25<sup>th</sup> August, 2017





Issue: Volume 7 No. 32

25<sup>th</sup> August, 2017

NIGERIA CENTRE FOR DISEASE CONTROL

# Weekly Epidemiological Report

Main Highlight of the week

# EXPERTS MEET TO DISCUSS LASSA FEVER CONTROL



Lassa fever experts from all over Nigeria and beyond gathered in the Federal Capital Territory (FCT), Abuja for 2 days to review the 2016/2017 Lassa fever outbreak and propose preparedness plans for subsequent outbreaks. The Nigeria Centre for Disease Control (NCDC) together with the World Health Organisation and supporting partners, hosted the Lassa fever outbreak after action review meeting on the 21<sup>st</sup> and 22<sup>nd</sup> of August 2017. Participants were drawn from the States affected by the outbreak this year, Lassa fever treatment facilities, diagnostic laboratories, NCDC surveillance, laboratory and Health emergency response teams, Federal Ministry of Agriculture and Rural Development, Federal Ministry of Environment, and other key stakeholders. Technical support was provided by WHO Africa Regional Office (AFRO) and the National Lassa fever Steering Committee.

The event was declared open on the first day by the Honourable Minister of State for Heath, Dr Osagie Enahire who applauded the NCDC for its efforts towards stemming the tides of Lassa fever in Nigeria and charged all present to find a lasting solution to the menace of the disease in the country. The chairperson of the National Steering Committee, Prof Oyewale Tomori gave an overview of Lassa fever outbreak since the virus was discovered in 1969 with a critical review of control efforts taken in the past which have not yielded needed results. He decried the unsustainable efforts that have plagued the surveillance system in Nigeria and called on every stakeholder to realign their activities to achieve a common goal of a strengthened surveillance system, which can be used as a strong tool in the fight against Lassa fever. He urged participants present to focus on finding practical solutions towards elimination of the disease.

A national report of the 2016/2017 Lassa fever outbreak was presented. As at Epi-week 33(14<sup>th</sup>-20<sup>th</sup> August 2017), a total of 764 suspected cases have been reported across 19 states (Ogun, Taraba, Rivers, Nasarawa, Edo, Ondo, Bauchi, Ebonyi, Plateau, Kaduna, Gombe, Cross-River, Borno, Kano, Kogi, Enugu, Anambra, Lagos and Kwara). 247 of these cases were confirmed and 14 classified as probable cases. A total of 83 deaths have been recorded, with 69 of them in confirmed cases. Case fatality rates is 33.6% in confirmed and probable cases and 15.1% in all cases (confirmed, probable and suspected). The response activities carried out by the NCDC, including development of Viral Haemorrhagic Fever guidelines, deployment of Rapid Response Teams, provision of Ribavirin and other medical supplies to States and several others, were also discussed.

Robust discussions were held by the participants following various presentations made, which all focused on preparedness and response to Lassa fever outbreak. The 2-day meeting provided an opportunity to reflect on the events which led to the 2016/2017 Lassa fever outbreak in each State and also to conduct out a detailed review of the response activities carried out by the affected States and the NCDC. In addition, gaps in preparedness, response and surveillance activities were highlighted and pragmatic steps to be taken to bridge these gaps were proposed.

Working groups were created in line with the six thematic areas under the incident management system (IMS) for Lassa fever- Coordination, Case management/ Infection Prevention and Control, Laboratory, Logistics, Surveillance/Data management and Risk Communication. Focus group discussions were held within these working groups during which best practises and challenges in the 2016/2017 Lassa fever outbreak were highlighted. Practical recommendations were made by every group in their individual thematic areas and in cross-cutting areas. Each State was enjoined to follow up with these recommendations, as it applies to their particular needs and circumstances and to also incorporate them in their state-specific Lassa fever preparedness work plan.

Issue: Volume 7 No. 32

The NCDC affirmed its resolve to continue to ensure that the disease burden caused by Lassa fever, and indeed all epidemic-prone diseases in Nigeria is reduced. The steps taken at this meeting will serve as added incentives towards establishing a finish line for the scourge of Lassa fever. All stakeholders and the general public are called upon to work with the governments in the various States towards a collaborative plan for the control and elimination of Lassa fever.

