

NIGERIA CENTRE FOR DISEASE CONTROL

Weekly Epidemiological Report

Main Highlight of the week

Early case notification- critical for outbreak management



In this reporting week, a new confirmed case of Lassa fever was reported in Borno State. Following this, there are currently 13 States affected by the outbreak. Seven new suspected cases were reported from three states. Four of these suspected cases were confirmed positive following laboratory testing for Lassa fever and other VHF. Two deaths were recorded.

Since onset of the outbreak, 247 suspected cases have been reported with 73 confirmed cases and 6 probable deaths. A total of 43 deaths have been recorded so far (37 in confirmed cases and 6 in probable cases). The case fatality rate for all cases is 21.5% and for all confirmed /probable case is 54.4%.

The Nigeria Centre for Disease Control (NCDC) has continued to provide support (on-site and off-site) to the affected states. A team has been dispatched by the NCDC to provide support to Borno State. This was very important given the peculiar situation in

the State, which has further created challenges with disease notification, reporting and surveillance.

Case Notification in the face of insurgency: The Borno Story

The first confirmed case of Lassa fever in Borno State was reported to the NCDC on the 1st of March 2017. The index case is a 32-year old woman who presented at the hospital with a 9-day history of high-grade fever and 2-day history of bleeding from the nose and mouth.

She had a history suggestive of being exposed to rats and also poor storage of foodstuffs (uncovered foodstuff). Onset of illness was on the 17th of February 2017 and patient first visited a chemist and then a traditional healer. She later presented at a health facility on the 20th of February 2017 where the Lassa fever was suspected. She was put in an isolation unit and had laboratory investigations carried out results showed she was positive for Lassa fever. The affected LGA was notified on the 21st of February and notification was sent to the State, the next day (22nd of February). Contact tracing has also been instituted.

We applaud the Borno State Team for the prompt notification of this case. It is also important to highlight that the high index of suspicion among the health workers, which led to the patient's immediate isolation, played a key role in preventing further spread of the disease. We continue to encourage the general public to report immediately to a health facility if they have symptoms suggestive of Lassa fever or any VHF. We must remember that if a fever persists, it may be Lassa fever.

The CSM Outbreak in Zamfara State

The NCDC was notified of the CSM outbreak in Zamfara State on the 7th of February 2017. However, the suspected outbreak was first noticed on the 22nd of November 2016. 444 suspected cases and 45 deaths in 5 LGAs had been recorded as at the time of notification. In response to this, the NCDC has since deployed a team to Zamfara State to support the State's response to the outbreak.

The suspicion of CSM and its notification was very late despite the nature of the illness and the time of year, i.e the dry season when cases of CSM are predominant. Weekly surveillance reports sent by the State for many weeks did not reflect the presence of any public health event to be concerned about.

Early notification is a very critical aspect of surveillance. It shows by extension, the strengths or weaknesses of our surveillance system. The stories shared in this week's report are bordered on the importance of early notification, which is also a means of raising awareness to all concerned while sending out messages to concerned stakeholders for any support that may be required.

It is imperative that all suspected cases of epidemic-prone diseases are notified **immediately** to the next level, before laboratory investigations are carried out. Notification should be done from health facility to the LGA/State/National using the case-based surveillance reporting form (IDSR 001A). Notifications can also be done

through other approved channels-SMS, phone calls and chats to the appropriate authorities.

In the reporting week:

- There were 285 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 assiduously reinvigorated its efforts to eradicate Polio.
- No new suspected case of Cholera was reported.
- There were 89 suspected cases of Cerebrospinal Meningitis (CSM) reported from 22 LGAs in 10 States. Of this, two were lab confirmed and 14 deaths were recorded. Surveillance for CSM is ongoing and intensified in the States, particularly as the dry season has set in.
- There were 629 suspected cases of measles reported from 30 States including the FCT. Three (3) were laboratory confirmed and 14 deaths were recorded.

