

Republic of Sierra Leone



INTEGRATED DISEASE SURVEILLANCE AND RESPONSE (IDSR)

Vol. 10 Issue 18

WEEKLY EPIDEMIOLOGICAL BULLETIN

Week 18: 01 May - 07 May, 2017

Highlights of the week

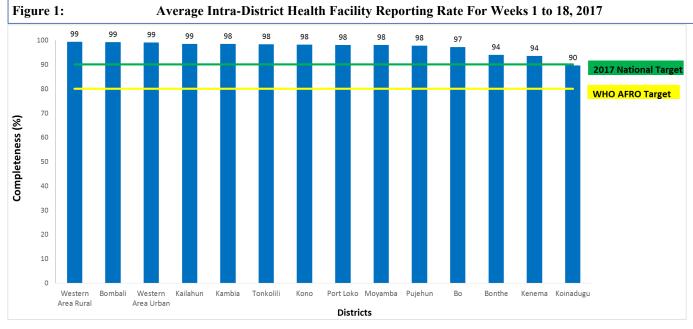
- All the 14 districts submitted timely reports to the national level this week using the eIDSR platform. The average district reporting timeliness for weeks 1 to 18 of 2017 is 98%.
- Countrywide, 98% of health facilities (HFs) submitted weekly IDSR reports to the district level this week.
- Ninety one percent (91%) 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 (32), suspected Measles (18), Maternal Deaths (3), Neonatal Deaths and Suspected Yellow Fever (1).
- Four (4) cases of Acute Viral Hemorrhagic fever were reported from Kenema district. All cases tested positive for Lassa fever and one of the cases died.
- Tonkolili district reported a second suspected Cholera case in two consecutive weeks. This case was from Yoni Chiefdom while the first one was from Gbonkolenken Chiefdom. A cholera RDT was negative and a sample was sent to the Central Public Health Reference Laboratory (CPHRL) for further laboratory testing
- Five (5) suspected Yellow Fever cases were reported from Bonthe (2), Kailahun (1), Pujehun (1) and Western Area Rural (1) districts. The cases were investigated by District Rapid Response Teams (DRRTs) and blood samples submitted to CPHRL for confirmatory testing.
- Suspected Measles cases reduced to 21 from 41 cases in week 17. Majority of
 the cases were from Kambia (8), Western Area Urban (6) and Koinadugu (4)
 districts. Eight (8) districts reported zero suspected measles cases in the
 week. Out of the 525 samples tested for Measles so far this year, 15 (3%)

| Intra-District Reporting Rate for Week 18 | | | | | | | |
|---|-----------------|--|--|--|--|--|--|
| Port Loko (100%) | Kailahun (99%) | | | | | | |
| Bombali 100%) | Bo (98%) | | | | | | |
| Kambia 100%) | Bonthe (98%) | | | | | | |
| Pujehun 100%) | Moyamba (98%) | | | | | | |
| Tonkolili 100%) | Kono (97%) | | | | | | |
| Western Area Rural 100%) | Koinadugu (93%) | | | | | | |
| Western Area Urban 100%) | Kenema (89%) | | | | | | |

- were positive for Measles while 408 (78%) tested positive for Rubella.
- One suspected case of meningococcal meningitis was reported from Tonkolili district. No sample was collected for laboratory investigation but the DRRT is monitoring the situation for any new cases that might occur
- One neonatal tetanus case was reported from Tonkolili district. The DRRT
 has been requested to investigate the case and complete the Case Investigation Form
- Seven (7) maternal deaths were reported this week from Western Area Urban (2), Moyamba (2), Pujehun (1), Tonkolili (1) and Western Area Rural (1) districts
- Clinical Malaria cases totaling 55,820 were reported in the week. Of these, 55,649 (99.7%) were tested, out of which 31,648 were confirmed positive, giving a positivity rate of 57%. A total of 26 deaths from confirmed Malaria cases were reported in the week.
- Reported Dysentery (bloody diarrhea) cases increased to 64 in week 18 from 52 cases in week 17. Districts that reported the highest number of cases in the week were Koinadugu (24), Kono (9), Kenema (9) and Western Area Urban (6)
- A total of 33 animal bites cases were reported in week 18, a reduction by 1 compared to week 17. Port Loko (7), Bonthe (6), Western Area Rural (5) and Kono (4) districts reported the highest number of cases in the week.
- A total of 568 cases of Severe malnutrition with 2 deaths were reported during the week. Port Loko (91), Bo (69), Moyamba (67), and Western Area Urban (54) districts reported the highest number of cases in the week