In the reporting week ending on the 13<sup>th</sup> of August, 2017:

- o There were 252 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.
- o 92 suspected cases of Cholera were reported from eight LGAs (four States) with ten (10) laboratory confirmed case and four (4) recorded deaths.
- There were 11 suspected cases of Cerebrospinal Meningitis (CSM) reported from six LGAs in six 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 375 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 remains 83% in the previous and current weeks (Week 31 and 32) while completeness also remains at 100%. It is very important for all States to ensure timely and complete reporting at all times, especially during an outbreak.

Disass	Variables	Week 31	Wee	ek 32	Cumulative Weeks							
Disease	Variables	2017	2017	2016	01 - 32, 2017	01 - 32, 2016						
	Cases	344	252	260	10,194	8438						
AFP	Deaths	0	0	0	0	0						
	CFR	0.00%	0.00%	0.00%	0.00%	0.00%						
	WPV Types 1 & 3	0	0	2	0	2						
Polio	WPV Types 1	0	0	2	0	2						
	WPV Types 3	0	0	0	0	0						
	Cases	23	92	0	1,068	373						
Cholera	Deaths	0	4	0	29	13						
	CFR	0.00%	4.35%	0.00%	2.72%	3.49%						
	Cases	5	19	5	393	787						
Lassa Fever	Deaths	0	2	2	58	90						
	CFR	0.00%	10.53%	40.00%	14.76%	11.44%						
	Cases	12	11	20	9764	588						
CSM	Deaths	0	0	0	602	29						
	CFR	0.00%	0.00%	0.00%	6.17%	4.93%						
	Cases	315	375	150	16,343	21358						
Measles	Deaths	1	6	0	101	86						
	CFR	0.32%	1.60%	0.00%	0.62%	0.40%						
	Cases	0	0	0	0	0						
<b>Guinea Worm</b>	Deaths	0	0	0	0	0						
	CFR	0.00%	0.00%	0.00%	0.00%	0.00%						

# 1. Lassa fever

Issue: Volume 7 No. 32 25<sup>th</sup> August, 2017

- Please note that the data reflects the routine reports i.e. all suspected cases including the laboratory positive and negative cases
- 1.1. 19 suspected cases of Lassa fever with four Laboratory confirmed and two deaths (CFR, 10.53%) were reported from seven LGAs (nine States; Edo 8, Kwara 5, Ogun 1, Ondo 1, Oyo 1, Plateau 1 & Yobe 2) in week 32, 2017 compared with five suspected cases and two deaths (CFR, 40.0%) reported from five LGAs (four States) at the same period in 2016.
- 1.2. Laboratory results of the 19 suspected cases were four positives for Lassa fever (Edo 2, Ogun 1 & Ondo -1) while nine were negative for Lassa fever and other VHFs (Edo 6, Oyo 1, Plateau 1, & Yobe -2) while five pending (Kwara 5.
- 1.3. Between weeks 1 and 32 (2017), 393 suspected Lassa fever cases with 97 laboratory confirmed cases and 58 deaths (CFR, 14.80%) from 74 LGAs (25 States) were reported compared with 787 suspected cases with 75 laboratory confirmed cases and 90 deaths (CFR, 11.44%) from 128 LGAs (27 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.
- 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- 32, 2016 & 2017

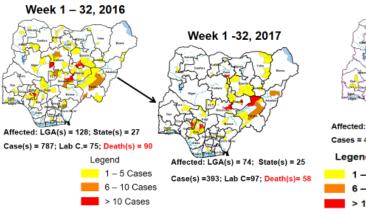
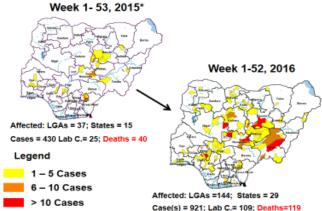


Figure 2: Map of Nigeria showing areas affected by Lassa fever, week 1 - 53, 2015 and week 1 - 52, 2016



