



Issue: Volume 7 No. 33

1st September, 2017

NIGERIA CENTRE FOR DISEASE CONTROL

Weekly Epidemiological Report

Main Highlight of the week

RECOMMENDATIONS FROM THE NATIONAL LASSA FEVER AFTER ACTION REVIEW MEETING



The primary goal of the Lassa fever After Action Review Meeting of the 2016/2017 Lassa fever outbreak was to review the Lassa fever outbreak in Nigeria, as well as strengthen preparedness and response measures. A major output of this meeting was the development of a

Weekly

Report

communique with proceedings and recommendations from the meeting. Sequel to last week's editorial, this week focuses on specific recommendations from the meeting, with the goal to implement this for an improved response to Lassa fever in Nigeria.

The meeting had in attendance, State Epidemiologists of 18 States that have been affected by the current outbreak, case management physicians from these States, representatives from NCDC collaborating laboratories across the country, members of the Lassa fever Steering Committee chaired by Prof. Oyewale Tomori and representatives from the Federal Ministries of Agriculture, Environment, the World Health Organisation, UNICEF, US Centers for Disease Control, African Field Epidemiology Network, University of Maryland Baltimore (Nigeria office) and Medecins Sans Frontiers.

Given the range of attendees cutting across policy makers, surveillance officers, case management physicians, response teams and related, extensive discussions were held and first-hand experience shared to develop the recommendations below.

One key consensus was on co-ordination. The co-ordination of Lassa fever preparedness and response activities is essential for the prevention of a large outbreak. A key activity that we have continuously advocated for, is the constitution of Rapid Response Teams (RRTs) at State and Local Government Area(LGA) levels with individuals with the relevant expertise. This should also be supported by the establishment of a multi-hazard Emergency Operations Centre (EOC) and Incident Management System (IMS) for the coordination of outbreak response.

In the past, outbreaks have spread across communities with late or incomplete reporting by Disease Surveillance and Notification Officers (DSNOs) and State Epidemiologists. It is very important that surveillance officers at all levels provide complete and timely information on all cases as requested in the case-based viral haemorrhagic fever management system forms. States are also encouraged to designate and train surveillance focal persons in all health facilities and involve communities in disease surveillance. Surveillance activities have been stalled by the lack of sufficient funding. State Governments are encouraged to create budgetary allocation and timely release of funds for surveillance activities and training.

The Nigeria Centre for Disease Control has developed guidelines for response to Lassa fever and related guidelines for Viral Hemorrhagic Fevers. This should be used as a guide to ensure a harmonized approach to prevention, detection and response across the country. In addition, it is important for each State to designate a treatment centre state with a constituted case management team/IPC team for Lassa fever and other VHFs. There should be dedicated funds at facility, LGA, State, and national level for management of cases.

In the last few years, the NCDC collaborating laboratories in Lagos and Irrua have served as the main diagnostic facilities for Lassa fever and other VHFs. With the recent operationalisation of the NCDC National Reference Laboratory in Gaduwa, Abuja, the Northern region will also have a hub for Lassa fever diagnosis. There are ongoing discussions to develop a national VHF sample transportation logistic framework, protocol and policy for sample management. This

Report

will be in addition to the establishment of VHF diagnostic laboratories in each geopolitical zone in Nigeria within the next 12 months. Each State should provide standardised sample collection and transportation kits in order to reduce the hazards inherent in current methods of shipping samples.

Risk Communication and Social Mobilization has remained an often ignored and underserved area. It is important for States and the Federal level, to organise periodic media workshops and engagement to increase sensitisation and awareness of VHFs among the general public. An all hazard risk communications plan currently being developed by the NCDC can be adapted by States.

Finally, the NCDC will work to facilitate one health collaborative research to establish the drivers of Lassa fever including areas of case management, drug manufacture, Rapid Diagnostic Test (RDT) kit and vaccine development.

In the reporting week ending on the 20th of August, 2017:

- o There were 239 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 at eradicating Polio.
- 24 suspected cases of Cholera were reported from three LGAs (three States) with four laboratory confirmed cases and one death recorded.
- 39 suspected cases of Lassa fever with six Laboratory confirmed were reported from 11
 LGAs in eight States.
- There were four suspected cases of Cerebrospinal Meningitis (CSM) reported from four LGAs in three States. Of these, none was laboratory confirmed and no death was recorded. Ongoing surveillance for CSM has been intensified in the States.
- o There were 485 suspected cases of Measles reported from 30 States. None was laboratory confirmed and six deaths were recorded.