Another Suspected Cholera case in Tonkolili District tested negative on RDT

Tonkolili district reported a second suspected Cholera case in two consecutive weeks. The case was from Yoni Chiefdom while the first was from Gbonkolenken Chiefdom. A cholera RDT was negative. A sample was sent to the Central Public Health Reference Laboratory (CPHRL) for further laboratory testing

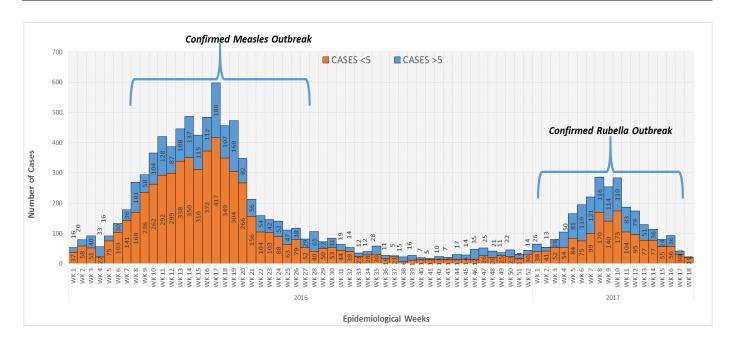


In the period of week 1 to week 18 of 2017, all districts achieved the average national intra-district health facility reporting rate target of \geq 90%*. Cumulatively, 97% of the expected health facility reports have been submitted to the district level since the beginning of the year

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

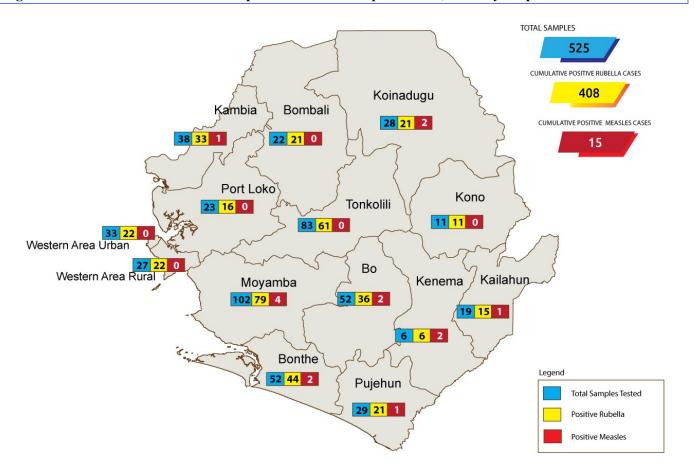
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Figure 2: Trend of Suspected Measles Cases Reported from Week 1, 2016 to Week 18, 2017



The number of reported suspected Measles cases reduced to 21 in week 18 of 2017 from 41 cases in the previous week. Of the cases reported in the current week, 90% (19/21) were in children under five years of age. Kambia (8) and Western Area Urban (6) districts reported the highest number of suspected Measles cases in all ages this week.

