



NIGERIA CENTRE FOR DISEASE CONTROL

Weekly Epidemiological Report

Main Highlight of the week

ROLE OF EMERGENCY OPERATIONS CENTRES IN OUTBREAK COORDINATION



The response to outbreaks usually involve multiple activities, many of which occur concurrently. In most situations, resources are scarce and few personnel are involved or available to respond to an outbreak. For effective outbreak management, a well-defined structure needs to be established.

An Emergency Operations Centre (EOC) is a structure set up for the preparation, coordination and management of response activities for public health events. It is also known as an incident command centre (ICC) and can operate in three different modes-Watch, Alert and Response Modes. These different modes function based on information received by the EOC on public health events. An Incident Manager (IM) is usually appointed as the lead in an EOC and is responsible for proper allocation of resources, aligning of activities, facilitating EOC meetings and production/approval of outbreak related documentations

A review of the different modes is seen below:

1. Watch Mode: The Watch mode staff are available and are involved in event based surveillance and documentation of events as they occur. Based on information received, certain actions/tasks are escalated to appropriate EOC personnel. At this point, Sitreps and Spotreps are generated and shared with relevant key stakeholders.
2. Alert Mode: At this point, subject matter experts (SMEs) are contacted. Surveillance is enhanced and notifications generated. A preliminary assessment team is convened and coordination with other ministries is initiated. An incident action plan is developed with deployment preparations initiated. In an alert phase, a rapid response team may be deployed for initial assessment.
3. Response Mode: The EOC is activated and the incident manager is appointed. The incident management staff and SMEs are mobilized. All liaisons with other relevant ministries is established. Resources are deployed and the incident action plan is finalized with specific timelines for stated activities. A situational awareness is conducted and reports generated are usually response-specific.

It is important to note that an EOC can exist in the three different modes for different incidents/events. This helps with optimal utilisation of resources and proper alignment of activities.

The Nigeria Centre for Disease Control (NCDC) has recently set up its Incident Coordination Centre (ICC), which has improved the surveillance and response to public health threats and incidents. The replication of this at the State level, will greatly contribute to a stronger and better coordinated response to outbreaks in the country.

Recently, the NCDC supported the Katsina State Government in establishing a state-owned EOC to be used for coordination of all outbreaks/public events in the state, starting with Cerebrospinal Meningitis (CSM).

It is important for all States in the country, to adapt the EOC structure to ensure better coordination, and contribute to national health security.

In the reporting week ending on December 31, 2017:

- There were 61 new cases of Acute Flaccid Paralysis (AFP) reported. None was confirmed as Polio. The last reported case of Polio in Nigeria was in August 2016. Active case search for AFP is being intensified as Nigeria has reinvigorated its efforts at eradicating Polio.
- 121 suspected cases of Cholera were reported from 18 LGAs in Kano State. Of these, five were laboratory confirmed and nine deaths were recorded.
- Five suspected cases of Lassa fever were reported from four LGAs in three States (Bauchi – 2, Edo – 1 & Kogi – 2). One was laboratory confirmed and no death was recorded.
- There were 33-suspected cases of Cerebrospinal Meningitis (CSM) reported from 18 LGAs in four States (Kaduna – 2, Katsina - 7, Sokoto – 2 & Zamfara – 22). Of these, nine were laboratory confirmed and five deaths were recorded. Ongoing surveillance for CSM has been intensified in all the 26 States in the Nigeria meningitis belt and case based surveillance commenced from 4th December, 2017.
- There were 90- suspected cases of Measles reported from 21 States. None was laboratory confirmed and no death was recorded.

In the reporting week, all States sent in their report. This is a remarkable improvement! Timeliness of reporting remains 86% in both previous and current weeks (Week 51 and 52) while completeness remains at 100%. It is very important for all States to ensure timely and complete reporting at all times, especially during an outbreak.

Summary Table 1 (IDSR Weekly Report as at 05/01/2018)

Disease	Variables	Week 51	Week 52		Cumulative Weeks	
		2017	2017	2016	01 - 52, 2017	01 - 52, 2016
AFP	Cases	70	61	58	14,178	13575
	Deaths	0	0	0	0	0
	CFR	0.00%	0.00%	0.00%	0.00%	0.00%
Polio	WPV Types 1 & 3	0	0	0	0	4
	WPV Types 1	0	0	0	0	4
	WPV Types 3	0	0	0	0	0
Cholera	Cases	172	121	0	4,221	768
	Deaths	5	9	0	107	32
	CFR	2.91%	7.44%	0.00%	2.53%	4.17%
Lassa Fever	Cases	8	5	8	733	921
	Deaths	1	0	1	71	117
	CFR	12.50%	0.00%	12.50%	9.69%	12.70%
CSM	Cases	17	33	2	10043	831
	Deaths	1	5	0	617	33
	CFR	5.88%	15.15%	0.00%	6.14%	3.97%
Measles	Cases	183	90	94	21,974	25251
	Deaths	0	0	0	117	102
	CFR	0.00%	0.00%	0.00%	0.53%	0.40%
Guinea Worm	Cases	0	0	0	0	0
	Deaths	0	0	0	0	0
	CFR	0.00%	0.00%	0.00%	0.00%	0.00%