In the reporting week, four States (Borno, Cross River, Delta and Imo) failed to report and three States reported late. Timeliness of reporting remains 73.0% in the previous week and current week while completeness increased from 92.0% in the previous week to 95.0%.

Summary Table (IDSR Weekly Report as at 03/03/2017)

Disease	Variables	Week 07	Week 08		Cumulative Weeks	
		2017	2017	2016	01 - 8, 2017	01 - 8, 2016
AFP	Cases	250	285	279	2,072	1293
	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	0
	WPV Types 1	0	0	0	0	0
	WPV Types 3	0	0	0	0	0
Cholera	Cases	1	0	21	38	115
	Deaths	0	0	1	4	1
	CFR	0.00%	0.00%	4.76%	10.53%	0.87%
Lassa Fever	Cases	8	6	10	152	411
	Deaths	2	0	1	23	66
	CFR	25.00%	0.00%	10.00%	15.13%	16.06%
CSM	Cases	26	89	24	384	129
	Deaths	0	14	2	49	7
	CFR	0.00%	15.73%	8.33%	12.76%	5.43%
Measles	Cases	352	629	1,264	3,659	5805
	Deaths	0	14	1	36	14
	CFR	0.00%	2.23%	0.08%	0.98%	0.24%
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%

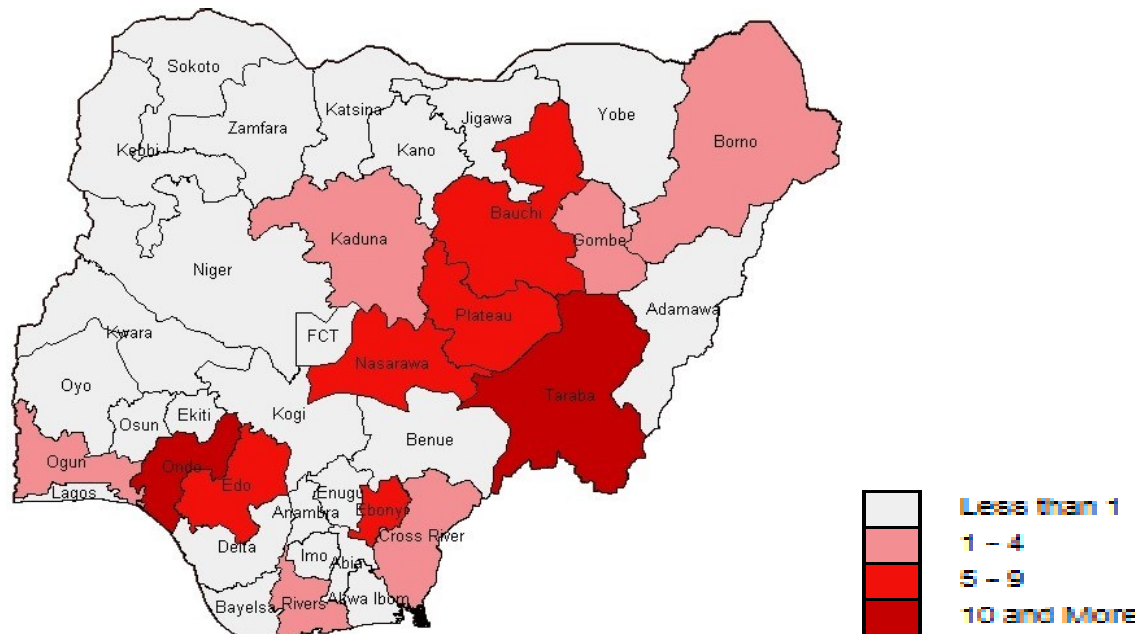


Figure 1. States with confirmed cases - Dec. 2016 to Mar. 2017 (updated as at Mar. 3 2017), N = 79

