



Weekly Epidemiological Report

Week 39: 23rd – 29th September, 2019

Highlight of the Week

Strengthening Regional Health Security: NCDC Hosts Cholera Genetic Sequencing Workshop for West Africa



Nigeria and other countries in West Africa continue to experience outbreaks of cholera every year. Despite the reduction in cases in the last two years, these outbreaks continue to affect lives of people in Nigeria and other countries. While other neighbouring countries like Cameroun and Niger Republic have similarly recorded some progress in the elimination of cholera, the possible trans-border of cholera across Nigeria, Cameroun and Niger based on recurrent outbreaks at border communities remains a major source of concern with implications for regional health security.

As part of our goal to better understand the epidemiology of cholera in West Africa, scientists from Johns Hopkins University through the Global Taskforce for Cholera Control (GTFCC) organised a workshop at the NCDC National Reference Laboratory, Abuja.

The goal of this workshop was to carry out sequencing of cholera samples in order to identify if reported in the region are from a single *V. cholerae* introduction or if they resulted from multiple overlapping epidemics caused by multiple introductions of the organism over the last two years. In addition to scientists from NCDC's National Reference Laboratory and network of laboratories, the workshop also had focal points for cholera (laboratory and epidemiology) from Cameroun and Niger Republic.

The outcomes of the workshop were:

1. Trained focal points of public health reference laboratories from Nigeria, Niger and Cameroun on sequencing *V. cholerae* O1 using the Oxford Nanopore MinION platform
2. Introduction to the Oxford Nanopore bioinformatics pipeline for *V. cholerae* O1 to assemble genomes and conduct basic phylogenetic analyses
3. Sequencing of isolates collected from 2015-2019 in all three countries
4. Combined genomic and epidemiologic information from all three countries to describe the regional outbreak dynamics, which will form the basis of a collaborative peer-reviewed manuscript
5. Developed first draft of a standard operating procedure for rapid identification and analysis of cholera transmission to be used in future surges of cases with the final aim of improving the regional response to outbreaks

A major outcome from the workshop is the possibility to identify pathogens other than *V. cholerae* O1 which could be responsible for cholera outbreaks in Nigeria, Cameroun and Niger. This could lead to improved epidemic intelligence, patient care and inform public health policy.

NCDC remains committed to working closely with our counterparts in neighbouring countries for a better understanding of causative organisms leading to large outbreaks, and using this knowledge to improve preparedness and response activities.