#### \* Backlog of data are being collected from States/LGAs

#### 2. MEASLES

- 2.1. In the reporting week, 375 suspected cases of Measles and six deaths (CFR, 1.60%) were reported from 30 States compared with 150 suspected measles cases reported from 28 States during the same period in 2016.
- 2.2. So far, 16,343 suspected Measles cases with 108 laboratory confirmed cases and 101 deaths (CFR, 0. 62%) have been reported in 2017 from 36 States and FCT (Figure 4) compared with 21,358 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 immunization 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  $21^{st}-25^{th}$  January, 2017 in Borno State and  $4^{th}-8^{th}$  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 17<sup>th</sup> -21<sup>st</sup> July 2017 conducted
- 2.7. Harmonization of measles surveillance data with laboratory confirmed cases

Figure 3: Suspected Measles attack rate by States, week 32, 2017 as at 18<sup>th</sup> August, 2017

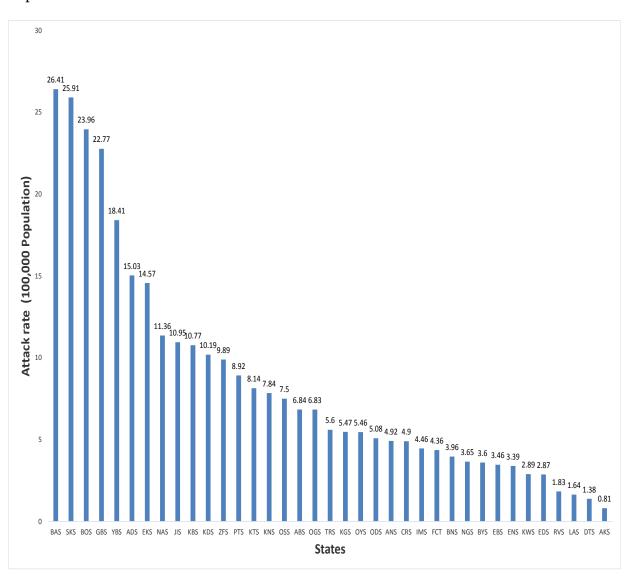
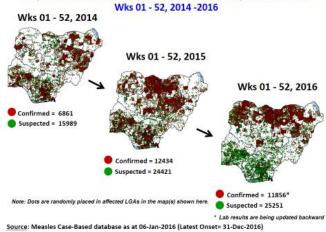


Figure 4: Map of Nigeria showing Distribution of suspected Measles cases, Weeks 1- 32, 2017as at 18/08/2017

Distribution of Suspected Measles Cases, Wks01-32 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,
With 01 - 52, 2014 - 2016



## 3. POLIOMYELITIS

- 3.1. As at August 6<sup>th</sup> 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, 252 cases of AFP were reported from 199 LGAs in 33 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 2<sup>nd</sup> and 3<sup>rd</sup> round of SIPDs completed (25<sup>th</sup>-28<sup>th</sup> February and 8<sup>th</sup> 11<sup>th</sup> 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. 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 6: Polio Compatible cases in Nigeria as at Week 1 - 52, 2014 - 2016 (Data as at 06/08/17)

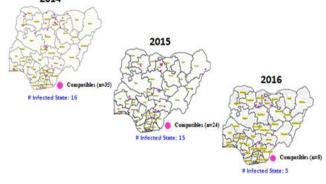


Table 2: 2017 SIAs

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

#### CHOLERA

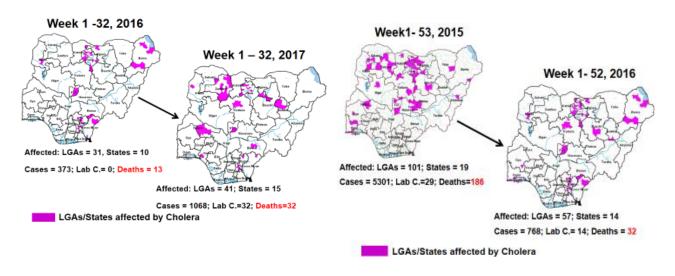
**4.1.** 92 suspected cases of Cholera cases with ten Laboratory confirmed and four deaths (CFR, 4.35%) were reported from eight LGAs (four States) in week 32 compared with zero case reported at the same period in 2016.

