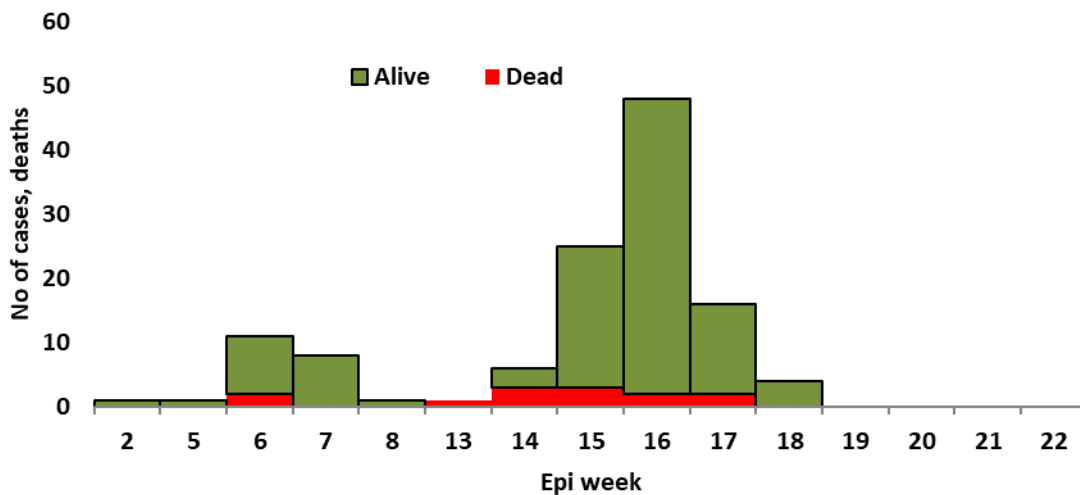


Figure 5: Bauchi epidemic curve, Week 40, 2022 to Week 22, 2023

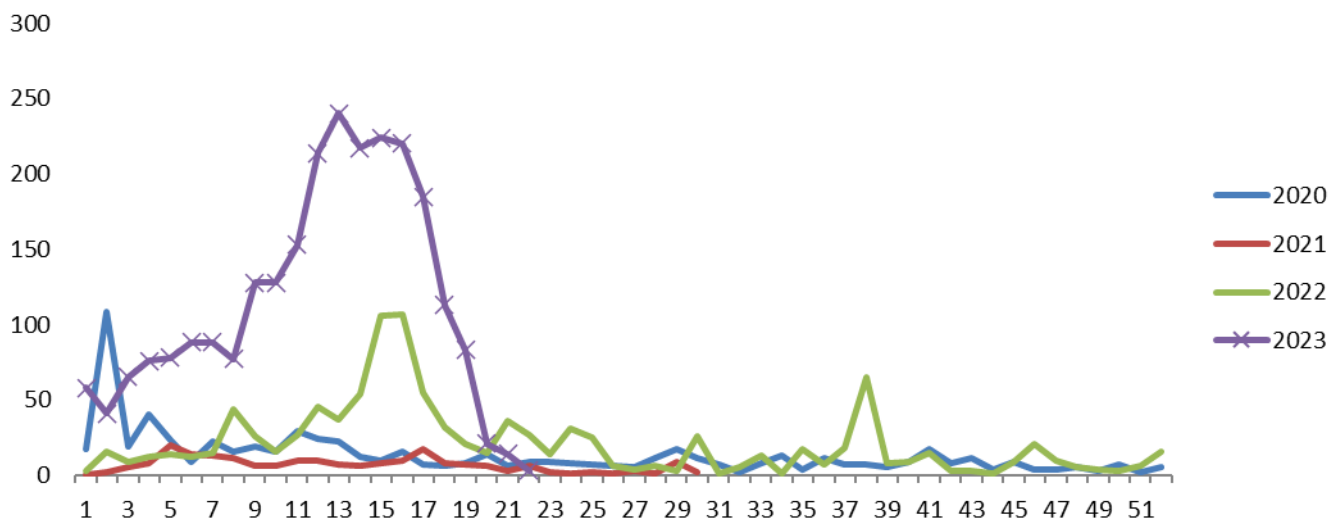


Figure 6: Weekly epidemiological