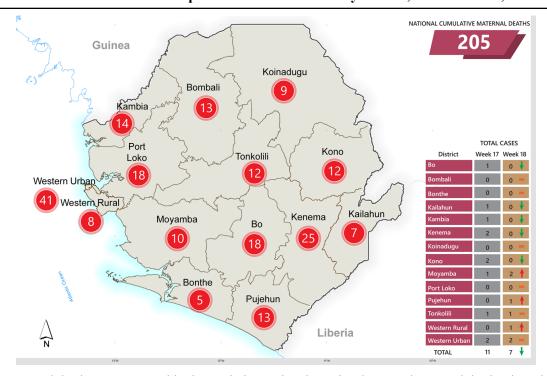
Figure 3: Cumulative Suspected Measles Samples Tested, January – April 2017



Three percent (15/525) of the samples tested for Measles at the CPHRL since the beginning of the year were positive, while 408 (78%) samples tested positive for Rubella. The results suggest that the upsurge in suspected Measles cases observed in the previous four months was due to Rubella virus circulation

Figure 4:

Cumulative Reported Maternal Deaths by district, Weeks 1 to 18, 2017



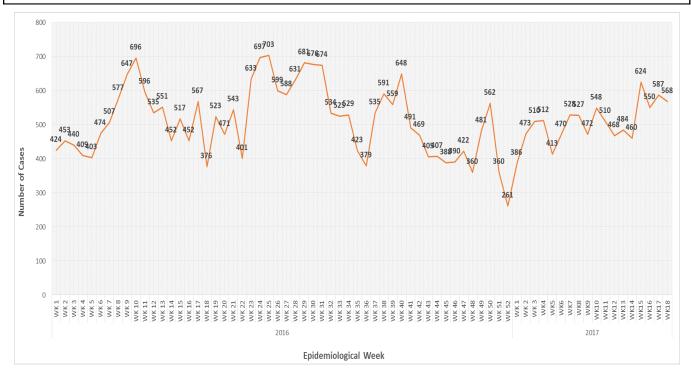
Seven (7) maternal deaths were reported in the week, increasing the national reported maternal deaths since the beginning of the year to 205. Western Area Urban district (41) has reported the highest number in the year so far followed by Kenema (25), Port Loko (18) and Bo (18) districts. DHMTs are supported to ensure all reported maternal deaths are investigated, reviewed and line-listed accordingly.

Table 1: Summary report of Priority Diseases, Conditions and Events Reported Through CBS, Week 18, 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 | 655 | 778 | 899 | 1046 | 673 | 874 | 930 | 884 | 884 | 7,623 |
| Completeness of CHWs Reporting | 78% | 96% | 101% | 95% | 81% | 90% | 93% | 96% | 88% | 91% |
| Total Alerts Reported | 25 | 9 | 2 | 5 | 14 | 0 | 0 | 0 | 0 | 55 |
| Total Alerts Verified | 25 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 30 |
| Total Alerts Investigated | 25 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 30 |
| AFP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AWD | 17 | 0 | 2 | 0 | 13 | 0 | 0 | 0 | 0 | 32 |
| 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 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Measles | 7 | 5 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 18 |
| Neonatal Death | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 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 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

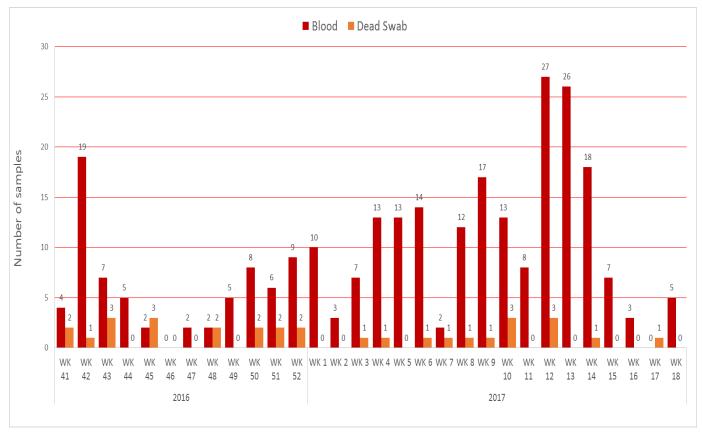
Community Based Surveillance (CBS) reports were received from 91% of the Community Health Workers (CHWs) in the 9 trained districts that are currently implementing CBS. The reports for the week included alerts of Acute watery diarrhea (32), suspected Measles (18), Maternal Deaths (3), Neonatal Death (1) and Suspected Yellow Fever (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 18, 2017



