



Cerebrospinal Meningitis Situation Report

MARCH 2023 REPORT 03

Epidemiological week 10 - 13: (27 March to 02 April 2023)

Key Points

Table 1: Summary of current week (9), cumulative Epi week 40 (2022) - 13 (2023)

Reporting Period	Suspected cases	Confirmed cases	Deaths (Suspected cases)	Case Fatality Ratio (CFR)	States and LGAs affected
Current week (week 13)	212	1	23	10.9%	State(s): 3 LGA(s): 15
Cumulative (Epi week 40 in 2022 – 13 2023)	1479	235	118	9.3%	State(s): 22 LGA(s): 79

Table 2: Weekly trend of CSF collection & confirmed cases from week 9 - 13, 2023

Epi-Week	Sample Collection	Confirmed Cases	Positivity Rate %	Serotype				
				NmC	NmW	NmX	Spn	HiB
9	29	13	44.83	12	0	0	0	1
10	31	18	58.06	18	0	0	0	0
11	52	21	40.38	21	0	0	0	0
12	43	19	44.19	19	0	0	0	0
13	37	1	2.70	1	0	0	0	0
Total	192	72	37.50	71	0	0	0	1

N.B: Three states, Jigawa (69 NmC), Gombe (2 NmC) and Zamfara (1 HiB) account for all positive cases recorded in epi week 9 – 13, 2023

Highlights

- From the beginning of the season, the following twenty (21) 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 13 (212), **increased by 8%** compared with Epi week 12 (196)
 - National multi-sectoral Cerebrospinal Meningitis TWG continues to monitor response across states.
- **Reporting week 13 (212),**
 - Two hundred and twelve (212) suspected CSM cases were reported in three (3) states,
 - Jigawa (131 cases), Yobe (77 cases) and Adamawa (4 cases)
 - Jigawa (131 cases) - accounted for 62% of the (212) suspected CSM cases.
 - 23 deaths recorded from Yobe (17) and jigawa (6)
 - 4 LGAs crossed alert threshold, Jigawa (Gumel, Kaugama, Sule Tankarkar and Taura)
 - 4 LGAs crossed epidemic threshold, Yobe (Machina and Nangere) and Jigawa (Gagarawa and Maigatari)
- **Jigawa state**
 - Has been in an outbreak since Epi week 40 (2022),
 - Eleven (out of 22) LGAs affected,
 - Over 1064 suspected cases, 65 deaths with CFR 6.1% as at week 13,
 - 213 confirmed cases,
 - Nm C = 206,
 - Streptococcus Pneumoniae = 6,
 - Nm X=1,
 - **Epi week 13 (131 suspected cases)**
 - Thirty-three (33) samples collected,
 - o One (1) sample tested positive for PCR.
 - NCDC and Partners deployed RRT and Materials to support Jigawa State outbreak response.
 - **Reactive vaccination**
 - Reactive vaccination (led by NPHCDA), was conducted in 17 wards of 4 LGAs of Jigawa state between 25th – 26th March 2023
 - The LGAs are Sule Tankarkar, Gumel, Maigatari and Gagarawa
 - 17 wards that crossed epidemic thresholds were targeted for vaccination
 - 194,487 persons aged 1-29 years were targeted for vaccination in the affected areas
 - 230,221 doses of bundled (ACWY135) vaccines were given to 230,221 persons
 - Administrative coverage of the campaign was 118%
 - Yobe State also in suspected outbreak is being supported by NCDC to generate enough surveillance/laboratory data/evidence to make a request for vaccines

Cumulative Epi-Summary

- As of 2nd April 2023,
 - **Total of 1479 suspected cases including 118 deaths (CFR 9.3%) reported from 22 states** in 2022/2023 CSM seasons,
 - **Total of 512 samples collected, 235 confirmed with 46% positivity rate** since beginning of the CSM seasons 2022/2023,

- Age group 5 -14 years was the most affected age group,
- Males were 57%, females were 43%
- 93% of all cumulative cases were from four (5) states – Jigawa (1064 cases), Yobe (234 cases), Zamfara (36 cases), Bauchi (23 cases) and Adamawa (21 cases).
- Fourteen LGAs across four states, Jigawa (8), Yobe (4), Bauchi (1) and Zamfara (1), reported more than 10 cases each this CSM seasons 2022/2023