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. Six suspected cases of Lassa fever were reported from five LGAs (five States) in week 8, 2017 compared with 10 suspected cases with three laboratory confirmed and one death (CFR, 10.0%) from eight LGAs (five States) at the same period in 2016 (Figure 2).
- 1.2. Laboratory results of the six suspected cases were three negative for Lassa fever and other VHFs while three results are pending (Bauchi – 1, Plateau -1 & Taraba – 1).
- 1.3. Between weeks 1 and 8 (2017), 152 suspected Lassa fever cases with 38 lab-confirmed and 23 deaths (CFR, 15.13%) from 31 LGAs (10 States) were reported compared with 411 suspected cases with 43 lab-confirmed and 66 deaths (CFR, 16.06%) from 107 LGAs (26 States) at the same period in 2016 (Figure 2).
- 1.4. Between weeks 1 & 52 2016, 921 suspected Lassa fever cases with 109 lab-confirmed and 119 deaths (CFR, 12.92%) from 144 LGAs (28 States & FCT) were reported compared with 430 suspected cases with 25 lab-confirmed and 40 deaths (CFR, 9.30%) from 37 LGAs (14 States & FCT) at the same period in 2015 (Figure 3).
- 1.5. Investigation and active case search ongoing in affected states with coordination of all response activities by NCDC with support from partners.
 - 1.5.1. National Lassa Fever Working Group meeting & National Surveillance and Outbreak Response meeting on-going at NCDC to assess the current Lassa fever situation in the Country
 - 1.5.2. Response materials for VHFs prepositioned across the country by NCDC at the beginning of the dry season
 - 1.5.3. New VHF guidelines being developed by the NCDC
 - 1.5.4. Ongoing reclassification of reported Lassa fever cases
 - 1.5.5. Ongoing review of the variable for case based surveillance for VHF
 - 1.5.6. VHF case based forms completed by affected States are being entered into the new VHF management system. This system allows for creation of a VHF database for the country.

- 1.5.7. Confirmed cases are being treated at identified treatment/isolation centers across the states with Ribavirin and necessary supportive management also instituted
- 1.5.8. Onsite support was earlier provided to Ogun, Nasarawa, Taraba and Ondo.
- 1.5.9. NCDC distributed Ribavirin tablets to Cross-River State
- 1.5.10. States are enjoined to intensify surveillance

Figure 2: Map of Nigeria showing areas affected by Lassa fever, week 1 - 8, 2016 & 2017

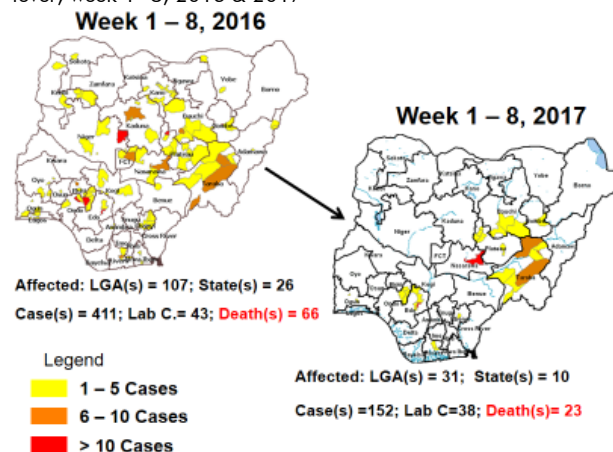
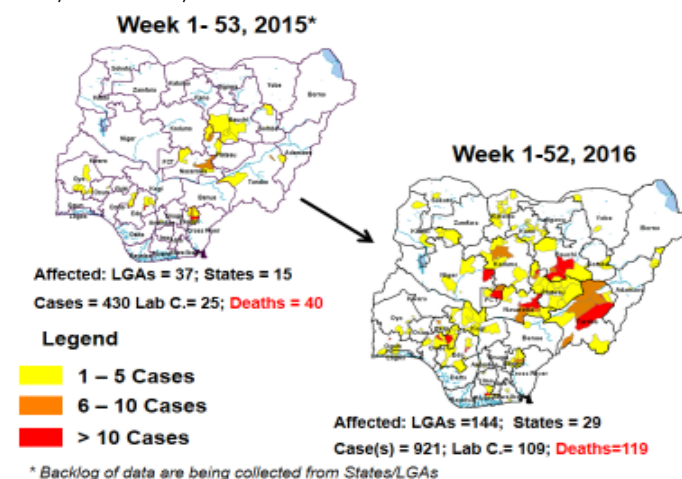