1. LASSA FEVER

Please note that the data reflects the routine reports i.e. all suspected cases including the laboratory positive and negative cases

- 1.1. Five suspected cases of Lassa fever with one Laboratory confirmed were reported from four LGAs (three States: Bauchi – 2, Edo – 1 & Kogi – 2) in week 52, 2017 compared with eight suspected cases and one deaths (CFR, 12.50%) reported from six LGAs (five States) at the same period in 2016
- 1.2. Laboratory results of the five suspected cases; one positive for Lassa fever (Edo – 1), four were negative for Lassa fever & other VHFs (Bauchi – 2 & Kogi – 2)
- 1.3. Between weeks 1 and 52 (2017), 733 suspected Lassa fever cases with 143 laboratory confirmed cases and 71 deaths (CFR, 9.69%) from 97 LGAs (29 States) were reported compared with 921 suspected cases with 101 laboratory confirmed cases and 117 deaths (CFR, 12.70%) from 144 LGAs (29 States) during the same period in 2016 (Figure 1)
- 1.4. Between weeks 1 and 52 2016, 921 suspected Lassa fever cases with 109 laboratory confirmed cases and 119 deaths (CFR, 12.92%) from 144 LGAs (28 States and FCT) were reported compared with 430 suspected cases with 25 laboratory confirmed cases and 40 deaths (CFR, 9.30%) from 37 LGAs (14 States and FCT) during the same period in 2015 (Figure 2)
- 1.5. Investigation and active case search ongoing in affected States with coordination of response activities by the NCDC with support from partners
 - 1.5.1. National Lassa Fever Working Group meeting and weekly National Surveillance and Outbreak Response meeting on-going at NCDC to keep abreast of the current Lassa fever situation in the country
 - 1.5.2. Response materials for VHF provided to support States
 - 1.5.3. National VHF guidelines (National Viral Haemorrhagic Fevers Preparedness guidelines, Infection Prevention and Control of VHF and Standard Operating Procedures for Lassa fever management) are available on the NCDC website- <http://ncdc.gov.ng/diseases/guidelines>
 - 1.5.4. VHF case-based forms completed by affected States are being entered into the new VHF management system. This system allows for the creation of a VHF database for the country. Data from the VHF database is currently being analysed to inform decision making in the coming year
 - 1.5.5. States are enjoined to intensify surveillance and promote Infection, Prevention and Control (IPC) measures in health facilities

- 1.5.6. NCDC Lassa fever working group visited priority States, to provide support in developing preparedness and response plans ahead of dry season

Figure 1: Map of Nigeria showing areas affected by Lassa fever, week 1- 52, 2016 & 2017

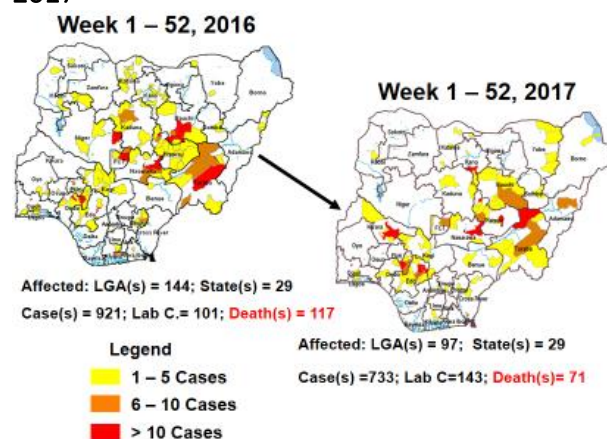
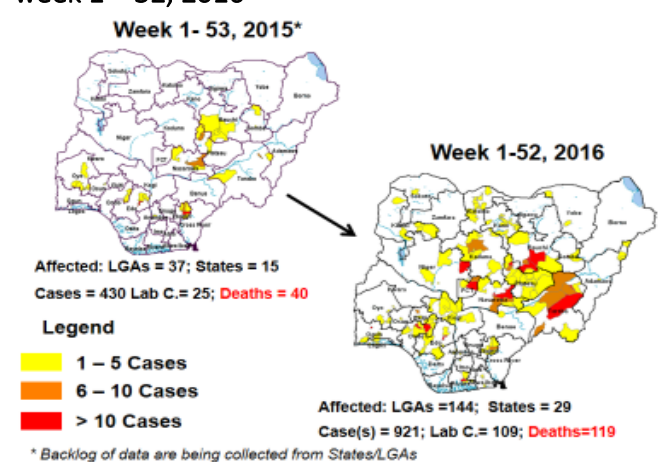