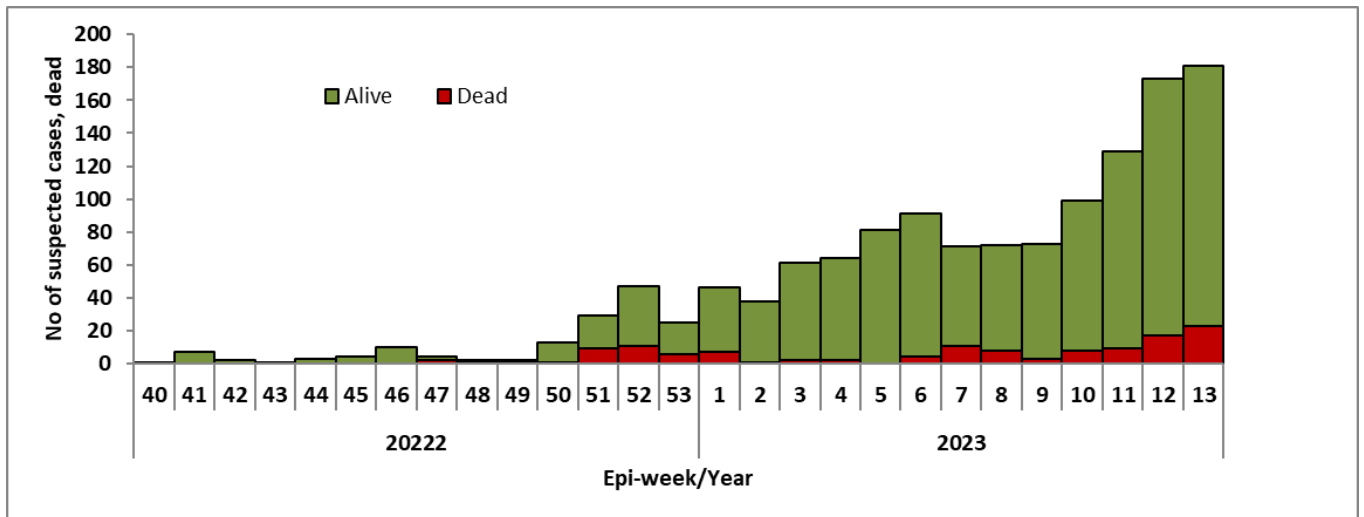


Figure 1: National Epidemic curve of weekly reported CSM cases, week 40, 2022 to week 13, 2023