Figure 3: Map of Nigeria showing areas affected by Lassa fever, week 1 - 53, 2015



2. MEASLES

- 2.1. In the reporting week, 629 suspected cases of Measles with three Lab. Confirmed and 14 deaths (CFR, 2.23%) were reported from 29 States & FCT compared with 1,264 suspected measles cases and one death (CFR, 0.08%) from 32 States & FCT at the same period in 2016.
- 2.2. So far, 3,659 suspected Measles cases with 40 Lab. Confirmed and 36 deaths (CFR, 0.98%) have been reported in 2017 from 35 states & FCT (Figure 3 & 4) compared with 5,805 suspected cases and 14 deaths (CFR, 0.24%) from 36 states & FCT at 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%) at the same period in 2015
- 2.4. Response measure includes immunization for all vaccine-preventable diseases in some selected/ affected wards/LGAs during SIAs with case management.
- 2.5. Scheduled measles campaign in the North East conducted from 12th – 17th January, 2017 in Adamawa, Borno & Yobe States (Phase I) and Phase II from 21st – 25th January, 2017 in Borno State & 4th – 8th February, 2017 in Yobe State

Figure 4: Suspected measles cases by States, week 8, 2017 as at 3rd March, 2017

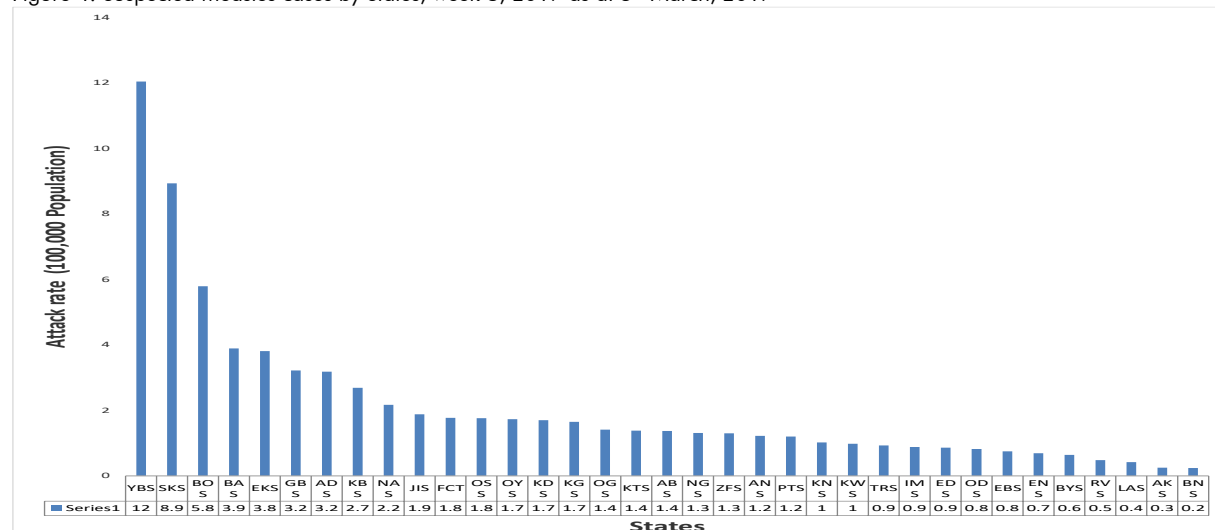


Figure 5: Nigeria: Distribution of suspected measles cases, week 1 - 8, 2017 as at 03/03/2017

