

Republic of Sierra Leone



INTEGRATED DISEASE SURVEILLANCE AND RESPONSE (IDSR)

Vol. 10 Issue 16

WEEKLY EPIDEMIOLOGICAL BULLETIN

Week 16: 17th April-23rdApr, 2017

Highlights of the week

- Thirteen (13) out of 14 districts submitted timely reports to the national level this
 week using the eIDSR platform. Bombali district submitted a late report. The
 average district reporting timeliness for weeks 1 to 16 of 2017 is 98%.
- Countrywide, 97% of health facilities (HFs) submitted weekly IDSR reports to the district level this week.
- Eighty nine percent (89%) of the trained Community Health Workers (CHWs) in the 9 Community Based Surveillance (CBS) implementing districts reported in the week. The reports included Acute watery diarrhea (68), suspected Measles (38), Neonatal Deaths (13), Maternal Deaths (3), suspected Yellow Fever (2) and Acute Flaccid Paralysis (1).
- One case of Acute Flaccid Paralysis was reported from Kailahun district. The district health team investigated and collected stool samples, which were sent to the Central Public Health Reference Labs (CPHRL) for testing
- Tonkolili district reported two cases of Neonatal Tetanus. One of the cases is reported to have died. The cases occurred in two different communities.
- Three (3) cases of suspected Yellow Fever were reported from Bonthe (1), Port Loko (1) and Western Area Rural (1) districts. All three cases were investigated by the respective District Health Management Teams (DHMTs) and blood samples submitted to CPHRL for confirmatory testing.
- One case of suspected Meningococcal Meningitis was reported from Tonkolili district. The case died before a sample for laboratory investigation could be taken.
- Suspected Measles cases increased to 92 from 79 cases in week 15. Majority of the cases in all ages were from Western Area Urban (30), Moyamba (14), Bonthe (12), Koinadugu (11) and Kambia (10) districts. Out of the 498 samples tested for Measles so far this year, 15 (3%) were positive for Measles while 360 (76%) of the 472 samples tested for Rubella were positive.

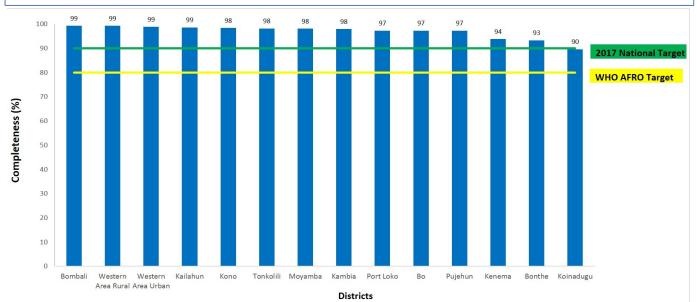
- Twelve (12) maternal deaths were reported this week from Bombali (3), Kenema (3), Western Area Urban (2), Kambia (1), Koinadugu (1), Pujehun (1) and Tonkolili (1) districts
- Clinical Malaria cases totaling 56,017 were reported in the week. Of these, 55,807 (99.6%) were tested, out of which 31,102 were confirmed positive, giving a positivity rate of 56%. A total of 48 deaths from confirmed Malaria cases were reported in the week
- Reported Dysentery (bloody diarrhea) cases reduced by one (1) to 72 in week 16 compared to week 15. Districts that reported the highest number of cases were Koinadugu (18), Kenema (10), Kailahun (7) and Bonthe (7).
- A total of 32 animal bites cases were reported in week 15, a reduction from 44
 cases in week 15. Kono (9), Moyamba (5), Western Area Rural (3), Western Area
 Urban (3) and Bo (3) districts reported the highest number of cases in the week.
- A total of 560 cases of Severe malnutrition with 3 deaths were reported during the week. Port Loko (122), Bo (78), Kambia (54), Moyamba (54) and Western Area Urban (42) districts reported the highest number of cases in the week

| Intra-District Reporting Rate for Week 15 | | | | | | | |
|---|-----------------|--|--|--|--|--|--|
| Bombali (100%) | Bo (99%) | | | | | | |
| Bonthe (100%) | Kailahun (99%) | | | | | | |
| Kambia (100%) | Moyamba (99%) | | | | | | |
| Kono (100%) | Port Loko (99%) | | | | | | |
| Tonkolili (100%) | Pujehun (94%) | | | | | | |
| Western Area Rural (100%) | Kenema (89%) | | | | | | |
| Western Area Urban (100%) | Kojnadugu (84%) | | | | | | |

Human Monkey Pox Case Discharged

On 23rd April 2017, the single confirmed case of Monkey pox was discharged from Pujehun Government Hospital where he had been admitted since 25th March 2017. Outbreak response activities with heightened surveillance will continue for another 42 days from the date of discharge to prevent and promptly detect new cases.