Figure 2: Map of Nigeria showing areas affected by Lassa fever, week 1 - 53, 2015 and week 1 – 52, 2016



2. MEASLES

- 2.1. In the reporting week, 90 suspected cases of Measles were reported from 21 States compared with 94 suspected cases reported from 16 States during the same period in 2016
- 2.2. So far, 21,974 suspected Measles cases with 109 laboratory confirmed cases and 117 deaths (CFR, 0. 53%) have been reported in 2017 from 36 States and FCT (Figure 4) compared with 25,251 suspected cases and 102 deaths (CFR, 0.40%) from 36 States and FCT during the same period in 2016
- 2.3. In 2016 (week 1 -52), 25,251 suspected Measles cases with 102 deaths (CFR, 0.40%) were reported from 36 States and FCT compared with 24,421 suspected cases with 127 deaths (CFR, 0.52%) during the same period in 2015 (Figure 5)
- 2.4. Response measures include immunisation for all vaccine-preventable diseases in some selected/affected wards/LGAs during SIAs, as well as case management
- 2.5. Scheduled Measles campaigns in the North East were conducted from 12th – 17th January, 2017 in Adamawa, Borno and Yobe States (Phase I) and Phase II from 21st – 25th January, 2017 in Borno State and 4th – 8th February, 2017 in Yobe State

- 2.6. Measles mass campaign conducted in seven North West and North East States from 9th – 14th November, 2017 and 30th November – 5th December, 2017 respectively.

Figure 3: Suspected Measles attack rate by States, week 52, 2017 as at 5th January, 2018