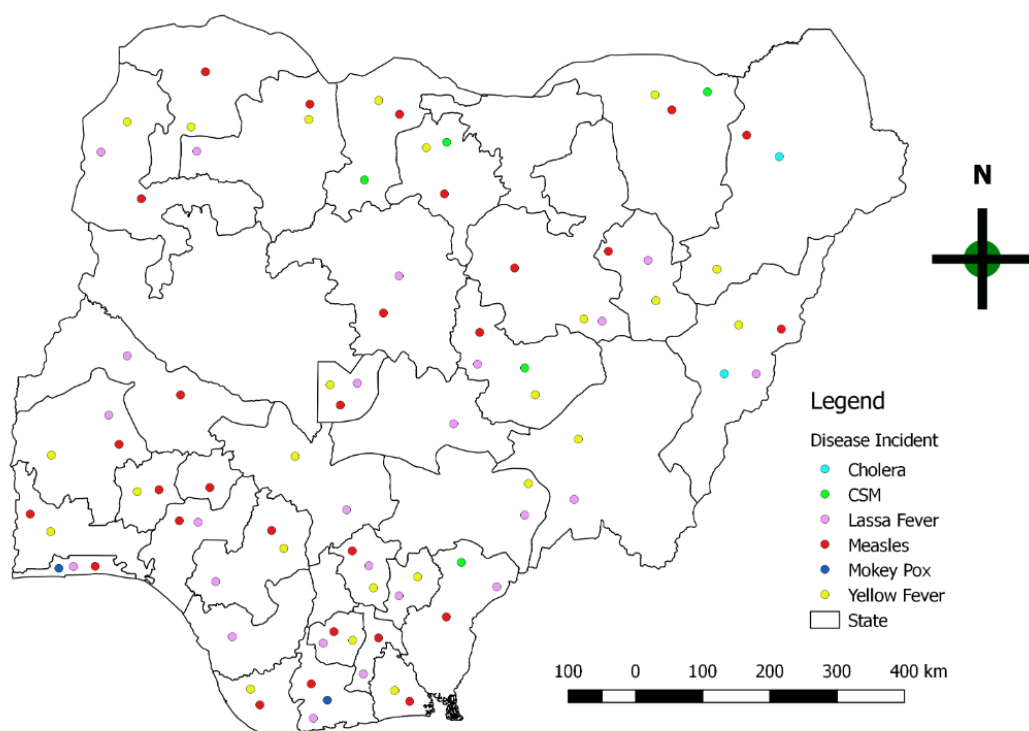
Summary of Incidents

Ongoing incidents

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Ongoing Incidents are defined as confirmed cases where a national EOC or equivalent has been activated (EOC is currently activated for Yellow Fever)

Other incidents are those confirmed cases for which EOC is not activated



Data source: SITAware

Summary

Week 39: 23rd – 29th September 2019

Lassa Fever_{1,2}	Cerebrospinal Meningitis (CSM)_{3,4}	Yellow Fever_{3,4}
108 Suspected cases	23 Suspected cases	116 Suspected cases
13 Confirmed case(s)	0 Confirmed cases	0 Confirmed cases
2 Death(s)	1 Death(s)	2 Death(s)
Cholera_{3,4}	Measles_{3,4}	Monkeypox_{1,4}
31 Suspected cases	260 Suspected cases	3 Suspected case(s)
2 Confirmed cases	0 Confirmed cases	3 Confirmed cases
0 Death(s)	0 Death(s)	0 Death(s)
Acute Flaccid Paralysis (AFP)_{3,4}	National Sentinel influenza surveillance₅	
101 Suspected cases	4 Suspected cases	
0 Confirmed Polio	0 Confirmed cases	

Timeliness of reports₃	Completeness of reports₃
94.6% Last 4 weeks	98.7% Last 4 weeks
89% Year to date	100% Year to date

Notes

- Information for this disease was retrieved from the Technical Working Group and Situation Reports
- Case Fatality Rate (CFR) for this disease is reported for confirmed cases only
- Information for this disease was retrieved from IDSR 002 data
- CFR for this disease is reported for total cases i.e. suspected + confirmed
- Information for sentinel influenza was retrieved from the laboratory

Lassa Fever

Week 39

Suspected cases	Confirmed cases	Deaths	Number of States and LGAs affected
108	13	2	State: 10 + FCT LGA: 12

Year to date (week 1 – 39)

Suspected cases		Confirmed cases		Deaths		CFR	
2018	2019	2018	2019	2018	2019	2018	2019
2623	3931	514	714	134	153	2.6%	21.4%

Figure 1: Number of suspected and confirmed cases of Lassa Fever, Nigeria, Week 1 – 39, 2019

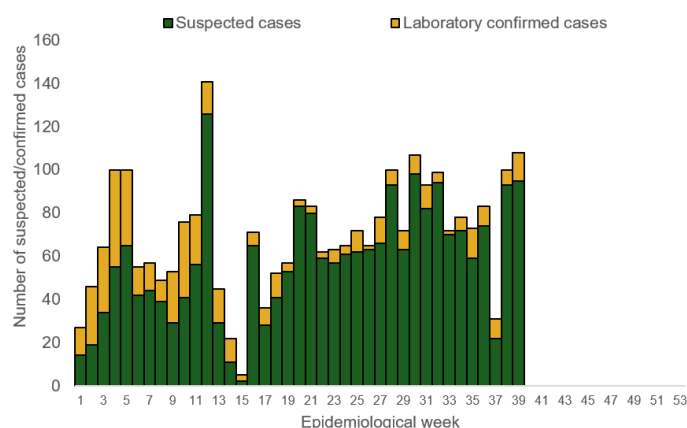
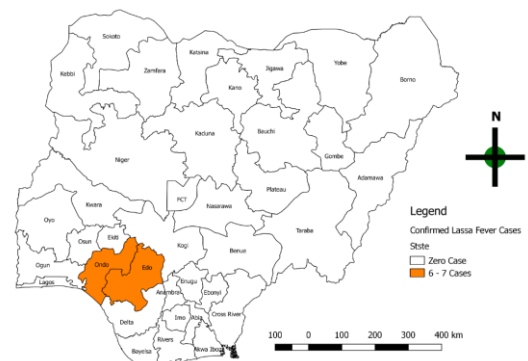