In the reporting week, all States sent in their report. This is a remarkable improvement! Timeliness of reporting increases from 83% in the previous week to 84% in the current week (Week 32 and 33) 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 25/08/2017)

Disease	Variables	Week 32 Week 33		ek 33	Cumulative Weeks		
		2017	2017	2016	01 - 33, 2017	01 - 33, 2016	
AFP	Cases	252	239	301	10,433	8752	
	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	2	
	WPV Types 1	0	0	0	0	2	
	WPV Types 3	0	0	0	0	0	
Cholera	Cases	92	24	29	1,092	402	
	Deaths	4	1	0	30	13	
	CFR	4.35%	4.17%	0.00%	2.75%	3.23%	
Lassa Fever	Cases	19	39	3	432	790	
	Deaths	2	0	2	58	92	
	CFR	10.53%	0.00%	66.67%	13.43%	11.65%	
сѕм	Cases	11	4	9	9768	597	
	Deaths	0	0	0	602	29	
	CFR	0.00%	0.00%	0.00%	6.16%	4.86%	
Measles	Cases	375	485	244	16,833	21604	
	Deaths	6	0	0	101	86	
	CFR	1.60%	0.00%	0.00%	0.60%	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. 39 suspected cases of Lassa fever with six Laboratory confirmed were reported from 11 LGAs (eight States; Anambra 1, Edo 3, Kwara 24, Ogun 5, Ondo 2, Nasarawa 1, Plateau 1 & Taraba 2) in week 33, 2017 compared with three suspected cases with one Laboratory confirmed and two deaths (CFR, 66.7%) reported from three LGAs (three States) at the same period in 2016.
- 1.2. Laboratory results of the 39 suspected cases were six positives for Lassa fever (Edo -3, Ogun -2 & Ondo -1) while four were negative for Lassa fever and other VHFs (Ogun -3 & Ondo -1) while 28 pending (Kwara -24, Nasarawa -1, Plateau -1 & Taraba -2).
- 1.3. Between weeks 1 and 33 (2017), 432 suspected Lassa fever cases with 104 laboratory confirmed cases and 58 deaths (CFR, 13.43%) from 78 LGAs (26 States) were reported compared with 790 suspected cases with 76 laboratory confirmed cases and 92 deaths (CFR, 11.65%) from 130 LGAs (28 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 VHFs prepositioned across the country by NCDC at the beginning of the dry season
- 1.5.3. New VHF guidelines have been developed by the NCDC (National Viral Haemorrhagic Fevers Preparedness guidelines, Infection Prevention and Control of VHF and Standard Operating Procedures for Lassa fever management) and are available on the NCDC website.
- 1.5.4. Ongoing reclassification of reported Lassa fever cases
- 1.5.5. Ongoing review of the variables 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 the creation of a VHF database for the country.

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- 1.5.7. NCDC team sent to Edo State to support Lassa fever data harmonization & Updating of VHF case-based management database
- 1.5.8. Confirmed cases are being treated at identified treatment/isolation centres across the States with Ribavirin and necessary supportive management also instituted
- 1.5.9. Onsite support was earlier provided to Ogun, Nasarawa, Taraba, Ondo and Borno States by the NCDC and partners
- 1.5.10. Offsite support provided by NCDC/partners in all affected States
- 1.5.11. NCDC and partners are providing onsite support in Ondo and Plateau State
- 1.5.12. States are enjoined to intensify surveillance and promote Infection, Prevention and Control (IPC) measures in health facilities.