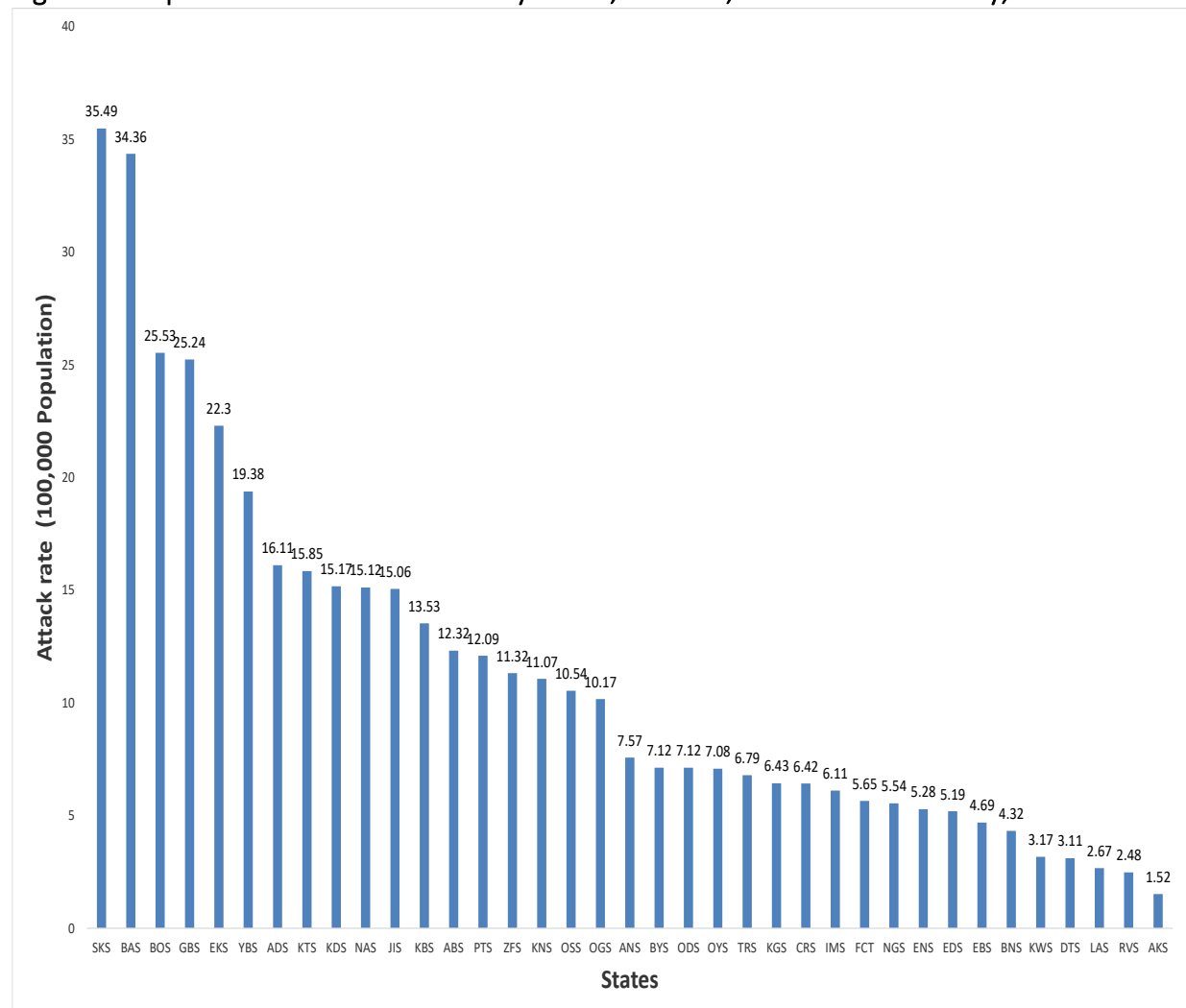


Figure 4: Map of Nigeria showing Distribution of suspected Measles cases, Weeks 1- 52, 2017as at 05/01/2018

Distribution of Suspected Measles Cases, Wks01-52 2017

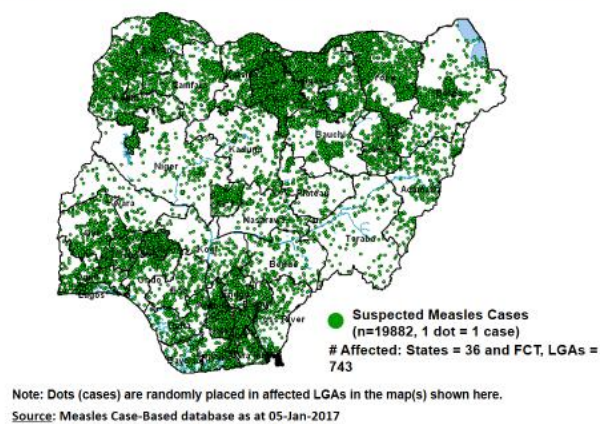
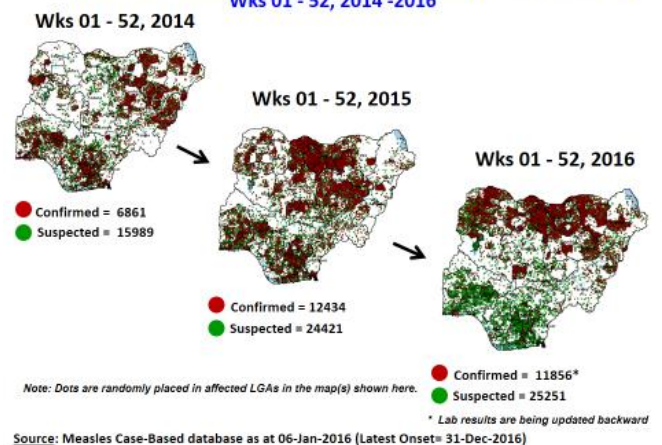


Figure 5: Suspected & confirmed (Lab + Epi Link + Clinical) Measles cases weeks 1 – 52, 2014 – 2016

Suspected and Confirmed (Lab + Epi Link + Clinical) Measles Cases, Wks 01 - 52, 2014 -2016



3. POLIOMYELITIS

- 3.1. As at December 31st 2017, no new case of WPV was recorded
- 3.2. Three new cVDPV2, environmental derived and Polio compatible cases identified
 - 3.2.1. In the reporting week, 61 cases of AFP were reported from 57 LGAs in 21 States and FCT
 - 3.2.2. AFP Surveillance has been enhanced and outbreak response is on-going in Borno and other high risk States
 - 3.2.3. The 1st round of SIPDs in 2017 was conducted from 28th – 31st January 2017 in the 18 high risk States. This was carried out using mOPV2 (2nd mOPV2 OBR). The schedule for other SIAs is as described in Table 2
 - 3.2.4. The 2nd and 3rd round of SIPDs completed (25th-28th February and 8th – 11th July, 2017) in 14 & 18 high risk States using bOPV respectively.
 - 3.2.5. The 1st and 2nd rounds of NIPDs completed (from 25th – 28th March, 2017 and 22nd – 25th April, 2017) nationwide respectively.
 - 3.2.6. The 4th round of SIPDs completed from 14th- 17th October, 2017 in 18 high risk States using bOPV.
 - 3.2.7. The 5th round of SIPDs completed from 9th- 12th December, 2017 in 6 high risk States using bOPV.