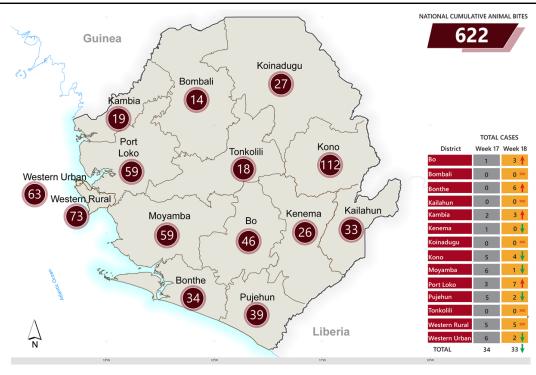
Reported cases of severe malnutrition in children under five reduced to 568 in week 18 from 587 in week 17. Port Loko (91) reported the highest number of cases in the week, followed by Bo (69), Moyamba (67) and Western Area Urban (54) districts. DHMTs are urged to sensitize health facility staff and facilitate community interventions that will contribute to prevention, detection, reporting and management of severe acute malnutrition cases in children under five years of age

Figure 6: EVD Laboratory Data, Week 41, 2016 to Week 18, 2017



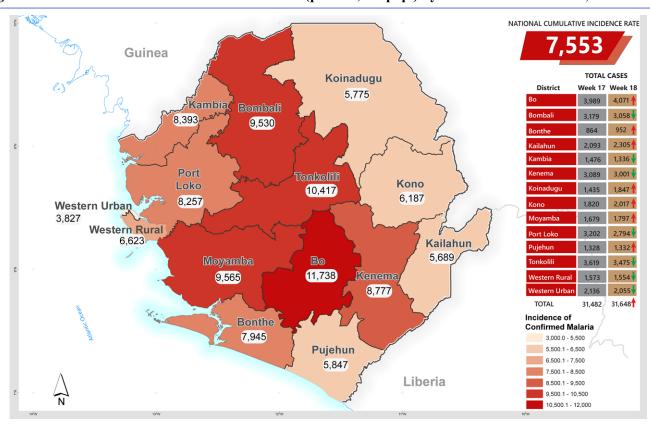
The number of samples tested for EVD increased to 5 this week from 1 sample tested in week 18. The samples were all from live alerts and tested negative for EVD. DHMTs are urged to maintain vigilance in detecting, reporting and investigating suspected EVD cases and deaths both at community and health facility levels

Figure 7: Cumulative Reported Animal Bite Cases by district, Weeks 1 to 18, 2017



In week 18, a total of 33 animal bites cases were reported from 9 districts. Port Loko (7), Bonthe (6), Western Area Rural (5) and Kono (4) districts reported the highest number of cases. Since the beginning of the year, a total of 622 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 18 weeks of 2017 is 9 cases per 100,000 population

Figure 8: Incidence of Confirmed Malaria Cases (per 100,000 pop.) by district - Weeks 1 to 18, 2017



The national cumulative incidence rate of confirmed Malaria cases for weeks 1 to 18 of 2017 is 7,553 per 100,000 population. Bo district has reported the highest burden of confirmed Malaria cases in the period, recording a cumulative incidence rate of 11,738 cases per 100,000 population. Other districts with high incidence rates are Tonkolili (10,417), Moyamba (9,565), Bombali (9,530) and Kenema (8,777). For week 18, the national Malaria incidence rate is 447 per 100,000 population, an increase from 445 per 100,000 population in week 17. The highest incidence rate of Malaria cases in week 17 was recorded in Bo (709) and Tonkolili (655) districts.