Figure 1: Map of Nigeria showing areas affected by Lassa fever, week 1- 33, 2016 & 2017

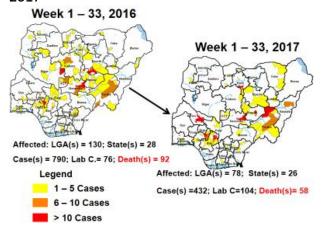
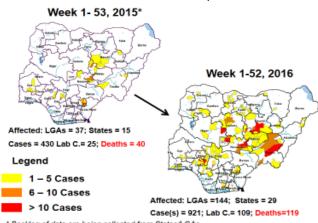


Figure 2: Map of Nigeria showing areas affected by Lassa fever, week 1 - 53, 2015 and week 1 - 52, 2016



* Backlog of data are being collected from States/LGAs

2. MEASLES

- 2.1. In the reporting week, 485 suspected cases of Measles were reported from 30 States compared with 244 suspected measles cases reported from 28 States during the same period in 2016.
- 2.2. So far, 16,833 suspected Measles cases with 108 laboratory confirmed cases and 101 deaths (CFR, 0. 60%) have been reported in 2017 from 36 States and FCT (Figure 4) compared with 21,604 suspected cases and 86 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 21^{st} 25th January, 2017 in Borno State and 4th 8th February, 2017 in Yobe State
- 2.6. Measles Surveillance Evaluation and Establishment of the burden of Congenital Rubella Syndrome (CRS) in 12 selected States in the six geopolitical zones from the 17th -21st July 2017 conducted
- 2.7. Harmonisation of measles surveillance data with laboratory confirmed cases

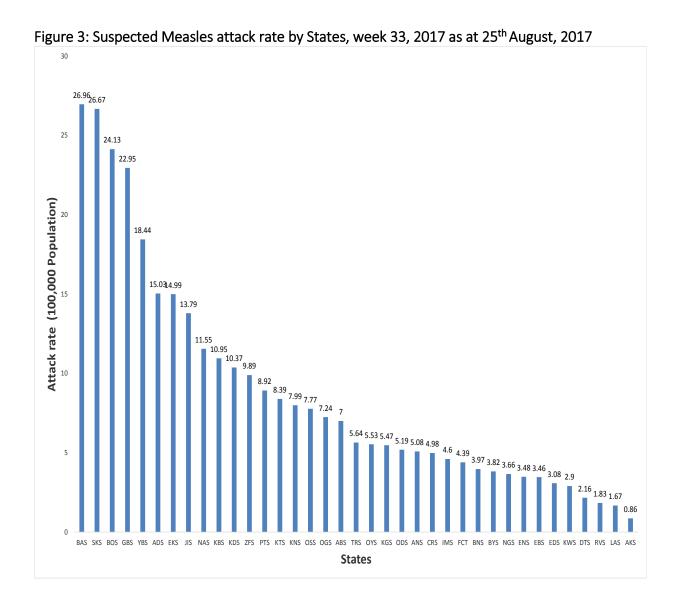
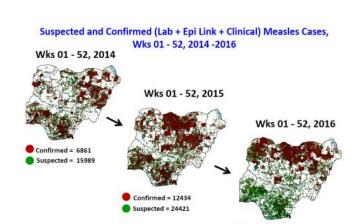


Figure 4: Map of Nigeria showing Distribution of suspected Measles cases, Weeks 1- 33, 2017as at 25/08/2017

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

Suspected = 25251



ted LGAs in the map(s) shown he

Source: Measles Case-Based database as at 06-Jan-2016 (Latest Onset= 31-Dec-2016)

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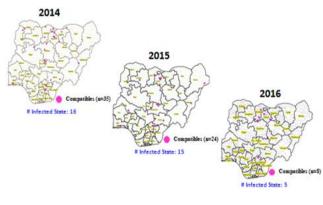
Distribution of Suspected Measles Cases, Wks01-33 2017

Affected: States = 36 and FCT, LGAs = 723

3. POLIOMYELITIS

- 3.1. As at August 6th 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, 239 cases of AFP were reported from 183 LGAs in 35 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 1^{st} round of SIPDs in 2017 was conducted from $28^{th}-31^{st}$ January 2017 in the 18 high risk States. This was carried out using mOPV2 (2^{nd} 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 1^{st} and 2^{nd} rounds of NIPDs completed (from $25^{th} 28^{th}$ March, 2017 and $22^{nd} 25^{th}$ April, 2017) nationwide respectively.
- 3.2.6. 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.
- 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