Figure 2: Location of **confirmed** cases of Lassa Fever by state, Nigeria, week 39, 2019



Key points

- There were 108 suspected cases of Lassa Fever (LF) reported from 12 LGAs in 10 states & FCT (Edo – 66, Ondo – 25, Bauchi – 1, Plateau – 4, Gombe – 1, Benue – 1, Enugu – 2, Kebbi – 1, Abia – 3, FCT - 3 & Yobe – 1). There were 13 confirmed cases and two deaths were recorded

Actions

To date:

- National Lassa Fever multi-partner, multi-sectoral Technical Working Group (TWG) continues to coordinate the response activities at all levels
- A Lassa Fever National Environmental Response, coordinated by Federal Ministry of Environment in collaboration with NCDC and supported by WHO was carried out in Edo and Ondo states
- Implementation of targeted risk communication and enhanced surveillance activities in affected States

Planned:

- Conduct a meeting to finalise the LF psychosocial guideline meeting in October 2019
- Review LF case management and surveillance tools and SOPs in October 2019

Cerebrospinal Meningitis (CSM)

Week 39

Suspected cases	Confirmed cases	Deaths	Number of States and LGAs affected
23	0	1	State: 5 LGA: 11

Year to date (week 1 – 39)

Suspected cases		Confirmed cases		Deaths		CFR	
2018	2019	2018	2019	2018	2019	2018	2019
4333	1683	318	101	357	75	8.2%	4.4%

Figure 3: Number of suspected and confirmed cases of CSM, Nigeria, week 1 – 39, 2019

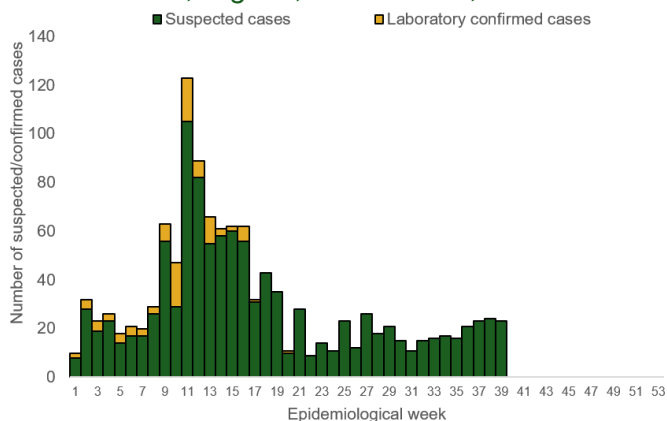
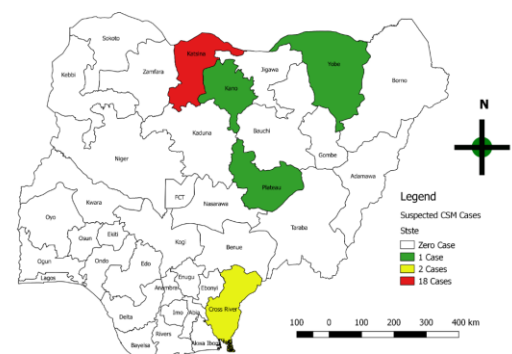