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The Malaria positivity rate increased to 57% in week 18 as compared to 55% in the previous week, while reported suspected Malaria cases reduced by 3% compared to week 17. DHMTs are urged to ensure that health facility staff in collaboration with Community Health workers (CHWs) strengthen detection, reporting and management of Malaria cases

Table 2: Reported Priority Diseases, Conditions and Events by District, Week 18, 2017

| Diseases | Во | Bombali | Bonthe | Kailahun | Kambia | Kenema | Koinadugu | Kono | Moyamba | Port Loko | Pujehun | Tonkolili | Western Rural | Western Urban | TOTAL Cases | Deaths | CFR(%) |
|-------------------------------------|-------|---------|--------|----------|--------|--------|-----------|-------|---------|-----------|---------|-----------|------------------|------------------|----------------|--------|--------|
| Acute Flaccid Paralysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0.0 |
| AVHF | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 25.0 |
| Acute jaundice syndrome | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| AEFI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0.0 |
| Animal bite case (dog/cat) | 3 | 0 | 6 | 0 | 3 | 0 | 0 | 4 | 1 | 7 | 2 | 0 | 5 | 2 | 33 | 0 | 0.0 |
| Suspected Anthrax | 0 | 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 | 0.0 |
| Suspected Chikungunya | 0 | 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 | 1 | 0 | 0 | 1 | 0 | 0.0 |
| Suspected Dengue Fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Diarrhea severe dehydration < 5s | 3 | 14 | 24 | 15 | 5 | 60 | 23 | 1 | 0 | 21 | 10 | 15 | 0 | 9 | 200 | 3 | 1.5 |
| Dracunculiasis (Guinea worm) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Dysentery (Bloody diarrhea) | 1 | 3 | 3 | 0 | 0 | 9 | 24 | 9 | 1 | 2 | 1 | 4 | 1 | 6 | 64 | 0 | 0.0 |
| Suspected Influenza due to new sub- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Suspected Malaria cases | 6,557 | 5,455 | 1,566 | 4,151 | 2,537 | 5,028 | 3,079 | 3,778 | 2,620 | 5,481 | 2,633 | 5,939 | 3,030 | 3,966 | 55,820 | | |
| Suspected Malaria cases tested | 6,556 | 5,399 | 1,566 | 4,132 | 2,537 | 5,028 | 3,079 | 3,749 | 2,620 | 5,481 | 2,609 | 5,897 | 3,030 | 3,966 | 55,649 | 26 | 0.1 |
| Malaria positive Cases | 4,071 | 3,058 | 952 | 2,305 | 1,336 | 3,001 | 1,847 | 2,071 | 1,797 | 2,794 | 1,332 | 3,475 | 1,554 | 2,055 | 31,648 | | |
| Severe Malnutrition | 69 | 21 | 20 | 45 | 28 | 31 | 24 | 33 | 67 | 91 | 34 | 24 | 27 | 54 | 568 | 2 | 0.4 |
| Maternal death | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 1 | 2 | | 7 | |
| Suspected Measles (All ages) | 1 | 0 | 1 | 0 | 8 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 21 | 0 | 0.0 |
| Suspected Meningococcal Meningitis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0.0 |
| Suspected Monkey pox | 0 | 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 | 1 | 0 | 0 | 1 | 0 | 0.0 |
| Suspected Plague | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Severe Pneumonia | 99 | 15 | 17 | 7 | 0 | 20 | 152 | 23 | 1 | 47 | 31 | 33 | 4 | 81 | 530 | 11 | 2.1 |
| Suspected Small pox | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Suspected Typhoid fever | 158 | 97 | 16 | 10 | 75 | 58 | 6 | 284 | 55 | 44 | 41 | 27 | 72 | 356 | 1,299 | 0 | 0.0 |
| Suspected Yellow fever | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 5 | 0 | 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 18