Figure 1: Average Intra-District Health Facility Reporting Rate For Weeks 1 to 16 2017

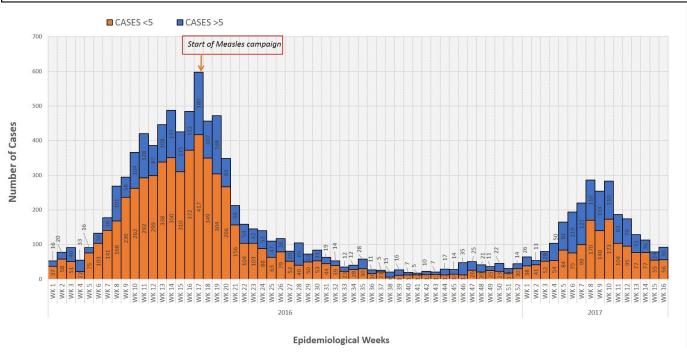


In the period of week 1 to week 16 of 2017, all districts achieved the average national intra-district health facility reporting rate target of \geq 90%*. Cumulatively, 97% of the expected health facility reports have been submitted to the district level since the beginning of the year

^{*}The country revised the IDSR reporting rate (completeness) target from \geq 80% to \geq 90% tested week 7 of 2017

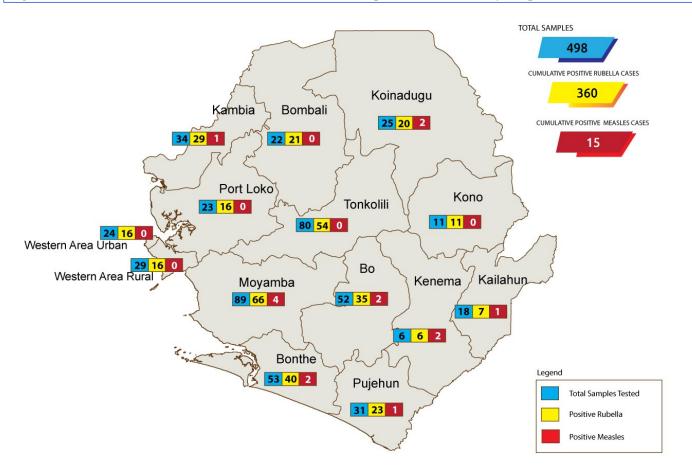
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Figure 2: Trend of Suspected Measles Cases Reported from Week 1, 2016 to Week 16, 2017

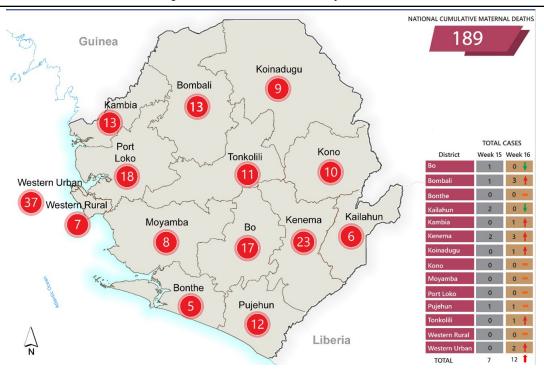


The number of reported suspected Measles cases increased to 92 in week 16 of 2017 from 79 cases in the previous week. Of the cases reported in the current week, 61% (56/92) were in children under five years of age. Western Area Urban (30) and Moyamba (14) districts reported the highest number of suspected Measles cases in all ages this week.

Figure 3: Cumulative Measles – Rubella Samples Tested, January – April 2017



Of the samples tested for Measles at the CPHRL since the beginning of the year, 3% (15/498) were positive, while 76% (360/472) tested positive for Rubella. Rubella results for 26 samples are still pending. The results suggest that the upsurge in suspected Measles cases during the first quarter of 2017 is due to Rubella virus circulation