Figure 4: Location of suspected cases of CSM by State, Nigeria, week 39, 2019



Key points

There were 23 suspected cases of Cerebrospinal Meningitis (CSM) reported from 11 LGAs in five states (Cross River – 2, Kano – 1, Katsina – 18, Plateau – 1 & Yobe – 1). None was laboratory confirmed and one death was recorded

Actions

To date:

- The national CSM TWG meets weekly to review reports from states and plan appropriately

Planned:

- Continue harmonisation of the national line list and SORMAS data
- Establish a mechanism for getting weekly feedback from states

Yellow Fever

Week 39

Suspected cases	Confirmed cases	Deaths	Number of States and LGAs affected
116	0	2	State: 23 + FCT LGA: 70

Year to date (week 1 – 39)

Suspected cases		Confirmed cases		Deaths		CFR	
2018	2019	2018	2019	2018	2019	2018	2019
2026	2853	7	66	1	78	0%	2.7%

Figure 5: Number of suspected and confirmed cases of Yellow Fever, Nigeria, week 1 – 39, 2019

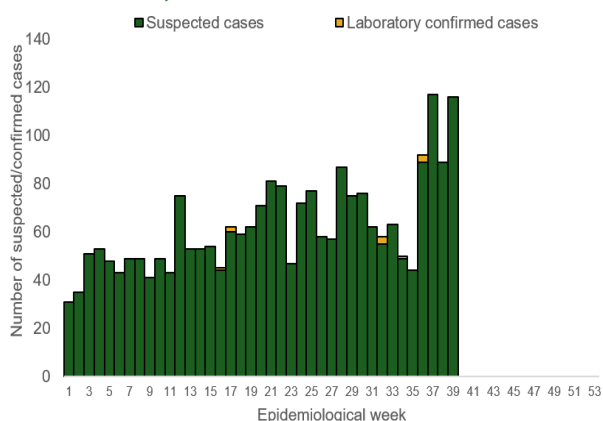
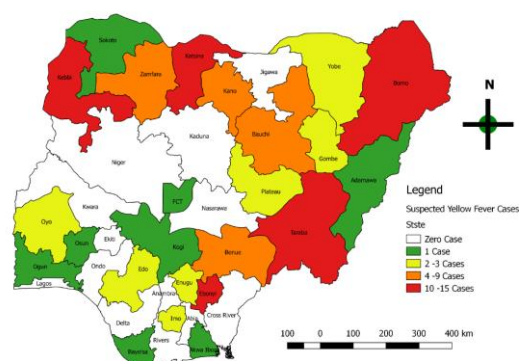


Figure 6: Location of suspected cases of Yellow Fever by State, Nigeria, week 39, 2019



Key points

There were 116 suspected cases of Yellow Fever (YF) reported from 70 LGAs in 23 states & FCT. None was laboratory confirmed and two deaths were recorded

Actions

To date:

- A national multiagency YF Incident Management System (IMS) is coordinating response activities
- Offsite support is being provided to all affected states
- Operationalisation of the three new laboratories added to the YF laboratory network

Planned:

- Continue on-site and off-site support to affected states
- Conduct preventive mass vaccination campaign in Rivers, Ekiti & Anambra states in the fourth week of November 2019

Cholera

Week 39

Suspected cases	Confirmed cases	Deaths	Number of States and LGAs affected
31	2	0	State: 2 LGA: 3

Year to date (week 1 – 39)

Suspected cases		Confirmed cases		Deaths		CFR	
2018	2019	2018	2019	2018	2019	2018	2019
43799	2508	797	289	1042	38	2.4%	1.5%

Figure 7: Number of suspected and confirmed cases of Cholera, Nigeria, week 1 – 39, 2019