| Disease | C | urrent Week : | 18 | Cumulative : Weeks 1 — 18 | | | | |
|--|--------|---------------|---------|---------------------------|--------|---------|--|--|
| | Cases | Deaths | CFR (%) | Cases | Deaths | CFR (%) | | |
| Acute Flaccid Paralysis | 2 | 0 | 0.0 | 22 | 0 | 0.0 | | |
| AVHF | 4 | 1 | 25.0 | 37 | 18 | 48.6 | | |
| Acute jaundice syndrome | 0 | 0 | 0.0 | 5 | 1 | 20.0 | | |
| AEFI | 1 | 0 | 0.0 | 23 | 0 | 0.0 | | |
| Animal bite case (dog/cat) | 33 | 0 | 0.0 | 622 | 2 | 0.3 | | |
| Suspected Anthrax | 0 | 0 | 0.0 | 0 | 0 | 0.0 | | |
| Suspected Buruli ulcer | 0 | 0 | 0.0 | 0 | 0 | 0.0 | | |
| Suspected Chikungunya | 0 | 0 | 0.0 | 0 | 0 | 0.0 | | |
| Suspected Cholera | 1 | 0 | 0.0 | 23 | 0 | 0.0 | | |
| Suspected Dengue Fever | 0 | 0 | 0.0 | 0 | 0 | 0.0 | | |
| Diarrhea severe dehydration < 5s | 200 | 3 | 1.5 | 5020 | 51 | 1.0 | | |
| Dracunculiasis (Guinea worm) | 0 | 0 | 0.0 | 0 | 0 | 0.0 | | |
| Dysentery (Bloody diarrhea) | 64 | 0 | 0.0 | 1466 | 5 | 0.3 | | |
| Suspected Influenza due to new subtype | 0 | 0 | 0.0 | 0 | 0 | 0.0 | | |
| Suspected Malaria cases | 55,820 | | | 985,576 | | | | |
| Suspected Malaria cases tested | 55,649 | 26 | 0.1 | 979,839 | 651 | 0.1 | | |
| Malaria positive Cases | 31,648 | | | 536,984 | | | | |
| Severe Malnutrition | 568 | 2 | 0.4 | 9,100 | 56 | 0.6 | | |
| Maternal death | | 7 | | | 205 | | | |
| Suspected Measles (All ages) | 21 | 0 | 0.0 | 2,539 | 1 | 0.0 | | |
| Suspected Meningococcal Meningitis | 1 | 0 | 0.0 | 23 | 4 | 17.4 | | |
| Suspected Monkey pox | 0 | 0 | 0.0 | 1 | 0 | 0.0 | | |
| Neonatal Tetanus | 1 | 0 | 0.0 | 10 | 3 | 30.0 | | |
| Suspected Plague | 0 | 0 | 0.0 | 0 | 0 | 0.0 | | |
| Severe Pneumonia | 530 | 11 | 2.1 | 9,432 | 163 | 1.7 | | |
| Suspected Small pox | 0 | 0 | 0.0 | 0 | 0 | 0.0 | | |
| Suspected Typhoid fever | 1,299 | 0 | 0.0 | 25,216 | 23 | 0.1 | | |
| Suspected Yellow fever | 5 | 0 | 0.0 | 20 | 0 | 0.0 | | |

Table 4: Timeliness and completeness of weekly reports for Week 18, 2017

| Districts | No. of Health Facilities in each district | No. of Health Facilities that reported to the district | | |
|--------------------|---|--|-----|---|
| Во | 130 | 128 | 98 | Т |
| Bombali | 116 | 116 | 100 | Т |
| Bonthe | 57 | 56 | 98 | Т |
| Kailahun | 86 | 85 | 99 | Т |
| Kambia | 71 | 71 | 100 | Т |
| Kenema | 124 | 110 | 89 | Т |
| Koinadugu | 74 | 69 | 93 | Т |
| Kono | 90 | 87 | 97 | Т |
| Moyamba | 103 | 101 | 98 | Т |
| Port Loko | 111 | 111 | 100 | Т |
| Pujehun | 78 | 78 | 100 | Т |
| Tonkolili | 107 | 107 | 100 | Т |
| Western Area Rural | 54 | 54 | 100 | Т |
| Western Area Urban | 67 | 67 | 100 | Т |
| Total | 1,268 | 1241 | 98 | |

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

In week 18, all the 14 districts submitted timely reports to the national level. Of the 1,268 health facilities that are expected to report, a total of 1,241 (98%) 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