- 3.2.8. Between weeks 1 and 52 in 2016, four WPVs were isolated from Borno State compared to no WPV isolated during the same period in 2015.
- 3.3. No circulating Vaccine Derived Polio Virus type 2 (cVDPV2) was isolated in week 1 - 52, in both 2016 and 2015.
- 3.4. Between weeks 1 and 52, 2016 two (2) cVDPV2 were isolated in two LGAs (two States) while one (1) cVDPV2 was isolated from Kwali, FCT during the same period in 2015.
- 3.5. Six confirmed WPVs were isolated in 2014.
- 3.6. The SIAs were strengthened with the following events:
 - 3.6.1. Immunisation for all vaccine-preventable diseases in some selected wards/LGAs.

Figure 6: Polio Compatible cases in Nigeria as at Week 1 - 52, 2014 - 2016 (Data as at 31/12/17)

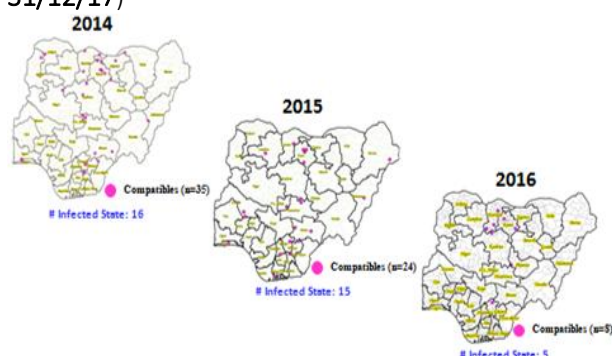


Table 2: 2017 SIAs

S/N	Month	Dates	Scope	Remarks	Target Populations	Antigen
1	January	28 th - 31 st	SIPDs (18 States)	2nd mOPV2 OBR in 18 states	33,478,035	mOPV2
2	February	25 th - 28 th	SIPDs (14 High Risk States)	List of high risk states reviewed using the HR Algorithm and local information on risk	26,256,251	bOPV
3	March	25 th - 28 th	NIPDs (36+1)	Nationwide	59,961,520	bOPV
4	April	22 nd - 25 th	NIPDs (36+1)	Nationwide	59,961,520	bOPV
5	July	8 th -11 th	SIPDs (18 High Risk States)	High Risk States	33,478,035	bOPV
6	October	14 th - 17 th	SIPDs (18 High Risk States)	High Risk States	33,478,035	bOPV
7	December	9 th - 12 th	SIPDs (6 High Risk States)	High Risk States		bOPV

4. CHOLERA

- 4.1. 121 suspected cases of Cholera with five Laboratory confirmed and nine deaths (CFR, 7.44%) were reported from 18 LGAs (Kano State) in week 52 compared with zero case reported during the same period in 2016.
- 4.2. Between weeks 1 and 52 (2017), 4221 suspected Cholera cases with 60 laboratory confirmed and 107 deaths (CFR, 2.53%) from 87 LGAs (20 States) were reported compared with 768 suspected cases and 32 deaths (CFR, 4.17%) from 57 LGAs (14 States) during the same period in 2016 (Figure 7).
- 4.3. Between weeks 1 and 52 (2016), 768 suspected Cholera cases with 14 laboratory confirmed cases and 32 deaths (CFR, 4.17%) from 57 LGAs (14 States) were reported compared with 5,301 cases with 29 laboratory confirmed cases and 186 deaths (CFR, 3.51%) from 101 LGAs (18 States and FCT) during the same period in 2015 (Figure 8).
- 4.4. National Preparedness and Response to Acute Watery Diarrhoea/ Cholera Guidelines have been finalised:

http://ncdc.gov.ng/themes/common/docs/protocols/45_1507196550.pdf

4.7. States are enjoined to intensify surveillance, implement WASH activities and ensure early reporting.

Figure 7: Status of LGAs/States that reported Cholera cases in week 1- 52, 2016 & 2017

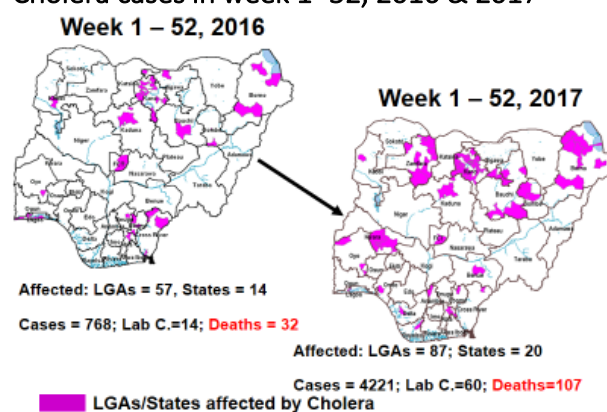
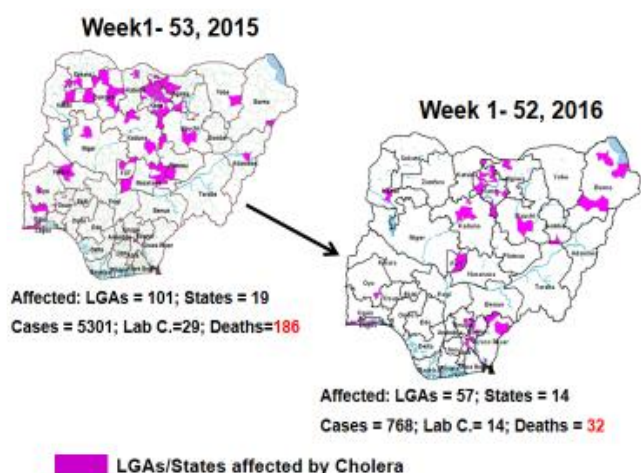