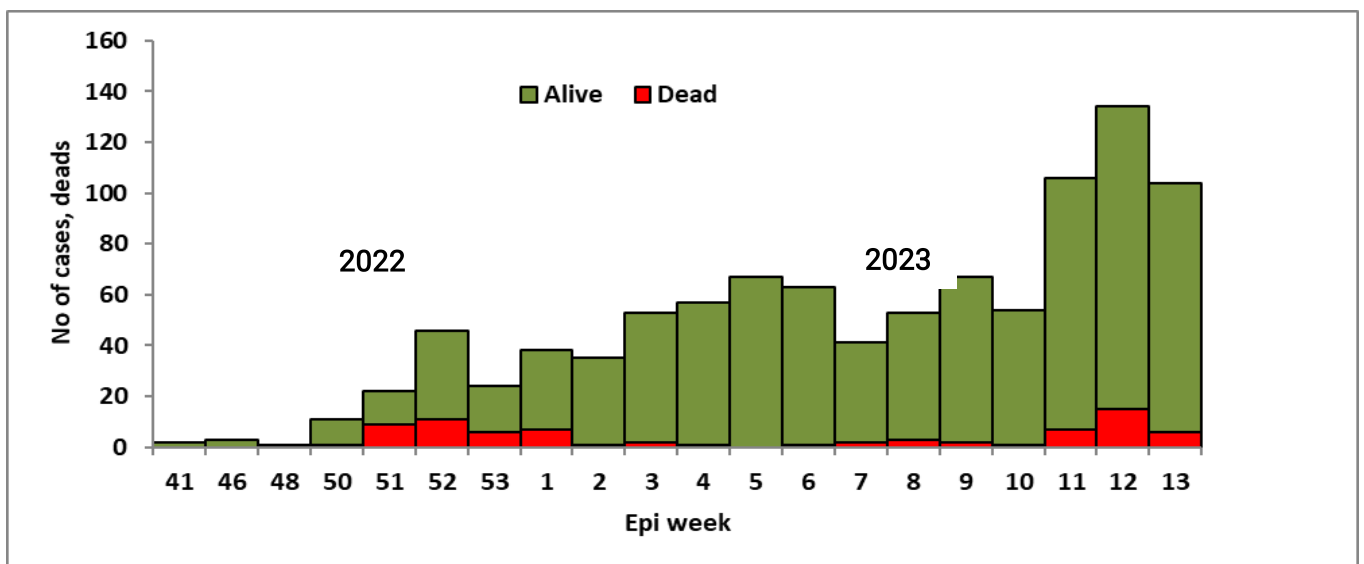


Figure 2: Jigawa epidemic curve, Week 40, 2022 - Week 13, 2023

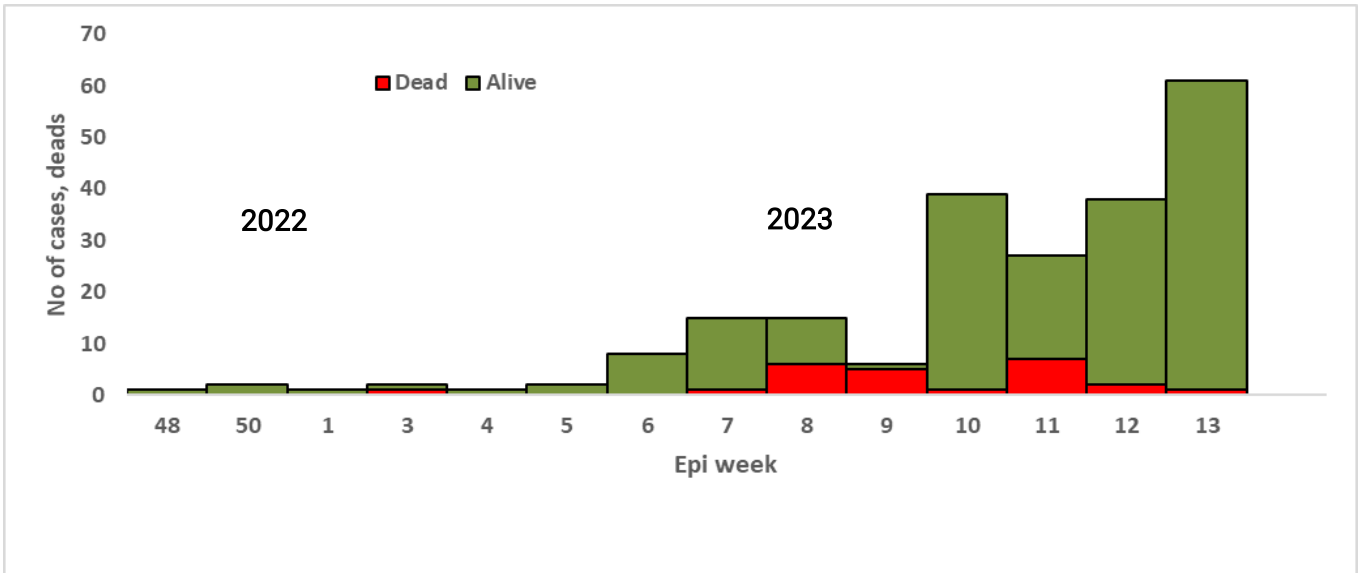


Figure 3: Yobe epidemic curve, Week 40, 2022 to Week 13, 2023