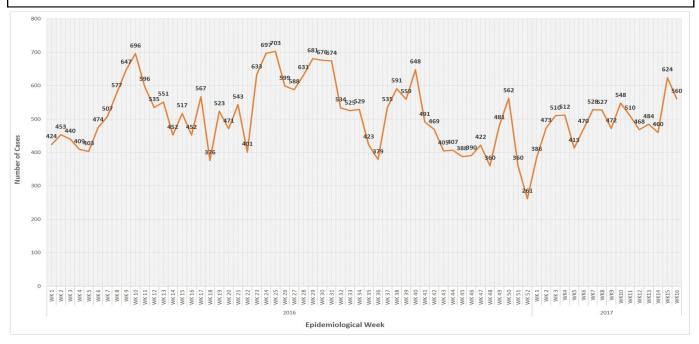
Twelve (12) maternal deaths were reported in the week, increasing the national reported maternal deaths since the beginning of the year to 189. Western Area Urban district (37) has reported the highest number in the year so far followed by Kenema (23), Port Loko (18) and Bo (17). DHMTs are supported to ensure all reported maternal deaths are reviewed and line-listed accordingly.

Table 1: Summary report of Priority Diseases, Conditions and Events Reported Through CBS, Week 16 2017

| District | Bombali | Bonthe | Kailahun | Kambia | Koinadugu | Kono | Moyamba | Port Loko | Pujehun | Total |
|--------------------------------|---------|--------|----------|--------|-----------|------|---------|-----------|---------|-------|
| CHWs Expected to Report | 839 | 809 | 890 | 1,105 | 829 | 974 | 1,000 | 921 | 1,000 | 8,367 |
| CHWs Reported this week | 520 | 774 | 866 | 975 | 829 | 874 | 916 | 800 | 864 | 7,418 |
| Completeness of CHWs Reporting | 62% | 96% | 97% | 88% | 100% | 90% | 92% | 87% | 86% | 89% |
| Total Alerts Reported | 22 | 13 | 1 | 10 | 18 | 0 | 40 | 2 | 19 | 125 |
| Total Alerts Verified | 22 | 13 | 1 | 10 | 18 | 0 | 40 | 2 | 19 | 125 |
| Total Alerts Investigated | 22 | 13 | 1 | 10 | 18 | 0 | 40 | 2 | 19 | 125 |
| AFP | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| AWD | 21 | 0 | 1 | 1 | 18 | 0 | 6 | 2 | 19 | 68 |
| Cluster of Deaths | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Guinea Worm | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Maternal Death | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 3 |
| Measles | 1 | 11 | 0 | 8 | 0 | 0 | 18 | 0 | 0 | 38 |
| Neonatal Death | 0 | 2 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 13 |
| Neonatal Tetanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suspected Ebola | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yellow Fever | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |

Community Based Surveillance (CBS) reports were received from 89% of the Community Health Workers (CHWs) in the 9 CBS implementing districts. The reported cases include Acute watery diarrhea (68), suspected Measles (38), Neonatal Deaths (13), Maternal Deaths (3), suspected Yellow Fever (2) and Acute Flaccid Paralysis (1). Alerts reported through CBS are verified by health workers and included in the IDSR report of the verifying health facility if they meet the standard case definition. DHMTs are urged to ensure CBS reports are sent to national level in a timely and complete manner.

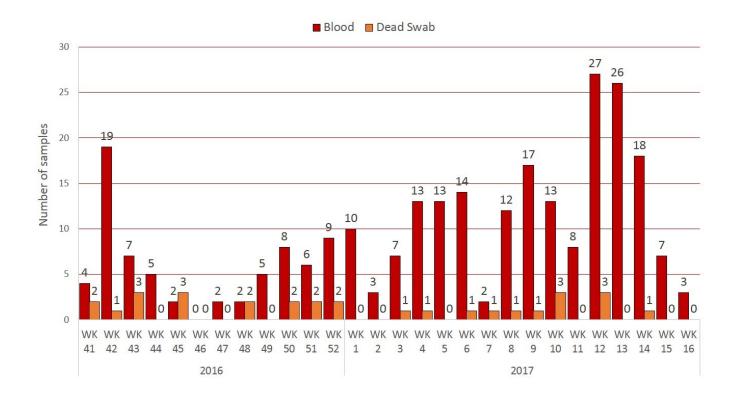
Figure 5: Trend of Reported Severe Malnutrition Cases in Children Under Five, Week 1, 2016 to Week 16, 2017



Reported cases of severe malnutrition in children under five reduced by 64 to 560 in week 16 of 2017. Port Loko (122) reported the highest number of cases in the week, followed by Bo (78), Moyamba (54) and Kambia (54) districts. DHMTs are urged to sensitize health facility staff and facilitate community interventions that will contribute to prevention, detection, reporting and management of severe malnutrition cases in children under five years of age