Issue: Volume 7 No. 32

- 4.2. Between weeks 1 and 32 (2017), 1068 suspected Cholera cases with 32 laboratory confirmed and 29 deaths (CFR, 2.72%) from 41 LGAs (15 States) were reported compared with 373 suspected cases and 13 deaths (CFR, 3.49%) from 31 LGAs (ten 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.
- 4.6 NCDC/partners are providing onsite support in Zamfara 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 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- 32, 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 32, 11 suspected Cerebrospinal Meningitis (CSM) cases were reported from six LGAs (six States) compared with 20 suspected cases from six LGAs (six States) at the same period in 2016.

Issue: Volume 7 No. 32

- 5.2. Between weeks 1 and 32 (2017), 9764 suspected CSM cases with 108 laboratory confirmed cases and 602 deaths (CFR, 6.17%) were recorded from 309 LGAs (32 States) compared with 588 suspected cases and 29 deaths (CFR, 4.93%) from 133 LGAs (27 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 affected by CSM, Week 1 - 32, 2016 & 2017

Week 1 -32, 2016

Week 1 -32, 2017

Cases = 588; Death(s) = 29

LGAs affected = 133

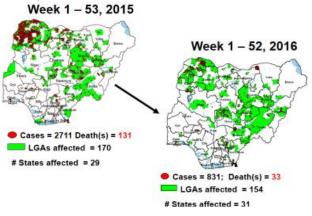
# States affected = 27

Cases = 9764; LabCfd = 108; Death(s) = 602

LGAs affected = 309

# States affected = 32

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



- 5.4. Timeliness/completeness of CSM case-reporting from States to the National Level (2017 versus 2016): on average, 81.3% of the 26 endemic States sent CSM reports in a timely manner while 97.7% were complete in week 1-32, 2017 as against 84.6% timeliness and 99.0% 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. 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
- 5.7. CSM National Emergency Operations Centre constituted at the Nigeria Centre for Disease Control
- 5.8. Onsite support provided to Zamfara, Sokoto, Katsina, Kebbi, Kano, Yobe and Niger States by NCDC and partners
- 5.9. Off-site support provided to other States
- 5.10. Intensive Surveillance in high risk States.
- 5.11. Reactive vaccination completed in Zamfara State for people aged one to 29 years using polysaccharide meningococcal A & C vaccine.
- 5.12. 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.

5.13. Reactive vaccination completed in nine LGAs in Sokoto State using monosaccharide meningococcal conjugate C vaccine for aged one to 20 years.

Issue: Volume 7 No. 32

- 5.14. Reactive vaccination campaign completed in Yobe State for people aged two to 29 years using polyvalent ACW conjugate vaccine.
- 5.15. Medical teams were trained and deployed to support case management in Sokoto and Zamfara States completed (from Friday 5<sup>th</sup> 26<sup>th</sup> May, 2017).
- 5.16. Deployed mobile testing laboratory to Zamfara State to aid diagnosis
- 5.17. A Team was deployed by NCDC/WHO to support surveillance activities, laboratory data harmonization and monitoring of the implementation plan in Yobe state
- 5.18. National CSM EOC has been stepped down
- **5.19.** Evaluation of the CSM outbreak response in Zamfara and Sokoto States is ongoing by NCDC and WHO
- **5.20.** National CSM After-Action Review meeting conducted in Sokoto State from the  $24^{th}$   $25^{th}$  of July 2017.

#### 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)

### 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

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Total number of reports expected (E)		37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37 3	7 37	37	37	37	37	37	37	1184					•
Total reports sent on time (T		28	27	_	26	27	27	26		28	36	31	32	31	31	32	33		35		34	30	34	_	34 2	_	_	_		36		34		987				
Total reports sent late (L)		9	10	10	+	10	10		9	9	1	6	5	6	6	5	4	8	2	3	3	7	3	_	3 9	-	+-	+	6	1	4	3			197			-
otal number of reports not received (N		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	+	_	+	0	0	0	0			1//	0		
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Timeliness of reports =100°T/E			73.0		703					75.7					83.8						919				_	5.7 73.0	_	_	_	97.3						-	83%	Í
ompleteness of reporting=100*(E-N)/E		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100,0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100,0	100.0	100,0	100.0	100.0	100.0 1	JUJU 10	U.U 100J	U 100.	U 100.0	100.0	100.0	100.0	100.0						

Table 4: Updates on Epidemics, Week 1- 32 (7th – 13th August 2017) as at 18th August, 2017)