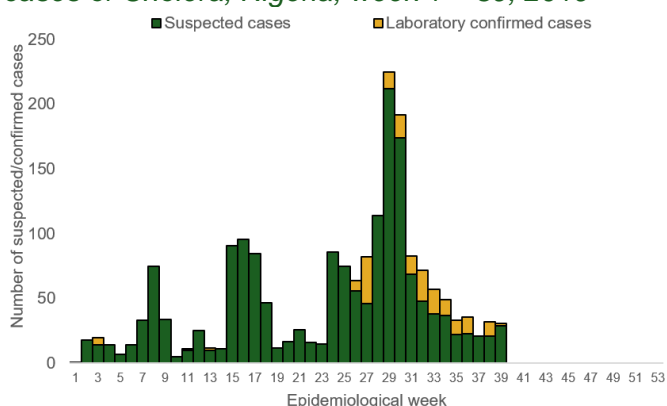
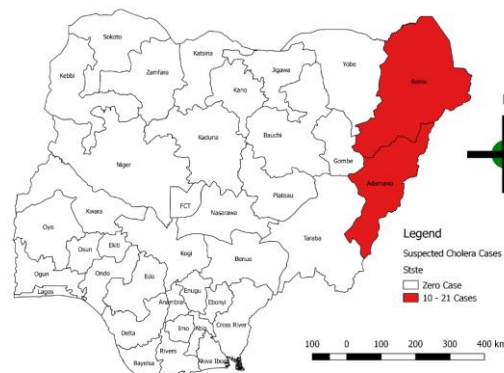


Figure 8: Location of suspected cases of Cholera by State, Nigeria, week 39, 2019



Key points

There were 31 suspected cases of Cholera reported from three LGAs in two states (Adamawa – 10 & Borno – 21). There were two laboratory confirmed cases and no death was recorded

Actions

To date:

- A Cholera multisectoral preparedness meeting was held with partners in Borno state
- The national Cholera TWG continues to coordinate activities in states in collaboration with the Federal Ministry of Water Resources (FMWR) and support from partners
- Adamawa state EOC continues to coordinate response activities with support from partners

Planned:

- Follow up with states with active outbreak and monitor non-reporting states

Measles

Week 39

Suspected cases	Confirmed cases	Deaths	Number of States and LGAs affected
260	0	0	State: 27 + FCT LGA: 115

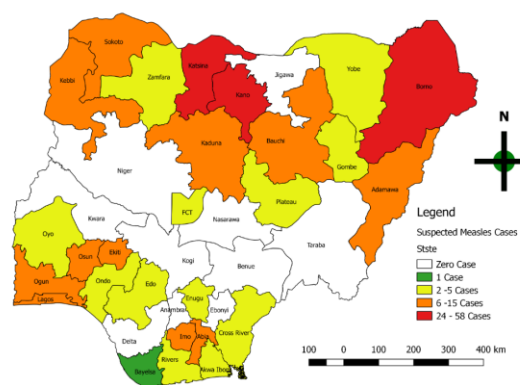
Year to date (week 1 – 39)

Suspected cases		Confirmed cases		Deaths		CFR	
2018	2019	2018	2019	2018	2019	2018	2019
14439	55476	21	2150	166	275	0.8%	0.5%

Figure 11: Number of suspected and confirmed cases of Measles, Nigeria, week 1 – 39, 2019



Figure 12: Location of suspected cases of Measles by State, Nigeria, week 39, 2019



Key points

There were 260 suspected cases of measles reported from 115 LGAs in 27 states and FCT. None was laboratory confirmed and no death was recorded

Actions

To date

- The measles TWG is closely monitoring surveillance data and response activities across the country
- The TWG is working closely with NPHCDA towards measles Supplemental Immunization Activity in Nigeria
- Following up with states still reporting above 50 cases

Planned:

- Continue the review of measles surveillance data across the country
- Follow up with Katsina state on the next line of action
- Conduct measles surveillance guideline consolidation meeting from 15th – 17th October, 2019

Monkeypox

Week 39

Suspected cases	Confirmed cases	Deaths	Number of States and LGAs affected
3	3	0	State: 2 LGA: 2

Year to date (week 1 – 39)

Suspected cases	Confirmed cases	Deaths	CFR
2018 2019	2018 2019	2018 2019	2018 2019
89 82	47 39	1 0	1.1% 0%