trend of CSM cases from 2020 to 2023

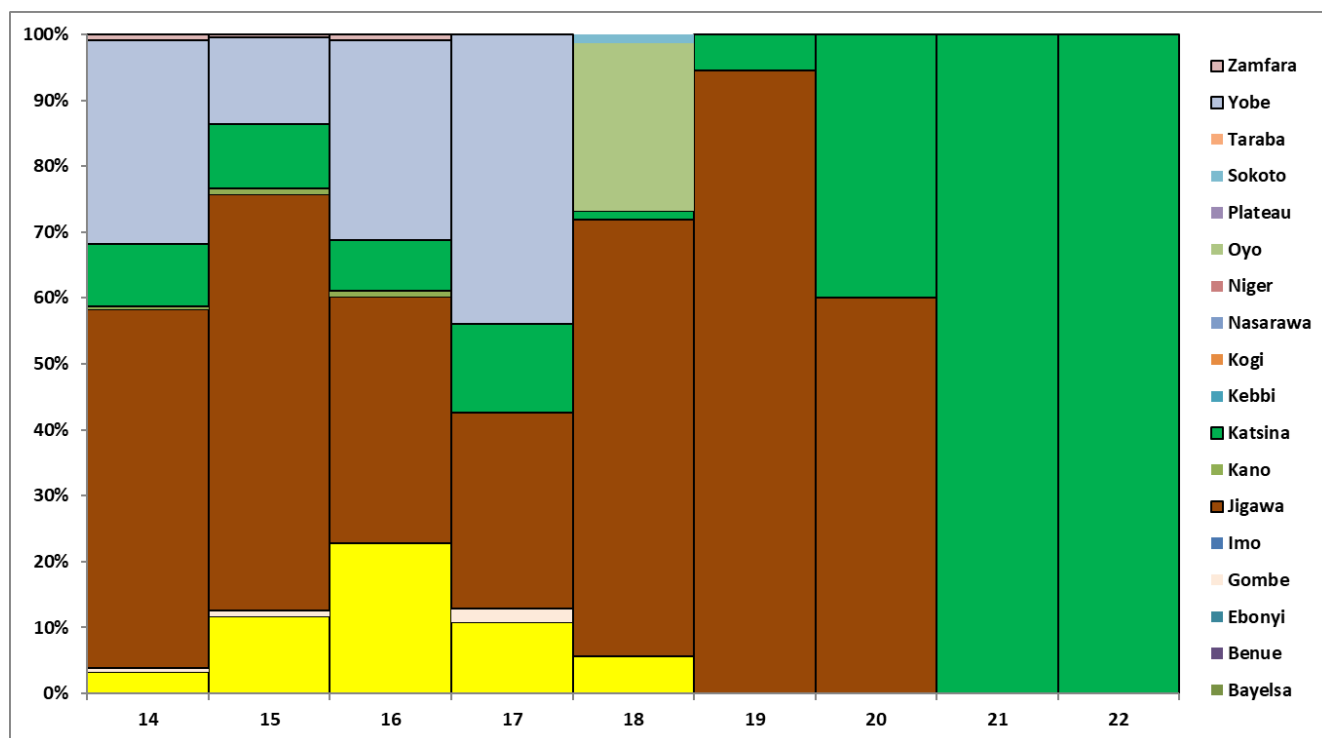


Figure 7: Percentage contribution of weekly cases by state in recent 9 weeks, week 14 - 22, 2023