Figure 8: Status of LGAs/States that reported Cholera cases in week 1- 52, 2015 & 2016



5. CEREBROSPINAL MENINGITIS (CSM)

5.1 In the reporting week 52, 33 suspected Cerebrospinal Meningitis (CSM) cases with nine Laboratory confirmed and five death (CFR, 15.15%) were reported from 18 LGAs (four States; Kaduna – 2, Katsina - 7, Sokoto – 2 & Zamfara - 22) compared with two suspected cases from Nguru LGA (Yobe State) at the same period in 2016

5.2 Between weeks 1 and 52 (2017), 10043 suspected CSM cases with 122 laboratory confirmed cases and 617 deaths (CFR, 6.14%) were recorded from 328 LGAs (34 States) compared with 831 suspected cases and 33 deaths (CFR, 3.97%) from 154 LGAs (31 States) during the same period in 2016 (Figure 9)

5.3 Between weeks 1 and 52, 2016, 831 suspected CSM cases with 43 laboratory confirmed cases and 33 deaths (CFR, 3.97%) were recorded from 154 LGAs (30 States and FCT) compared with 2,711 suspected cases and 131 deaths (CFR, 4.83%) from 170 LGAs (28 States and FCT) during the same period in 2015 (Figure 10)

Figure 9: Map of Nigeria showing areas
Week 1 - 52, 2016 & 2017

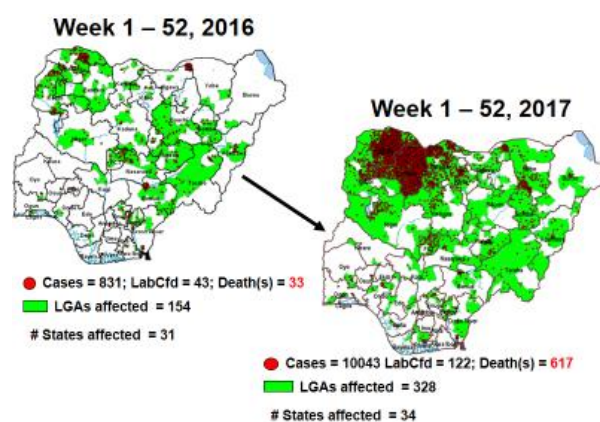
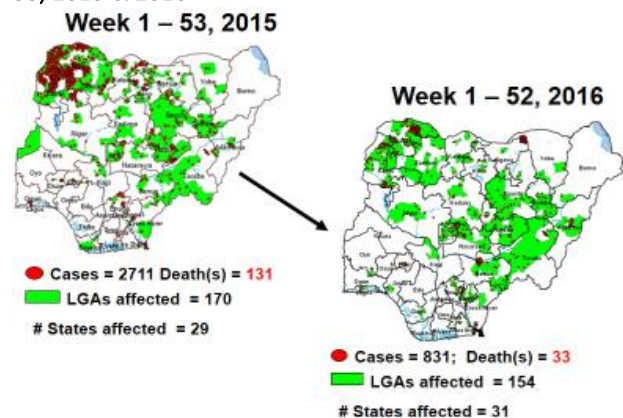


Figure 10: Nigeria: Dot maps of CSM cases, affected by CSM,
aWeek 1- 53, 2015 & 2016



5.4 Timeliness/completeness of CSM case-reporting from States to the National Level (2017 versus 2016): on average, 83.4% of the 26 endemic States sent CSM reports in a timely manner while 98.7% were complete in week 1 – 52, 2017 as against 84.8% timeliness and 97.9% completeness recorded within the same period in 2016

5.5 The National CSM Emergency Operations Centre has been activated and is currently on response mode

5.6 Enhanced surveillance/ case based surveillance began 1st of December 2017

5.7 Rapid Response Teams currently deployed to support response in Zamfara and Katsina States

5.8 The National CSM Guidelines have been finalised and available via
http://ncdc.gov.ng/themes/common/docs/protocols/51_1510449270.pdf

5.9 Development of State specific CSM Epidemic Preparedness & Response plan completed in 11 Northern States within the Meningitis belt

6 GUINEA WORM DISEASE

6.1 In the reporting week, no rumour report of Guinea Worm disease was received from any State.

- 6.2 Nigeria has celebrated eight consecutive years of zero reporting of Guinea worm disease in the country. The Country has been officially certified free of Dracunculiasis transmission by the International Commission for the Certification of Dracunculiasis Eradication (ICCDE).