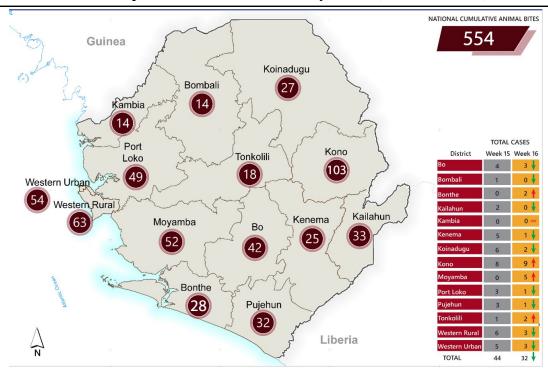
Figure 6:

EVD Laboratory Data, Week 41, 2016 to Week 16, 2017



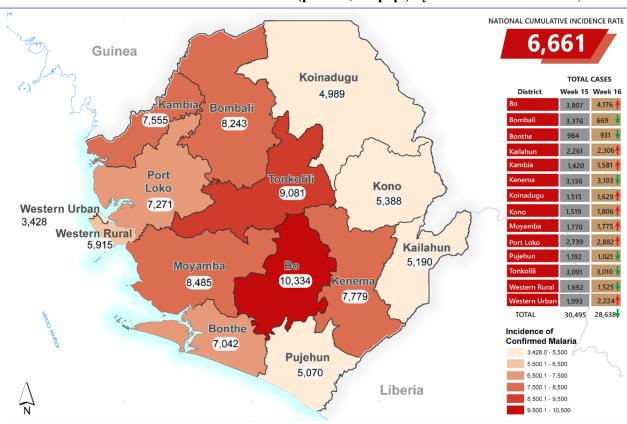
The number of samples tested for EVD decreased to 3 this week from 7 samples tested in week 15. All the 3 samples were from suspected live alerts and tested negative for EVD. DHMTs are urged to maintain vigilance in detecting, reporting and investigating suspected EVD cases and deaths both at community and health facility levels

Figure 7: Cumulative Reported Animal Bite Cases by district, Weeks 1 to 16, 2017



In week 16, a total of 32 animal bites cases were reported from 11 districts. Kono (9), Moyamba (5), Western Area Rural (3), Western Area Urban (3) and Bo (3) districts reported the highest number of cases. Since the beginning of the year, a total of 554 animal bites cases have been reported nationwide, with 2 deaths from Kono (1) and Kenema (1) districts. The national incidence rate of animal bites cases in the 16 weeks of 2017 is 8 cases per 100,000 population

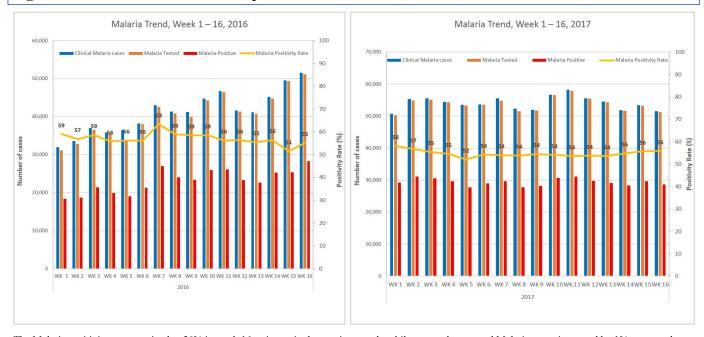
Figure 8: Incidence of Confirmed Malaria Cases (per 100,000 pop.) by district - Weeks 1 to 16, 2017



The national cumulative incidence rate of confirmed Malaria cases for weeks 1 to 16 of 2017 is 6,661 per 100,000 population. Bo district has reported the highest burden of confirmed Malaria cases in the period, recording a cumulative incidence rate of 10,334 cases per 100,000 population. Other districts with high incidence rates are Tonkolili (9,081), Moyamba (8,485), Bombali (8,243) and Kenema (7,779). For week 16, the national Malaria incidence rate is 405 per 100,000 population, a reduction from 433 per 100,000 population in week 15. The highest incidence rate of Malaria cases in week 16 was recorded in Bo (727) and Tonkolili (567) districts.