Distribution of Suspected Measles Cases, Wks01-08 2017

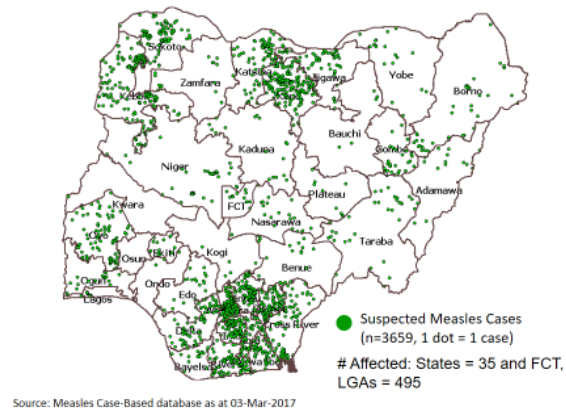
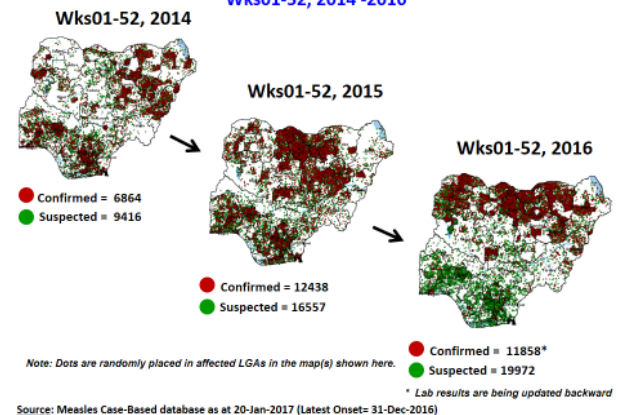


Figure 6: Suspected & Confirmed(Lab+Epi Link+Clinical) Measles 2014, 2015 & 2016

Suspected and Confirmed (Lab + Epi Link + Clinical) Measles Cases, Wks01-52, 2014-2016



3. POLIOMYELITIS

- 3.1. As at February 24th 2017, no new case of WPV recorded
- 3.2. No new cVDPV2, environmental derived and Polio compatible cases identified
 - 3.2.1. In the reporting week, 285 cases of AFP were reported from 221 LGAs in 31 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 NIPDs 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 in Figure 8.
 - 3.2.4. The 2nd round of SIPDs completed (25th-28th February, 2017) in 14 high risk States using bOPV.
 - 3.2.5. Between weeks 1 & 52, 2016 four WPVs were isolated from Borno State compared to no WPV isolated at the same period in 2015.
- 3.3. No circulating Vaccine Derived Polio Virus type 2 (cVDPV2) was isolated in both week 1 - 5, 2016 and 2015.
- 3.4. Between weeks 1 & 52, 2016 two (2) cVDPV2 were isolated in 2 LGAs (2 States) while one (1) cVDPV2 were isolated from Kwali, FCT at the same period in 2015.
- 3.5. Six (6) confirmed WPV were isolated in 2014.
- 3.6. The SIAs were strengthened with the following events:
 - 3.6.1. Immunization for all vaccine-preventable diseases in some selected wards/LGAs.
 - 3.6.2. Use of health camp facilities.
 - 3.6.3. Field supportive supervision and monitoring.
 - 3.6.4. Improved Enhanced Independent Monitoring (EIM) and Lots Quality Assessments (LQAs) in all Polio-high risk States.
 - 3.6.5. High level of accountability framework

Figure 7: Polio Compatible cases in Nigeria as at week 52, 2014 - 2016 (Data as at 24/02/17)