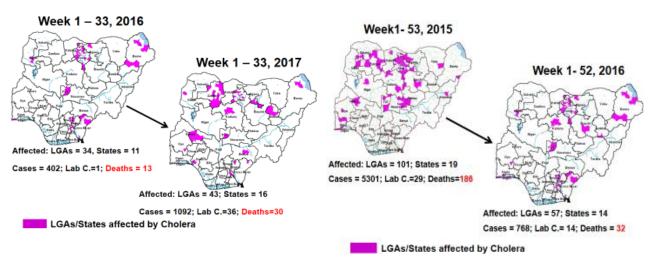
S/N	Month	Dates	Scope	Remarks	Target Populations	Antigen
1	January	28 th - 31 st	SIPDs (18 States)	2nd mOPV2 OBR in 18 states	33,478,035	mOPV2
2	February	25 th - 28 th	SIPDs (14 High Risk States)	List of high risk states reviewed using the HR Algorithm and local information on risk	26,256,251	bOPV
3	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.** 24 suspected cases of Cholera cases with four laboratory confirmed and one death (CFR, 4.17%) were reported from three LGAs (three States) in week 33 compared with 29 suspected cases reported from four LGAs (three States) during the same period in 2016.
- 4.2. Between weeks 1 and 33 (2017), 1092 suspected Cholera cases with 36 laboratory confirmed and 30 deaths (CFR, 2.76%) from 43 LGAs (16 States) were reported compared with 402 suspected cases and 13 deaths (CFR, 3.23%) from 34 LGAs (11 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. Cholera preparedness workshop held from 31^{st} May -1^{st} June, 2017 in Abuja to develop Cholera preparedness plan as the season set in.
- 4.5. NCDC/partners provided onsite support in Kwara State and Zamfara.
- 4.6 NCDC/partners are providing onsite support in Kebbi State.
- 4.7. Cholera Preparedness Checklist sent to all States to assess their level of preparedness with recommendations for prevention of and response to an outbreak.
- 4.8. RDT procured by NCDC and WHO currently being prepositioned in affected States
- 4.9. 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- 33, 2016 & 2017

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



5. CEREBROSPINAL MENINGITIS (CSM)

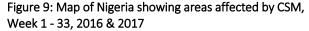
- 5.7. In the reporting week 33, four suspected Cerebrospinal Meningitis (CSM) cases were reported from four LGAs (three States) compared with nine suspected cases from four LGAs (four States) at the same period in 2016.
- 5.8. Between weeks 1 and 33 (2017), 9768 suspected CSM cases with 108 laboratory confirmed cases and 602 deaths (CFR, 6.16%) were recorded from 310 LGAs (33 States) compared with 597 suspected cases and 29 deaths (CFR, 4.86%) from 133 LGAs (27 States) during the same period in 2016 (Figure 9).
- 5.9. 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)

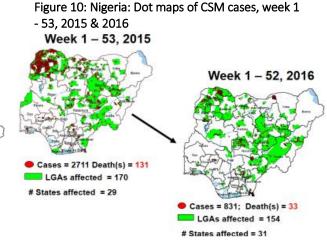
Week 1 - 33, 2016

Cases = 597; LabCfd = 38; Death(s) =

LGAs affected = 133

States affected = 27





5.10. Timeliness/completeness of CSM case-reporting from States to the National Level (2017 versus 2016): on average, 81.4% of the 26 endemic States sent CSM reports in a timely manner while 98.7% were complete in week 1-33, 2017 as against 84.7% timeliness and 99.0% completeness recorded within the same period in 2016