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Figure 9: National Trend of Reported Malaria Cases, Week 1, 2016 to Week 16, 2017



The Malaria positivity rate remained at 56% in week 16 as it was in the previous week, while reported suspected Malaria cases increased by 1% compared to week 15. The trend of malaria cases in Weeks 1 to 16 weeks of 2017 is similar to that observed in same period of 2016. DHMTs are urged to ensure that health facility staff in collaboration with Community Health workers (CHWs) strengthen detection, reporting and management of Malaria cases in order to reduce the malaria burden countrywide

Table 2: Reported Priority Diseases, Conditions and Events by District, Week 16, 2017

| Diseases | Во | Bombali | Bonthe | Kailahun | Kambia | Kenema | Koina- dugu | Kono | Mo- yamba | Port Loko | Pujehun | Tonkolili | Western Rural | Western Urban | TOTAL Cases | Deaths | CFR(%) |
|-------------------------------------|-------|---------|--------|----------|--------|--------|----------------|-------|--------------|-----------|---------|-----------|------------------|------------------|----------------|--------|--------------|
| | | ali | Te | 'n | ia | na | ۳ ۲ | ٥ |)a | ko | ä | i | _ 3 | ח או | is Z | hs | <u>&</u> |
| Acute Flaccid Paralysis | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| AVHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acute jaundice syndrome | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AEFI | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Animal bite case (dog/cat) | 3 | 0 | 2 | 0 | 0 | 1 | 2 | 9 | 5 | 1 | 1 | 2 | 3 | 3 | 32 | 0 | 0 |
| Suspected Anthrax | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suspected Buruli ulcer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suspected Chikungunya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suspected Cholera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suspected Dengue Fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diarrhea severe dehydration < 5s | 13 | 11 | 24 | 8 | 5 | 63 | 8 | 7 | 2 | 23 | 38 | 5 | 0 | 45 | 252 | 2 | 0.8 |
| Dracunculiasis (Guinea worm) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dysentery (Bloody diarrhea) | 2 | 2 | 7 | 7 | 0 | 10 | 18 | 6 | 5 | 1 | 4 | 1 | 4 | 5 | 72 | 0 | 0 |
| Suspected Influenza due to new sub- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suspected Malaria cases | 7,072 | 4,959 | 1,537 | 4,540 | 3,062 | 5,267 | 2,832 | 4,033 | 2,685 | 5,503 | 2,264 | 5,442 | 2,832 | 3,989 | 56,017 | | |
| Suspected Malaria cases tested | 7,072 | 4,955 | 1,537 | 4,538 | 3,062 | 5,267 | 2,781 | 4,033 | 2,685 | 5,503 | 2,264 | 5,289 | 2,832 | 3,989 | 55,807 | 48 | 0.2 |
| Malaria positive Cases | 4,176 | 2,714 | 927 | 2,306 | 1,662 | 3,103 | 1,629 | 2,087 | 1,775 | 2,882 | 1,082 | 3,010 | 1,525 | 2,224 | 31,102 | | |
| Severe Malnutrition | 78 | 10 | 18 | 22 | 54 | 35 | 24 | 27 | 54 | 122 | 34 | 20 | 20 | 42 | 560 | 3 | 0.5 |
| Maternal death | 0 | 3 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 12 | 12 | |
| Suspected Measles (All ages) | 6 | 1 | 12 | 2 | 10 | 0 | 11 | 0 | 14 | 1 | 0 | 1 | 4 | 30 | 92 | 0 | 0 |
| Suspected Meningococcal Meningitis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 100 |
| Suspected Monkey pox | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neonatal Tetanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 50 |
| Suspected Plague | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Severe Pneumonia | 50 | 23 | 25 | 24 | 3 | 43 | 147 | 25 | 2 | 41 | 40 | 17 | 0 | 125 | 565 | 13 | 2.3 |
| Suspected Small pox | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suspected Typhoid fever | 110 | 91 | 65 | 29 | 112 | 45 | 16 | 282 | 9 | 63 | 45 | 6 | 105 | 337 | 1,315 | 5 | 0.4 |
| Suspected Yellow fever | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 0 |

Source: MOHS - DHIS 2/eIDSR

NR=No Report, AFP=Acute Flaccid Paralysis, AEFI=Adverse Effects Following Immunization, AVHF=Acute Viral Hemorrhagic Fever, NNT=Neonatal Tetanus