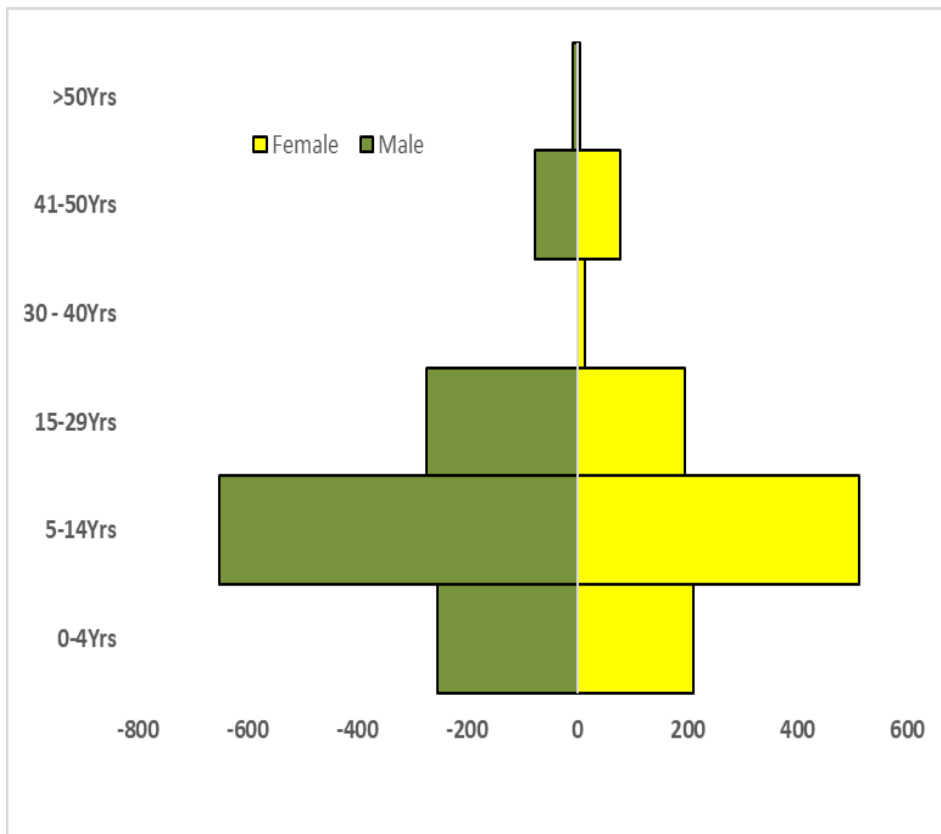


Figure 8: Age – Sex Pyramid and Sex Aggregation for CSM cases week 40, 2022 - 22, 2023.

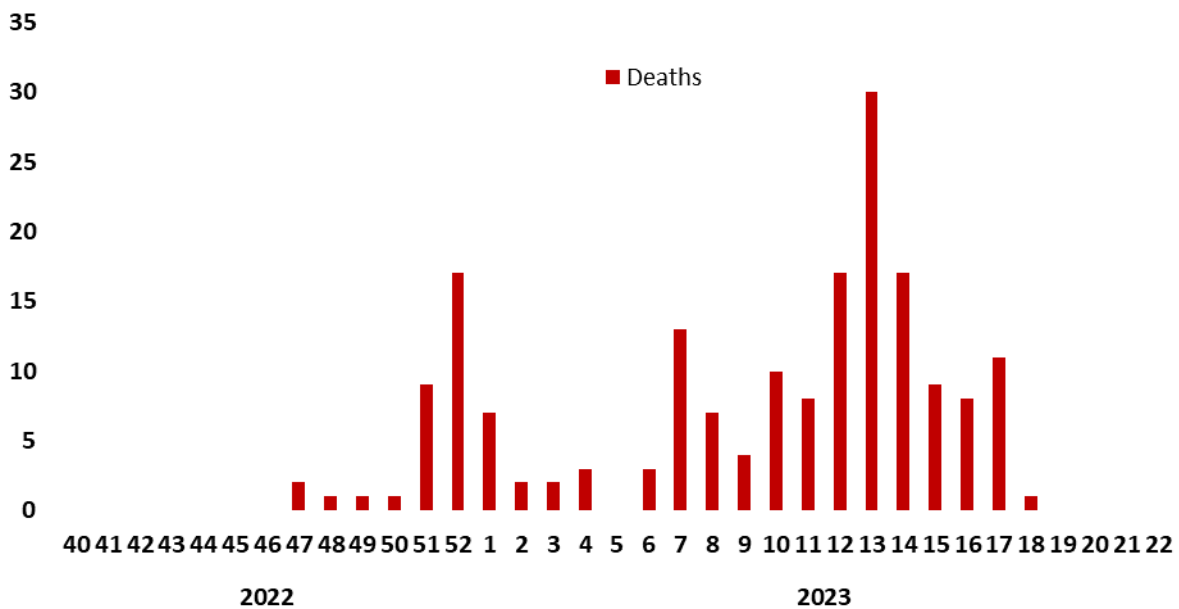


Figure 9: Trends in deaths, week 40, 2022 - 22, 2023, Nigeria

Figure 10. Map of Nigeria showing states with confirmed positive cases and deaths, week 40, 2022 - 22, 2023