Figure 13: Number of suspected and confirmed cases of Monkeypox, Nigeria, week 1–39, 2019

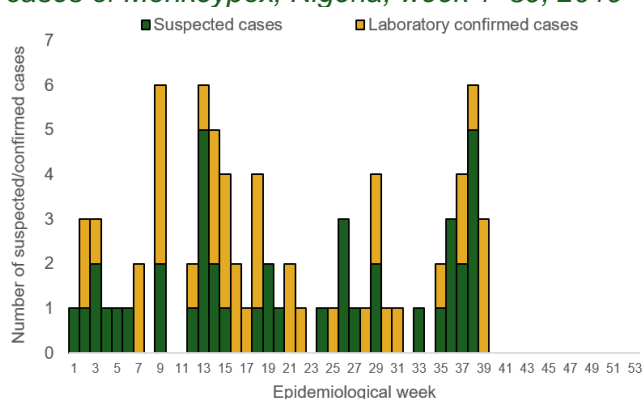
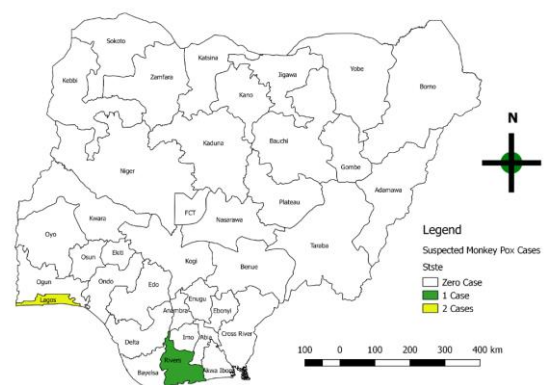


Figure 14: Location of suspected cases of Monkeypox by State, Nigeria, week 39, 2019



Key points

- There were three suspected cases of monkeypox reported from two LGAs in two states (Rivers – 1 & Lagos – 2). All of them were confirmed and no death was recorded

Actions

To date:

- The national monkeypox TWG is monitoring and coordinating response activities across the states
- Surveillance has been enhanced in all affected states

Planned

- Deploy Rapid Response Team to Akwa Ibom state to enhance surveillance activities.
- Dissemination of the reviewed case information form to all states

Acute Flaccid Paralysis (AFP)

Week 39

Suspected cases	Confirmed cases	Deaths	Number of States and LGAs affected
101	0	0	State: 31 + FCT LGA: 86

Year to date (week 1 – 39)

Suspected cases		Confirmed cases		Deaths		CFR	
2018	2019	2018	2019	2018	2019	2018	2019
6511	4938	0	0	0	0	0%	0%

Figure 15: Number of suspected and confirmed cases of AFP, Nigeria, week 1– 39, 2019

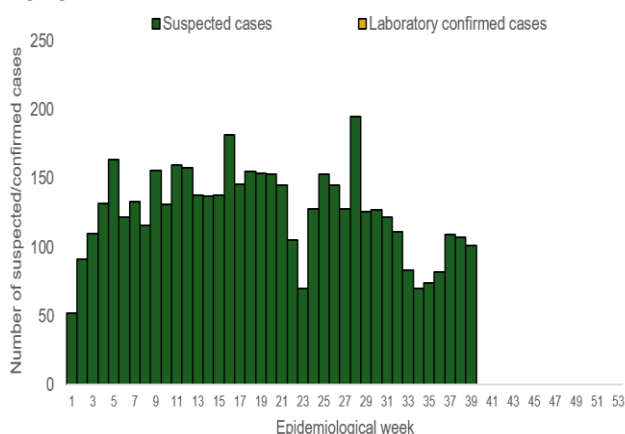
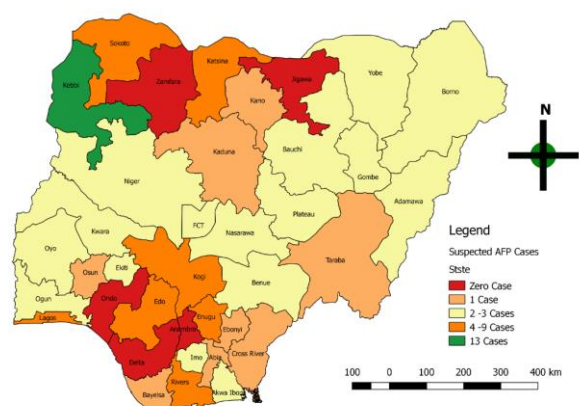