(For further information, contact Nigeria Guinea Worm Eradication Program / Neglected Tropical Diseases Division, Public Health Department/Federal Ministry of Health)

7. Update on national Influenza sentinel surveillance, Nigeria week 1 - 52, 2017

- 7.1. From week 1-52, 150-suspected cases were reported, of which 148 were Influenza like-illness (ILI), eight Severe Acute Respiratory Infection (SARI).
- 7.2. 150 samples were received of which 107 were processed. Of the processed samples, 99(92.5%) were ILI cases, eight (7.5%) were Severe Acute Respiratory Infection (SARI).
- 7.4. Of the 99 processed ILI samples, 1(1.01%) was positive for Influenza A; two (2.02%) positive for Influenza B and 96(96.97%) were negative.
- 7.5. Of the eight processed SARI samples, none was positive for Influenza A and Influenza B.
- 7.6. Three (2.80%) of the processed 107 samples were positive for Influenza, with one (33.3%) of these positive for Influenza A and two (66.7%) positive for Influenza B.
- 7.7. The subtypes A seasonal H3, 2009A/H1N1 and A/not subtyped account for (100%), 0 (0.0%) and 0 (0.0%) of the total influenza A positive samples respectively.
- 7.8. The percentage influenza positive was highest (50.0%) in week 14, 2017
- 7.9. In the reporting week 50, none samples were left unprocessed

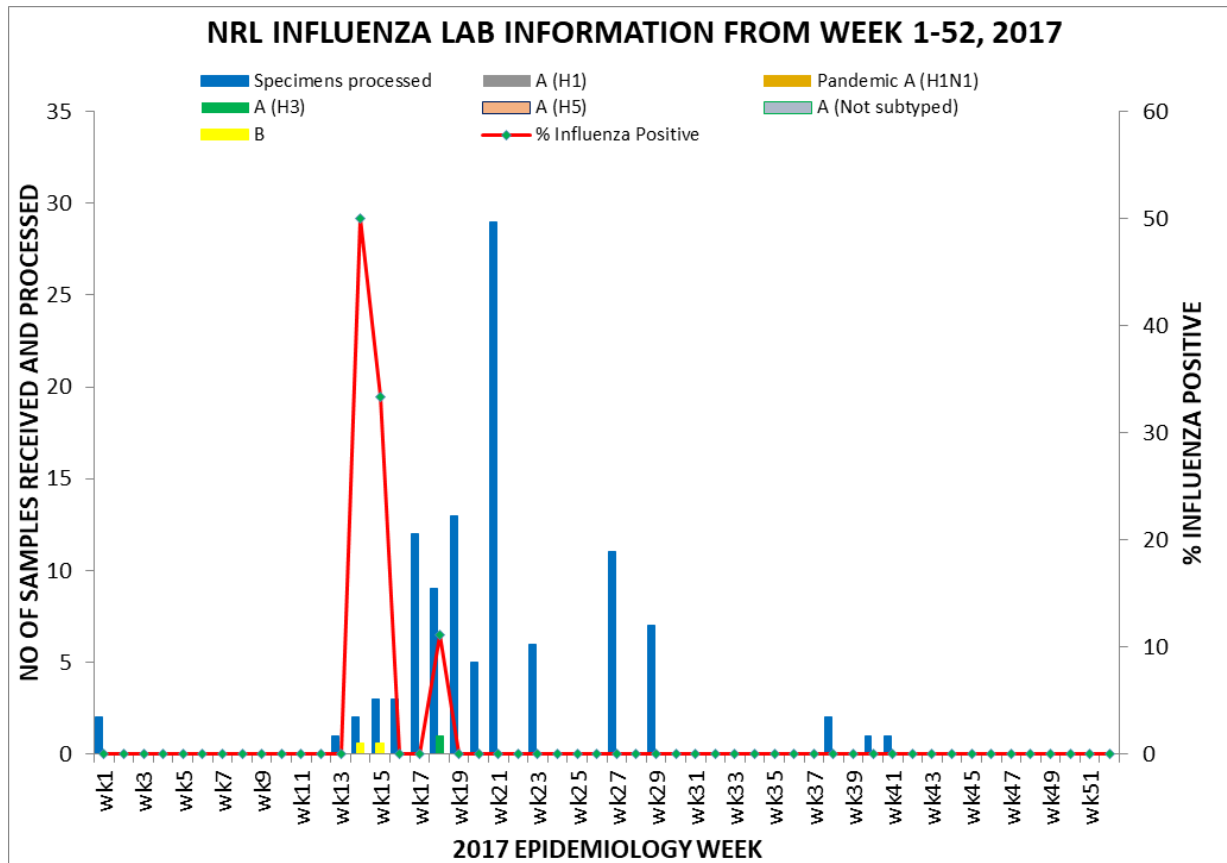


Figure 19: Number of Influenza Positive Specimens and Percent Positive by Epidemiological Week (Week 1- 52, 2017)