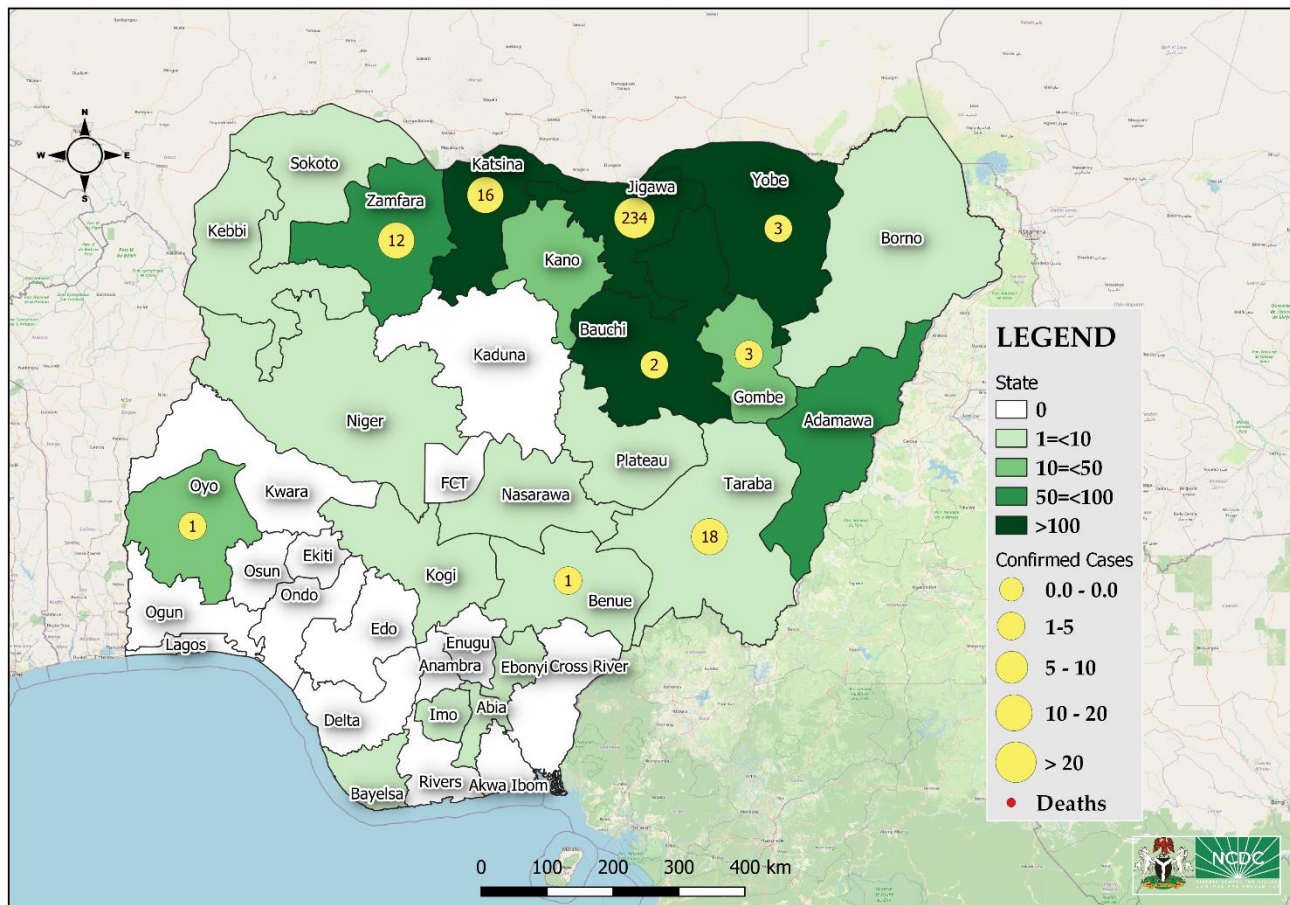


Table 3. Reporting Status for Weekly & Cumulative number of CSM Cases, for 2022/2023 season