Figure 16: Location of suspected cases of AFP by State, Nigeria, week 39, 2019



Key points

- There were 101 suspected cases of AFP reported from 86 LGAs in 31 states and FCT. None was laboratory confirmed and no death was recorded

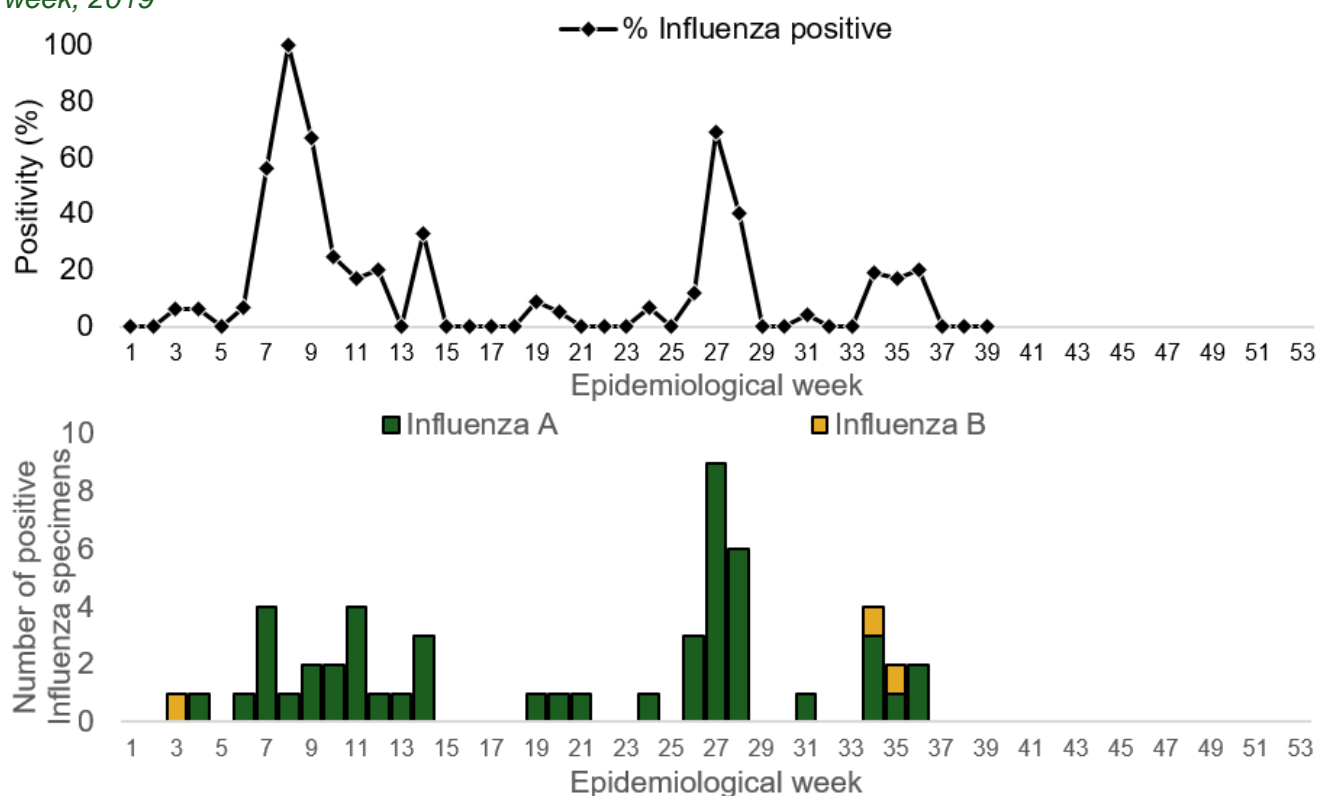
National Influenza Sentinel Surveillance