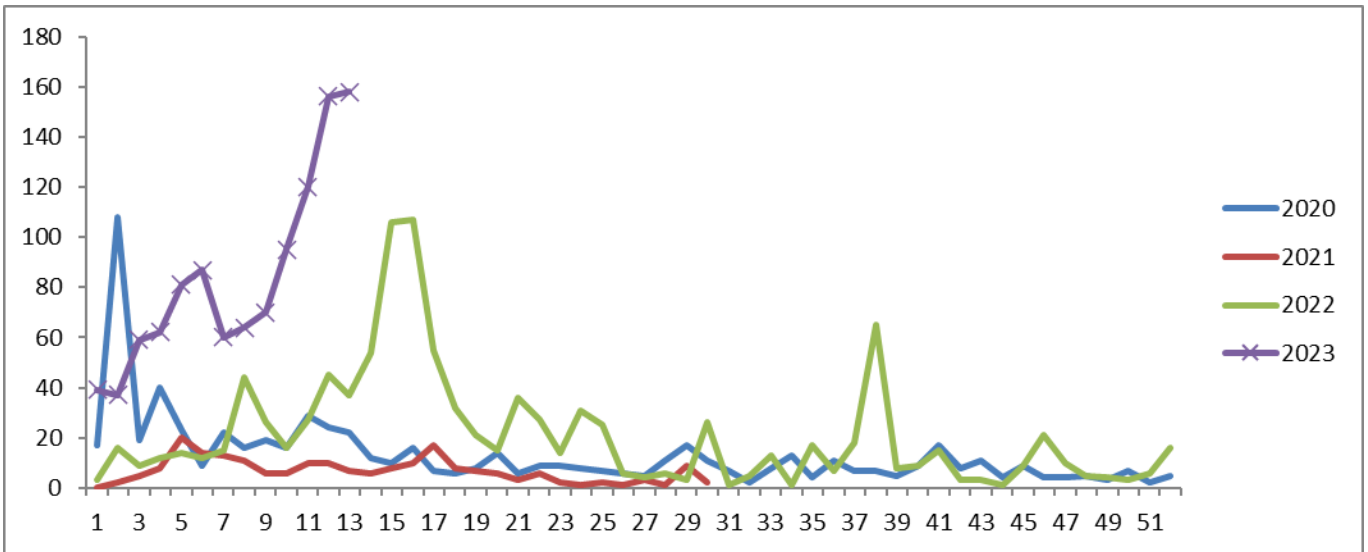


Figure 4: Weekly epidemiological trend of CSM cases from 2020 to 2023

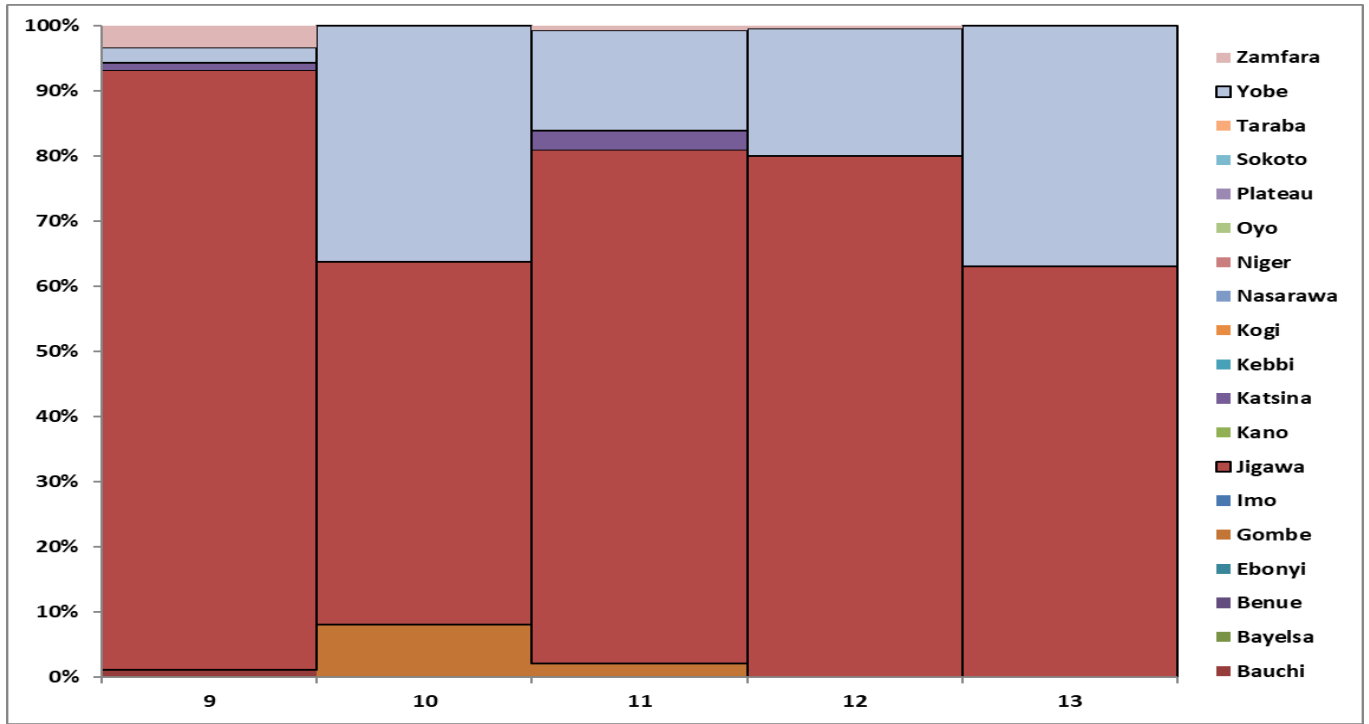