Weekly and Cumulative number of suspected and confirmed cases for 2022/2023 seasons																	
Current week: (Week 22, 2023)										Cumulative (Week 40, 2022 - Week 22, 2023)							
States	Cases						Cases										
	Suspected	Trend of outbreaks status	Number of LGAs on alert	Number of LGAs with epidemic	Deaths	CFR%	Confirmed	Suspected	Deaths	CFR %	Confirmed	Serotype					
												PCR% Positive	PCR% Positive	NmA	NmC	NmW	NmX
1	Abia						1	0		1 (0%)	0	0	0	0	0	0	
2	Adamawa						45	7	15.56	24(0%)	0	0	0	0	0	0	
3	Bauchi						123	13	10.57	5(40%)	0	2	0	0	0	0	
4	Bayelsa						1	0		1(0%)	0	0	0	0	0	0	
5	Benue						6	0		1(100%)	0	0	0	0	1	0	
6	Borno						1	0	0.00	1(0%)	0	0	0	0	0	0	
7	Ebonyi						3	0		0(0%)	0	0	0	0	0	0	
8	Gombe						26	4	15.38	26(13%)	0	3	0	0	0	0	
9	Imo						6	0		3(0%)	0	0	0	0	0	0	
10	Jigawa						1508	66	4.38	432(54%)	0	227	0	1	6	0	
11	Kano						10	0		0(0%)	0	0	0	0	0	0	
12	Katsina	3	Active		0	0.00	177	25	14.12	42(38%)	0	14	0	0	2	0	
13	Kebbi						1	0		0(0%)	0	0	0	0	0	0	
14	Kogi						5	2	40.00	1(0%)	0	0	0	0	0	0	
15	Nasarawa						3	1	33.33	1(0%)	0	0	0	0	0	0	
16	Niger						4	0		4(0%)	0	0	0	0	0	0	
17	Oyo						32	2		17(6%)	0	0	0	0	1	0	
18	Plateau						7	0		1(0%)	0	0	0	0	0	0	
19	Sokoto						8	0		3(0%)	0	0	0	0	0	0	
20	Taraba						6	0		6(17%)	0	0	0	0	0	1	
21	Yobe						654	61	9.33	36(50%)	0	3	0	0	0	0	
22	Zamfara						45	1	2.22	43(28%)	0	18	0	0	7	1	
	Total	3	1	0	0	0.00	0(0%)	2672	182	6.81	645(45%)	0	267	0	1	17	2

Table 4: Response activities

Pillar	Activities to date	Next steps
Coordination	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Continue response coordination by the TWG. Continue sub-national level preparedness and response support. Continue ongoing onsite and offsite support outbreaks to Jigawa and Zamfara. Plan to deploy NRRT to support CSM response in Yobe state
Surveillance	<ul style="list-style-type: none"> Ongoing surveillance in all states through routine Integrated Disease Surveillance and Response (IDSR) and Event-Based Surveillance (EBS) Providing offsite/onsite support to states and follow up for daily reporting and progress with response activities 	<ul style="list-style-type: none"> Continue data collation and harmonisation. Enhanced surveillance (active case search and contact tracing) in affected states and LGAs, Deployment of SORMAS application to secondary and tertiary health facilities.
Case Management & IPC	<ul style="list-style-type: none"> Provision of technical support and response commodities to affected states, Management of suspected/confirmed cases at designated treatment centres across the states. 	<ul style="list-style-type: none"> Continue providing technical support on case management and IPC to states Continue training of Health Care Workers (HCW) on management of CSM and LP procedures Continuous follow up with states for updates and support
Laboratory	<ul style="list-style-type: none"> CSM culture testing across state-level laboratories Sample shipment of aliquots samples to PCR NCDC National Reference Laboratory (NRL) and CPHL Yaba-Lagos for molecular diagnosis (PCR) 	<ul style="list-style-type: none"> Continue to support ongoing CSM culture testing across state-level laboratories Continue shipment of aliquots samples to PCR NCDC National Reference Laboratory (NRL) and CPHL Yaba-Lagos for molecular diagnosis (PCR)
Logistics	<ul style="list-style-type: none"> Distribution of essential response commodities to all CSM affected states 	<ul style="list-style-type: none"> Continue supporting affected states with essential response commodities
Vaccination (led by NPHCDA)	<ul style="list-style-type: none"> Monitoring of epidemiological trend to guide plans for reactive vaccination campaigns, Implementation of CSM reactive vaccination campaign in high burden LGAs/Wards in Jigawa state led by NPHCDA 	<ul style="list-style-type: none"> Continue monitoring epidemiological trend to guide plans for vaccination campaigns, Continue implementation of CSM reactive vaccination campaign in high burden LGAs/Wards in Jigawa state
Risk communication	<ul style="list-style-type: none"> Implementation of targeted risk communication activities across high-risk states 	<ul style="list-style-type: none"> Continue airing of CSM jingles and distribution of Information, Education and Communication (IEC) materials.

	<ul style="list-style-type: none"> • CSM jingles are being aired in English and local languages in all affected states • Community social mobilisation, media interviews, distribution of IEC materials and awareness campaigns ongoing in affected communities • CSM advisory developed and circulated across high-risk states. 	<ul style="list-style-type: none"> • Continue media engagement meetings and training of journalists, other media professionals • Continued follow-up with states for update on risk communication
State Response	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	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.
- 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/mm³ 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

ALERT THRESHOLD	DEFINITION
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
EPIDEMIC THRESHOLD	DEFINITION
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 4th June 2023