FOR MORE INFORMATION CONTACT

Surveillance Unit:

Nigeria Centre for Disease Control,
801 Ebitu Ukiwe Street, Jabi, Abuja, Nigeria.

epidreport@ncdc.gov.ng

www.ncdc.gov.ng/reports

0800-970000-10

Timely Reports	<50%	Poor	0 States
	50-79%	Good	12 States
	80-100%	Excellent	25 States

Last updated 5th January, 2018

Table 4: Updates on Epidemics, Week 1- 52 (25th - 31st December, 2017) as at 5th January, 2018

S/N	State	Sub-Epidemic	APR		CSM		Cholera		Measles		Lassa Fever		Yellow Fever		Guinea Worm Disease		HPV		Other Diseases		Remarks
			New	Cumulative Deaths	New	Cumulative Deaths	New	Cumulative Deaths	New	Cumulative Deaths	New	Cumulative Deaths	New	Cumulative Deaths	New	Cumulative Deaths	New	Cumulative Deaths	New	Cumulative Deaths	
1	Abia	000109	1	1	1	1	2	2	48	48	2	2	1	1					6	6	
2	Annam	020505	3	47	20	5		1	33	33	6	2	12	12					15	1	15
3	Annam	500504	1	60					38	38			14	14					0	0	
4	Annam	530710	234		9		3	1	49	49	2	1									
5	Bahr	633015	3	52	13	4	307	22	10	12	2	8	33	33	1				13	13	
6	Bahr	280705		154			8	6	165	165			2	2					8	8	
7	Bahr	500701		320	33		2	3	23	23	3		20	20					1	1	
8	Bahr	530307	5	49	20	2	78	30	130	14	1	1000	4	10				4	234	234	
9	Cross River	384009		243	52	3	57	2	25	25	8	1	15	15	2				88	8	113
10	Delta	530704		724	13	1	3	3	101	101			33	33					11	11	
11	Edo	280710	1	115	24		9	4	168	168	4	1	25	25					9	9	
12	Eni	020702	1	46	2	1	30	1	24	1	1	205	51	12	45				4	1	
13	Eni	320505		374				5	74	74			11	11					2	2	
14	Eni	430733	2	320	14	1	74		20	3	1	1	74	74							
15	FCI	340302	1	45	61	2	114	5	21	2	10		21	21					1	1	
16	Imo	320502	4	396	52	2	138	37	140	1	15	1	7	7					8	8	
17	Imo	530703		377					340	340			70	70					1	1	
18	Imo	530728	4	670	40	2	120	17	307	3	1		6	6							
19	Imo	630302	3	49	65	2	47	170	124	4	3		12	12					14	14	
20	Imo	630304	10	620	280	24	72	121	145	20	15	2	50	50					228	228	
21	Imo	730704	3	635	7	1	60	27	127	3	4	6	44	44	1				53	2	
22	Imo	930607	4	707	105	20	102	3	303	2	1	1000									
23	Imo	440607	2	239	10			3	20		2	2	13	13					4	4	
24	Imo	310505	2	7	1			40	64		3	2	12	12							
25	Imo	120714	1	310	16	2	125	35	140				12	12					7	7	
26	Imo	230605		294	22			40	30				23	23					60	60	
27	Imo	530602		225	105	20	20	3	303	6	1		15	15					180	180	155
28	Imo	530608	2	303	15	2	13	7	52		20	4	6	6							
29	Imo	420404		230	22				20	1			23	23							
30	Imo	420708		279	10	1	100		50		3		15	15							
31	Imo	730601	2	271	52			30	52		4		14	14							
32	Imo	440605	2	520	59	2	53	2	55	20	4	135	20	2							
33	Imo	730601		406	20			3	106		7	1	23	23					2	2	
34	Imo	430603	4	380	38	16	47	9	190	13	12		67	67							
35	Imo	030503	1	311	20				24	1	40	12	9	25					8	2	250
36	Imo	370602		454	206	11	102		157	13	6	2	52	52							
37	Imo	460705		230	22	8	307	30	327	17	6	1	33	33					4	4	155
38	Imo	030605	61	4070	38	9	104	12	204	10	17	1	54	54	4				44	24	10

Please note the reporting status in this table is from WHO State office

Source: WHO State office

Status of Report: Final