Figure 5: Percentage contribution of weekly cases by state in recent 5 weeks, week 9 - 13, 2023

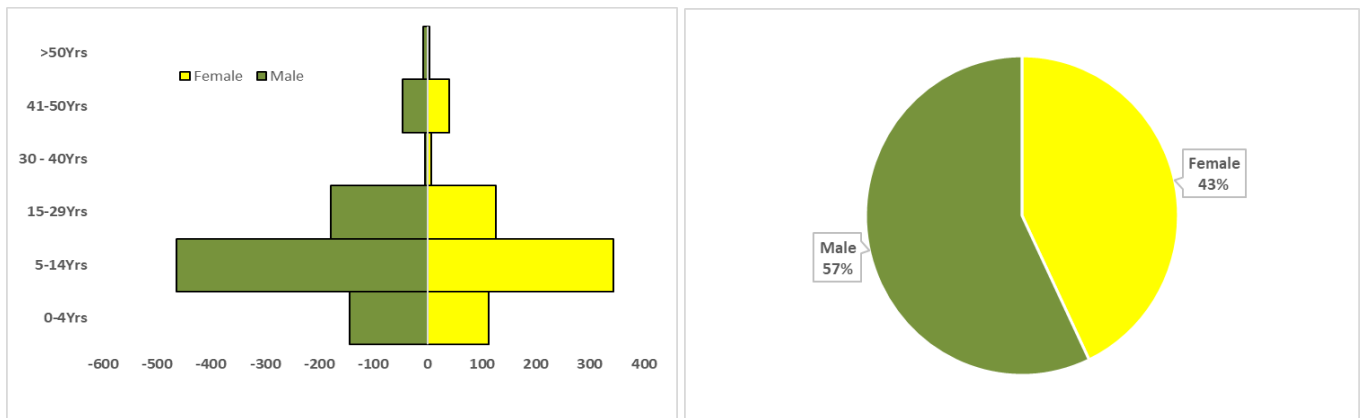


Figure 6: Age - Sex Pyramid and Sex Aggregation for CSM cases week 40, 2022 - 13, 2023.