Week 1 - 33, 2017

Cases = 9768; LabCfd = 108; Death(s) = 602

LGAs affected = 310 # States affected = 33

- 5.11. CSM preparedness checklist sent to 36 States and FCT ahead of 2017 meningitis season
- 5.12. Confirmed cases treated at identified treatment centres in affected States (Zamfara, Sokoto, Katsina, Kebbi, Niger, Kano, Yobe and Jigawa) and necessary supportive management also instituted
- 5.13. CSM National Emergency Operations Centre constituted at the Nigeria Centre for Disease Control
- 5.14. Onsite support provided to Zamfara, Sokoto, Katsina, Kebbi, Kano, Yobe and Niger States by NCDC and partners
- 5.15. Off-site support provided to other States
- 5.16. Intensive Surveillance in high risk States and NCDC in communication with States reporting suspected cases.
- 5.17. Reactive vaccination completed in Zamfara State for people aged one to 29 years using polysaccharide meningococcal A & C vaccine.
- 5.18. Reactive vaccination completed in two wards (Gada and Kaffe) in Gada LGA in Sokoto State using polysaccharide meningococcal A & C vaccine for people aged two to 29 years.
- 5.19. Reactive vaccination completed in nine LGAs in Sokoto State using monosaccharide meningococcal conjugate C vaccine for aged one to 20 years.
- 5.20. Reactive vaccination campaign completed in Yobe State for people aged two to 29 years using polyvalent ACW conjugate vaccine.
- 5.21. Medical teams were trained and deployed to support case management in Sokoto and Zamfara States completed (from Friday 5th 26th May, 2017).
- 5.22. Deployed mobile testing laboratory to Zamfara State to aid diagnosis
- 5.23. A Team was deployed by NCDC/WHO to support surveillance activities, laboratory data harmonization and monitoring of the implementation plan in Yobe state
- 5.24. National CSM EOC has been stepped down

5.25. Evaluation of the CSM outbreak response in Zamfara and Sokoto States is ongoing by NCDC and WHO

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5.26. National CSM After-Action Review meeting conducted in Sokoto State from the $24^{th} - 25^{th}$ of July 2017.

6. GUINEA WORM DISEASE

- 6.7. In the reporting week, no rumour report of Guinea Worm disease was received from any State.
- 6.8. 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)

FOR MORE INFORMATION CONTACT

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0800-970000-10

Keys: Poor 1States Timely Good T= Arrived on Time 50-79% 11 States Reports Excellent 25 States L= Arrived late Report not received N = No Report (Report not received) Timely Rpts Late Rpts Rpts Not Recvd W01 W02 W03 W04 W05 W06 W07 W08 W09 W10 W11 W12 W13 W14 W15 W18 W19 W20 W21 W23 W24 W25 W26 W27 W28 State GeoZones W22 W29 Timely Complete Abia SEZ 22 67% 2 Adamawa NEZ 33 20 13 0 Akwa Ibom SSZ 33 23 10 0 70% SEZ 33 29 4 Anambra 0 5 Bauchi NEZ 33 31 2 0 Bayelsa SSZ 33 33 0 NCZ 27 Benue 33 6 8 Borno NEZ 33 25 9 Cross River SSZ 33 19 14 0 58% 10 Delta SSZ 33 24 9 73% 11 Ebonyi SEZ 33 23 10 70% 0 12 Edo SSZ 33 17 16 13 Ekiti SWZ 33 32 SEZ 33 14 Enugu 23 10 0 15 FCT NCZ 33 33 0 NEZ 33 27 6 16 Gombe 17 Imo SEZ 33 24 9 0 NWZ 33 20 13 61% 18 Jigawa 0 19 Kaduna NWZ 33 28 5 20 Kano NWZ 33 NWZ 33 30 3 21 Katsina 22 Kebbi NWZ 33 30 3 0 NCZ 33 31 23 Kogi 2 0 24 Kwara NCZ 33 17 16 0 52% SWZ 33 32 25 Lagos NCZ 33 32 1 0 26 Nasarawa NCZ 33 27 6 0 27 Niger SWZ 33 33 28 Ogun 0 0 29 Ondo SWZ 33 29 4 0 30 Osun SWZ 33 33 0 27 SWZ 33 31 Oyo 32 Plateau NCZ 33 32 33 Rivers SSZ 33 33 0 0 34 Sokoto NWZ 33 33 0 0 35 Taraba NEZ 33 28 5 NEZ 32 36 Yobe NWZ 30 3 0 Total number of reports expected (E 37 Total reports sent on time (T 26 27 28 31 31 31 29 35 34 31 34 28 1021 200 Total reports sent late (L' Total number of reports not received (N 0 91.9 81.1 83.8 91.9 75.7 73.0 83.8 Timeliness of reports =100*T/E 75.7 | 73.0 | 73.0 | 70.3 | 83.8 86.5 83.8 83.8 89.2 78.4 94.6 919 919 89.2 91.9 91.9 Completeness of reporting=100*(E-N)/ 100.0 100.0 100.0 100.0 Latest Week 33 Last updated 25th August, 2017

Table 4: Updates on Epidemics, Week 1- 33 (14th - 20th August 2017) as at 25th August, 2017)