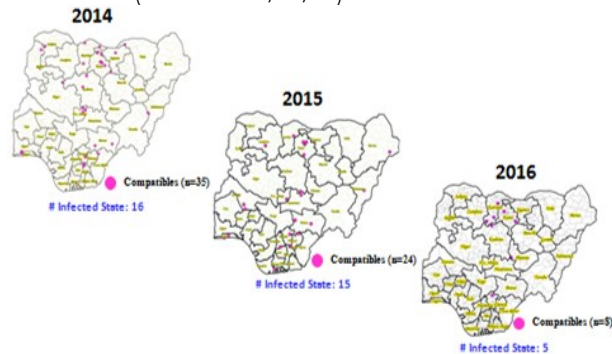


Figure 8: EOC Planned SIAs Calendar for 2017

S/No	Month	Dates	Scope	Remarks	Target Populations	Antigen	Outcome
1	January	28 th - 31 st	SIPDs (18 States)	2nd mOPV2 OBR in 18 states	33,478,035	mOPV2	Completed
	January	28 th - 31 st	Bodinga LGA & 2 wards in Shagari	the missed bOPV round in Dec 16	84,632	bOPV	
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	Completed
3	March	25 th - 28 th	NIPDs (36+1)	Nationwide	59,961,520	bOPV	Pending
4	April	22 nd - 25 th	NIPDs (36+1)	Nationwide	59,961,520	bOPV	Pending
5	July	1 st - 4 th	SIPDs (14 High Risk States)	High Risk States	26,256,251	bOPV	Pending
6	September	9 th - 12 th	SIPDs (14 High Risk States)	High Risk States	26,256,251	bOPV	Pending
7	October	14 th - 17 th	SIPDs (6 High Risk States)	High Risk States	26,256,251	bOPV	Pending
8	December	9 th - 12 th	SIPDs (18 High Risk States)	High Risk States	26,256,251	bOPV	Pending

4. CHOLERA

4.1. No suspected case of Cholera was reported in week 8 (2017), compared with 21 suspected cases and one death (CFR, 4.8%) from seven LGAs (three States) at the same period in 2016 (Figure 9).

4.2. Between weeks 1 and 8 (2017), 38 suspected cholera cases and four deaths (CFR, 10.54%) from seven LGAs (seven States) were reported compared with 115 suspected cases and 1 death (CFR, 0.87%) from 12 LGAs (six States) at the same period in 2016 (Figure 9).

4.3. Between weeks 1 and 52 (2016), 768 suspected cholera cases with 14 lab-confirmed and 32 deaths (CFR, 4.17%) from 57 LGAs (14 States and FCT) were reported compared with 5,301 cases with 29 lab confirmed and 186 deaths (CFR, 3.51%) from 101 LGAs (18 States and FCT) at the same period in 2015 (Figure 10).

4.4. States are enjoined to intensify surveillance.

Figure 9: Status of LGAs/States that reported Cholera cases in week 1 - 8, 2016 & 2017

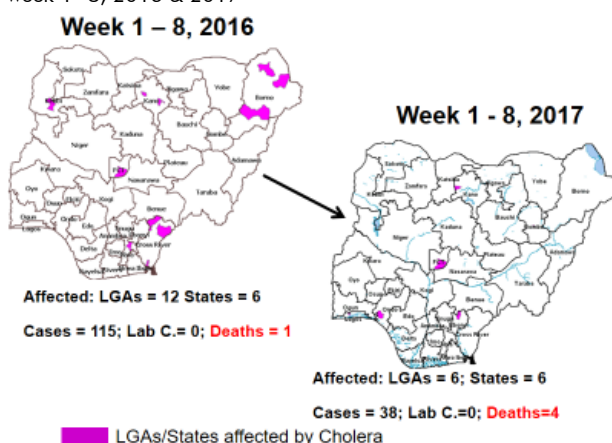
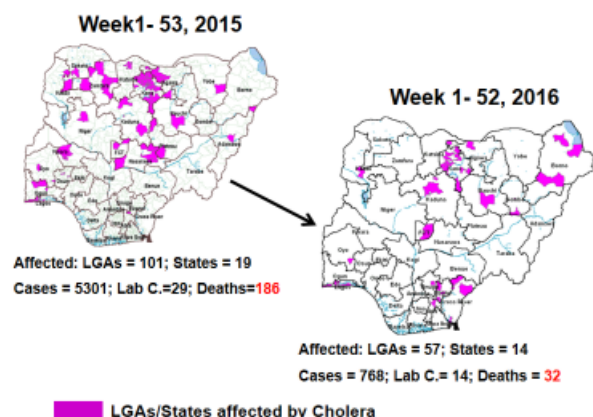