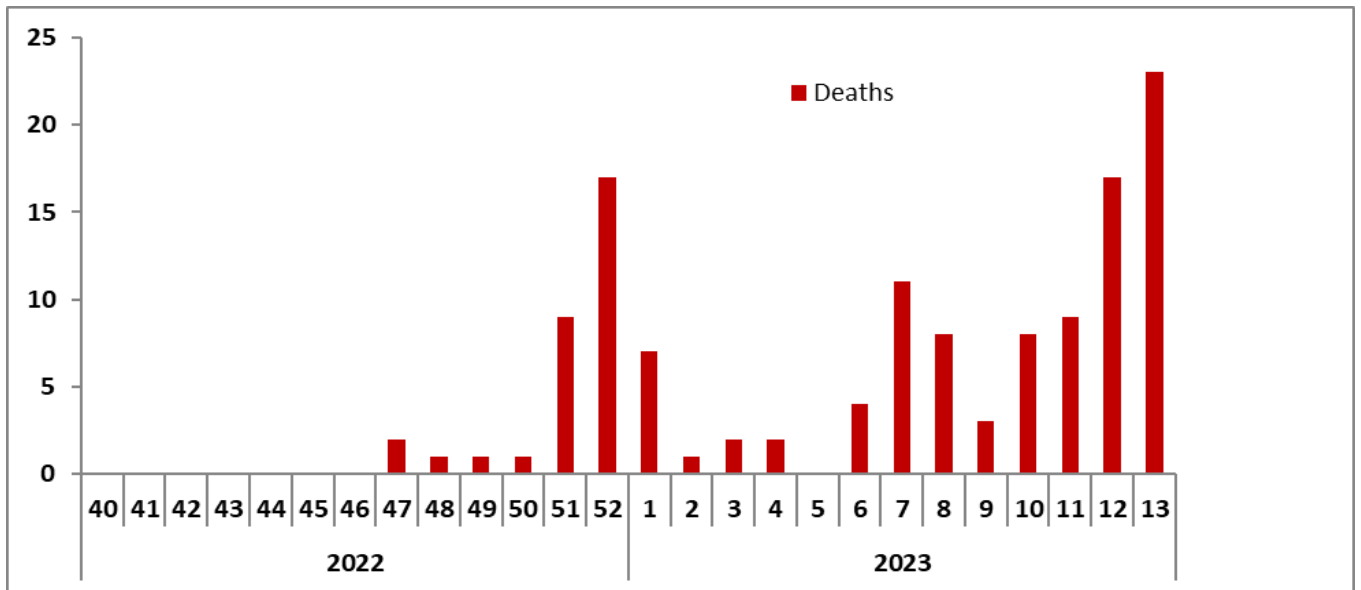


Figure 7: Trends in deaths, week 40, 2022 - 13, 2023, Nigeria

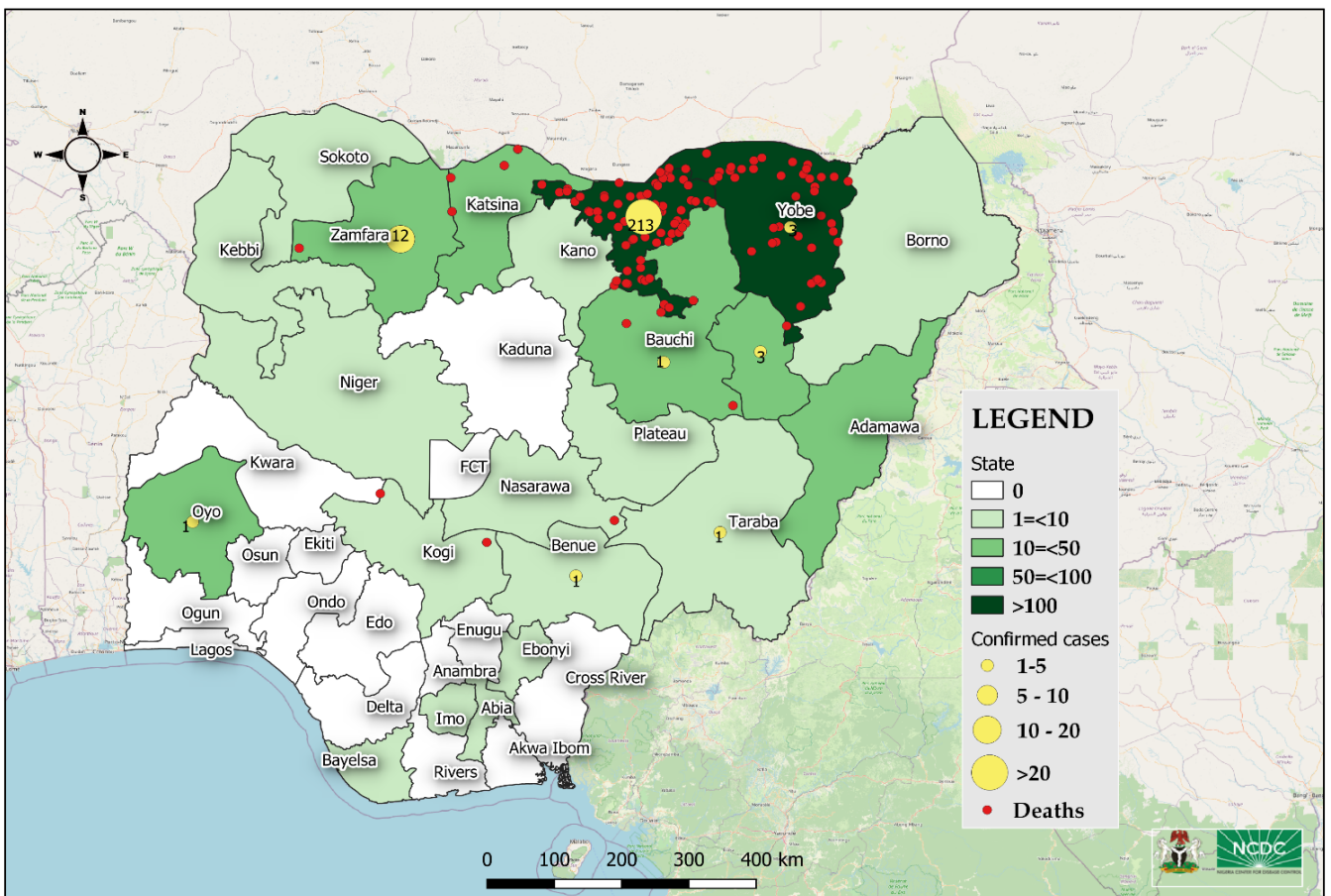


Figure 8. Map of Nigeria showing states with confirmed positive cases and dead, week 40, 2022 - 13, 2023

Table 3. Summary table for Weekly & Cumulative number of CSM Cases, for 2022/2023 seasons

Weekly and Cumulative number of suspected and confirmed cases for 2022/2023 seasons												
Current week: (Week 13, 2023)								Cumulative (Week 40, 2022 - Week 13, 2023)				
States	Cases							Cases				
	Suspected	Trend of outbreaks status	Number of LGAs in alert	Number of LGAs in epidemic	Deaths	CFR%	Confirmed	Suspected	Deaths	CFR %	Confirmed	
							PCR % Positive				PCR % positive	
1	Abia							1	0		1 (0%)	
2	Adamawa	4	Active		0		4(0%)	21	0		18(0%)	
3	Bauchi							23	2	8.70	1(100%)	
4	Bayelsa							1	0		1(0%)	
5	Benue							6	0		1(100%)	
6	Borno							1	0		1(0%)	
7	Ebonyi							3	0		0(0%)	
8	Gombe							19	0		19(16%)	
9	Imo							6	0		3(0%)	
10	Jigawa	131	Active	4	2	6	4.58	33(3%)	1064	65	6.11	406(53%)
11	Kano							3	0		0(0%)	
12	Katsina							19	4	21.05	2(0%)	
13	Kebbi							1	0		0(0%)	
14	Kogi							5	2	40.00	1(0%)	
15	Nasarawa							3	1		1(0%)	
16	Niger							4	0		4(0%)	
17	Oyo							14	0		13(8%)	
18	Plateau							7	0		1(0%)	
19	Sokoto							2	0		1(0%)	
20	Taraba							6	0		6(17%)	
21	Yobe	77	Active	0	2	17	22.08	234	43	18.38	4(75%)	
22	Zamfara							36	1	2.78	28(43%)	
	Total	212	3	4	4	23	10.85	2(100%)	1479	118	7.98	512(46%)

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 HFs.
Case Management & IPC	<ul style="list-style-type: none"> Provision of technical support and response commodities to 	<ul style="list-style-type: none"> Continue providing technical support on case management and