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Table 3: Summary report of Priority Diseases, Conditions and Events for Weeks 1 to 16, 2017

| | | Current Week : 10 | 6 | Cumulative : Weeks 1 — 16 | | | |
|--|--------|-------------------|---------|---------------------------|--------|---------|--|
| Disease | Cases | Deaths | CFR (%) | Cases | Deaths | CFR (%) | |
| Acute Flaccid Paralysis | 1 | 0 | 0 | 20 | 0 | 0 | |
| AVHF | 0 | 0 | 0 | 33 | 17 | 51.5 | |
| Acute jaundice syndrome | 0 | 0 | 0 | 5 | 1 | 20 | |
| AEFI | 1 | 0 | 0 | 22 | 0 | 0 | |
| Animal bite case (dog/cat) | 32 | 0 | 0 | 554 | 2 | 0.4 | |
| Suspected Anthrax | 0 | 0 | 0 | 0 | 0 | 0 | |
| Suspected Buruli ulcer | 0 | 0 | 0 | 0 | 0 | 0 | |
| Suspected Chikungunya | 0 | 0 | 0 | 0 | 0 | 0 | |
| Suspected Cholera | 0 | 0 | 0 | 21 | 0 | 0 | |
| Suspected Dengue Fever | 0 | 0 | 0 | 0 | 0 | 0 | |
| Diarrhea severe dehydration < 5s | 252 | 2 | 0.8 | 4,688 | 46 | 1.0 | |
| Dracunculiasis (Guinea worm) | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dysentery (Bloody diarrhea) | 72 | 0 | 0 | 1,350 | 5 | 0.4 | |
| Suspected Influenza due to new subtype | 0 | 0 | 0 | 0 | 0 | 0 | |
| Suspected Malaria cases | 56,017 | | | 872,072 | | | |
| Suspected Malaria cases tested | 55,807 | 48 | 0.2 | 867,105 | 577 | 0.1 | |
| Malaria positive Cases | 31,102 | | | 473,754 | | | |
| Severe Malnutrition | 560 | 3 | 0.5 | 7,945 | 52 | 0.7 | |
| Maternal death | | 12 | | | 189 | | |
| Suspected Measles (All ages) | 92 | 0 | 0 | 2,477 | 1 | 0.0 | |
| Suspected Meningococcal Meningitis | 1 | 1 | 100 | 22 | 4 | 18.2 | |
| Suspected Monkey pox | 0 | 0 | 0 | 1 | 0 | 0 | |
| Neonatal Tetanus | 2 | 1 | 50 | 9 | 3 | 33.3 | |
| Suspected Plague | 0 | 0 | 0 | 0 | 0 | 0 | |
| Severe Pneumonia | 565 | 13 | 2.3 | 8,482 | 135 | 1.6 | |
| Suspected Small pox | 0 | 0 | 0 | 0 | 0 | 0 | |
| Suspected Typhoid fever | 1,315 | 5 | 0.4 | 22,579 | 22 | 0.1 | |
| Suspected Yellow fever | 3 | 0 | 0 | 14 | 0 | 0 | |

Table 4: Timeliness and completeness of weekly reports for Week 16, 2017

| Districts | No. of Health Facilities in each district | No. of Health Facilities that reported to the district | % of Health Facilities that reported to the district | Timeliness of districts reports to the national level | |
|--------------------|---|--|--|---|--|
| Во | 130 | 129 | 99 | Т | |
| Bombali | 116 | 116 | 100 | L | |
| Bonthe | 57 | 57 | 100 | Т | |
| Kailahun | 86 | 85 | 99 | Т | |
| Kambia | 71 | 71 | 100 | Т | |
| Kenema | 124 | 110 | 89 | Т | |
| Koinadugu | 74 | 62 | 84 | Т | |
| Kono | 90 | 90 | 100 | Т | |
| Moyamba | 103 | 102 | 99 | Т | |
| Port Loko | 111 | 110 | 99 | Т | |
| Pujehun | 78 | 73 | 94 | Т | |
| Tonkolili | 107 | 107 | 100 | Т | |
| Western Area Rural | 54 | 54 | 100 | Т | |
| Western Area Urban | 67 | 67 | 100 | Т | |
| Total | 1,268 | 1,233 | 97 | | |

 Completeness
 <50%</th>
 >50% TO <80%</th>
 ≥80%
 Timeliness
 Late report
 Timely
 No Report

 In week 16, 13 out 14 districts submitted timely reports to the national level. Of the 1,268 health facilities that are expected to report, a total of 1,233 (97%)

submitted their reports to the district level.

For more information or to report any unusual public health event, please contact Mr. Roland Conteh, Surveillance Programme Manager, Directorate of Disease Prevention and Control, Ministry of Public Health and Sanitation. Mobile: +23276612812 | rmconteh09@gmail.com