Figure 10: Status of LGAs/States that reported Cholera cases in week 1 - 52, 2015 & 2016



5. CEREBROSPINAL MENINGITIS (CSM)

- 5.1. In the reporting week, 89 suspected cerebrospinal meningitis (CSM) cases with 2 Lab. Confirmed and 14 deaths (CFR, 15.73%) were reported from 22 LGAs (10 States) compared with 24 cases with one Lab confirmed and two deaths (CFR, 8.33%) from 11 LGAs (seven States) at the same period in 2016.
- 5.2. Between weeks 1 & 8 (2017), 384 suspected CSM cases with 8 Lab. confirmed and 49 deaths (CFR, 12.76%) were recorded from 70 LGAs (21 States) compared with 129 suspected cases and 11 deaths (CFR, 5.43%) from 53 LGAs (18 States) at the same period in 2016 (Figure 11).
- 5.3. Between weeks 1 & 52, 2016, 831 suspected CSM cases with 43 lab-confirmed 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) at the same period in 2015 (Figure 12)

Figure 11: Map of Nigeria showing areas affected by CSM, Week 1 – 8, 2016 & 2017

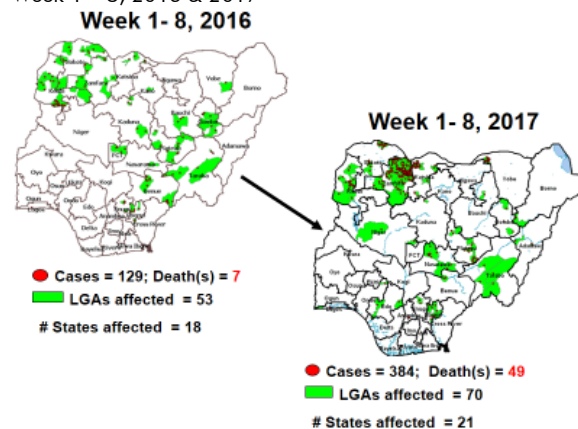
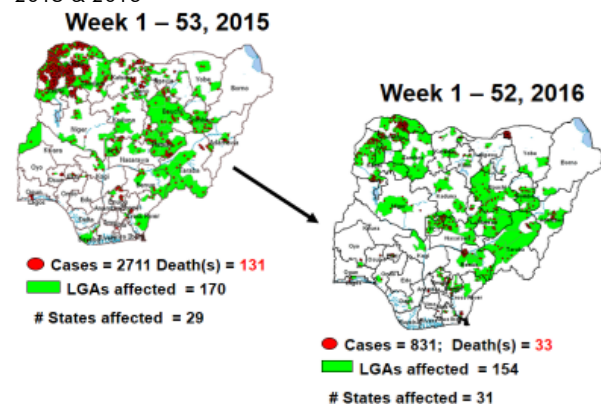


Figure 12: Nigeria: Dot maps of CSM cases, week 1 - 53, 2015 & 2016



- 5.4. Timeliness/completeness of CSM case-reporting from States to National Level (2017 versus 2016): on the average, 76.4% of the 26 endemic states sent CSM reports timely while 92.3% were complete in week 1 – 8, 2017 as against 83.2% timeliness and 93.3% completeness recorded within the same period in 2016.
- 5.5. CSM preparedness checklist sent to 36 States and FCT ahead of 2017 meningitis season
- 5.6. CSM surveillance evaluation to be held in first quarter of 2017
- 5.7. Intensive Surveillance is on-going in high risk States.