	<p>affected states,</p> <ul style="list-style-type: none"> • Management of Suspected/confirmed cases at designated treatment centers across the states. 	<p>IPC to states.</p> <ul style="list-style-type: none"> • 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 aliquot 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 in affected areas • Conducted reactive vaccination campaign in high burden LGAs of Jigawa State 	<ul style="list-style-type: none"> • Continue monitoring epidemiological trend to guide plans for vaccination campaigns.
Risk communication	<ul style="list-style-type: none"> • Implementation of targeted risk communication activities across high-risk states • CSM jingles are being aired in English and local languages in all affected states. • Community social mobilisation, media interviews, distribution of Information, Education and Communication (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 airing of CSM jingles and distribution of IEC materials. • Continue media engagement meetings and training of journalists, and other media professionals. • Continued follow-up with states for update on risk communication
State Response	<p>Multi-sectoral State-level Emergency Operation Centres (EOCs) was activated in Jigawa state and ICC also in operation in Yobe and Gombe states.</p>	<p>Continue supporting state response activities and implementation of CSM IAP for ownership and sustainability.</p>

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 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 the states.
- Build capacity for sample collection, transportation, laboratory diagnosis and data management.
- Plan to deploy NRRT to support CSM response in Yobe state.
- 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/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 2nd April 2023