Year to date (week 1 – 39)

	Suspected cases	Suspected ILI	Suspected SARI
Number (Percentage)	421	382(90.5%)	40(9.5%)

	Confirmed cases		Confirmed ILI		Confirmed SARI	
	Influenza A	Influenza B	Influenza A	Influenza B	Influenza A	Influenza B
Number	49	3	45	3	4	0
Positivity (%)	11.6%	0.7%	11.8%	0.8%	10%	0%

Figure 17: Number of influenza positive specimens by type and percent positive by epidemiological week, 2019



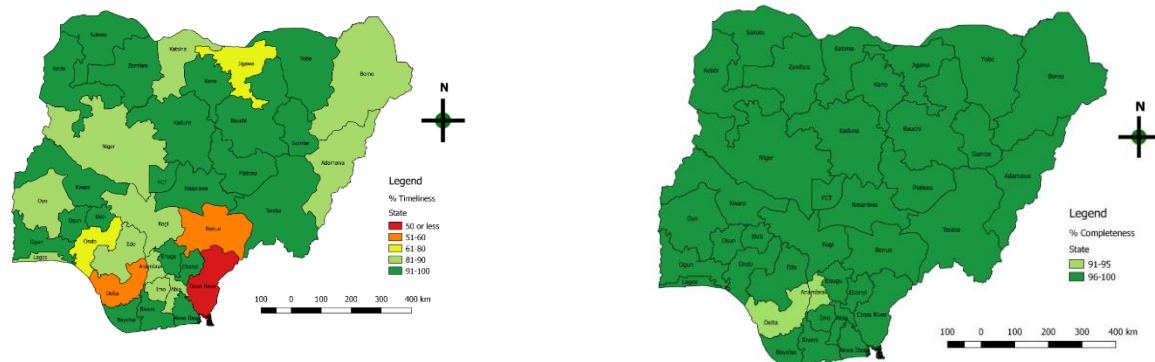
Key points

There were 53 processed samples positive for influenza, with 49 for influenza A, 3 for influenza B and 1 for influenza A&B

Timeliness and Completeness of Reports

Last 4 weeks (week 36 - 39, 2019)

Figure 18: A – Timeliness by State (%); B – Completeness by State (%), week 36 – 39, 2019



Number of reports received on time, late or not received, the percentage timeliness and completeness, in the last 4 weeks and year to date

Nigeria Total Reports	Last 4 weeks Week 36 – 39	Year to date Week 1- 39
Reports sent on time	140	1287
Reports sent late	6	151
Reports not received	2	5
Timeliness	94.6%	89%
Completeness	98.7%	100%

States with reports not received in 2019 (week 1 – 39)

State	Week(s) report not received
Anambra	38,39
Delta	8,10,12

Timeliness and Completeness of Reports by State

Year to date (week 1 – 39)

State	Timeliness (%)	Completeness (%)
Abia	87	100
Adamawa	90	100
Akwa Ibom	95	100
Anambra	85	95
Bauchi	92	100
Bayelsa	100	100
Benue	59	100
Borno	90	100
Cross River	49	100
Delta	51	92
Ebonyi	97	100
Edo	87	100
Ekiti	100	100
Enugu	92	100
FCT	100	100
Gombe	95	100
Imo	90	100
Jigawa	77	100
Kaduna	92	100
Kano	100	100
Katsina	90	100
Kebbi	95	100
Kogi	90	100
Kwara	97	100
Lagos	82	100
Nasarawa	95	100
Niger	90	100
Ogun	95	100
Ondo	74	100
Osun	100	100
Oyo	87	100
Plateau	92	100
Rivers	92	100
Sokoto	100	100
Taraba	95	100
Yobe	100	100
Zamfara	97	100