6. GUINEA WORM DISEASE

- 6.1. In the reporting week, No rumour reports of Guinea Worm disease was received from any State.
- 6.2. Nigeria has celebrated 8 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).

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Keys															Timely Reports	<50%	Four	9 States	
T= Arrived on Time																50-79%	Good	6 States	
L= Arrived late																80-100%	Excellent	22 States	
N = No Report (Report not received)																			
State	GeoZones	W01	W02	W03	W04	W05	W06	W07	W08	Expected (Es)	Timely Rpts (Ts)	Late Rpts (Ls)	Rpts Not Recvd (Ns)	% Timely	% Complete				
Abia	SEZ	L	L	L	L	L	T	L	T	8	2	6	0	25%	100%				
Adamawa	NEZ	L	L	L	L	L	L	T	L	8	1	7	0	13%	100%				
Akwa Ibom	SEZ	T	L	T	T	T	T	L	T	8	6	2	0	75%	100%				
Anambra	SEZ	T	T	T	T	L	T	T	T	8	7	1	0	88%	100%				
Bauchi	NEZ	T	T	T	T	T	T	T	L	8	7	1	0	88%	100%				
Bayelsa	SEZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Benue	NCZ	T	T	T	T	T	T	L	T	8	7	1	0	88%	100%				
Borno	NEZ	L	T	T	T	T	T	N	N	8	5	1	2	63%	75%				
Cross River	SEZ	N	N	N	N	N	N	N	N	8	0	0	8	0%	0%				
Delta	SEZ	L	T	L	L	L	T	N	N	8	2	4	2	25%	75%				
Ebonyi	SEZ	T	L	L	L	T	L	T	T	8	4	4	0	50%	100%				
Edo	SEZ	L	L	L	L	T	L	T	T	8	3	5	0	38%	100%				
Ekiti	SWZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Enugu	SEZ	L	L	L	L	T	L	T	L	8	2	6	0	25%	100%				
FCT	NCZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Gombe	NEZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Imo	SEZ	L	L	L	L	N	N	N	N	8	0	4	4	0%	50%				
Jigawa	NWZ	T	T	T	L	L	L	L	L	8	3	5	0	38%	100%				
Kaduna	NWZ	T	T	T	T	L	T	L	T	8	6	2	0	75%	100%				
Kano	NWZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Katsina	NWZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Kebbi	NWZ	T	T	T	T	L	L	T	T	8	6	2	0	75%	100%				
Kogi	NCZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Kwara	NCZ	L	L	L	L	L	L	L	L	8	0	8	0	0%	100%				
Lagos	SWZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Nasarawa	NCZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Niger	NCZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Ogun	SWZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Ondo	SWZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Osun	SWZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Oyo	SWZ	T	T	L	T	T	T	T	T	8	7	1	0	88%	100%				
Plateau	NCZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Rivers	SEZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Sokoto	NWZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Taraba	NEZ	T	T	T	T	T	T	T	T	8	8	0	0	100%	100%				
Yobe	NEZ	T	L	T	T	T	T	T	T	8	7	1	0	88%	100%				
Zamfara	NWZ	T	T	T	L	T	L	L	T	8	5	3	0	63%	100%				
Total number of reports expected (E)		37	37	37	37	37	37	37	37	296									
Total reports sent on time (T)		28	27	27	26	27	27	26	28		216								
Total reports sent late (L)		8	9	9	10	8	8	7	5			64							
Total number of reports not received (N)		1	1	1	1	2	2	4	4				16						
Timeliness of reports =100T/E		75.7	73.0	73.0	70.3	73.0	73.0	70.3	75.7					73%					
Completeness of reporting=100(E-N)/E		97.3	97.3	97.3	97.3	94.6	94.6	89.2	89.2						95%				
Latest Week		8																	
															Last updated 3rd March, 2017				

