

Republic of Sierra Leone



INTEGRATED DISEASE SURVEILLANCE AND RESPONSE (IDSR)

Vol. 10 Issue 13

WEEKLY EPIDEMIOLOGICAL BULLETIN

Week 13: 27th Mar - 02 Apr, 2017

Highlights of the week

reported in the week.

- All the 14 districts submitted timely reports to the national level this week using the eIDSR platform. The average district reporting timeliness is 98% for the period of weeks 1 to 13 of 2017
- Countrywide, 97% of health facilities (HFs) submitted weekly IDSR reports to the district level in the week
- Seventy percent (70%) of the trained Community Health Workers (CHWs) in the 9
 districts currently implementing Community Based Surveillance (CBS) reported
 in the week. Kailahun district (one of the nine) did not report. The reports included
 Acute watery diarrhea (46), suspected Measles (23), Maternal Death (2), AFP (1)
 and Neonatal Death (1).
- Three (3) cases of Acute Viral Haemorrhagic Fever (AVHF) were reported from Western Area Urban (1), Bo (1) and Kono (1) districts. The cases in Western Area Urban and Bo died while all cases tested negative for EVD.
- Two AFP cases were reported from Western Area Rural (1) and Koinadugu (1) districts. Stool samples were collected from the 2 cases and sent to districts Central Public Health Reference Laboratory (CPHRL) for confirmatory testing
- Suspected Measles cases reduced to 128 from 174 cases in week 12, with 77 cases (60%) being reported in children under five years of age. Majority of the cases in all ages were from Western Area Urban (29), Kambia (27), Tonkolili (23) and Bombali (14) districts. Out of the 431 samples tested for Measles so far this year, 15 (3%) were positive for Measles while 286 (76%) of the 378 samples tested for Rubella were positive.
- Eight (8) maternal deaths were reported this week from 7 districts. Bo district reported 2 deaths in the week while Bonthe, Kailahun, Kambia, Kono, Port Loko and Tonkolili reported one death each.
- One case of neonatal tetanus was reported from Western Area Urban district. The

	case was admitted at Ola During Children Hospital. Investigations are ongoing.
•	Clinical Malaria cases totaling to 54,502 were reported in the week. Of these,
	54,437 (99.7%) were tested, out of which 29,105 were confirmed positive, giving a
	positivity rate of 54%. A total of 27 deaths from confirmed Malaria cases were

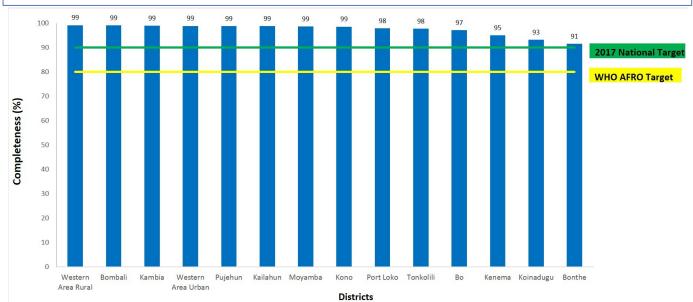
- Reported Dysentery (bloody diarrhea) cases reduced to 81 in week 13 from 82 in week 11. Majority of the cases were from Koinadugu (20), Tonkolili (18), and Bo (10) districts.
- A total of 36 animal bites cases were reported in week 13, the same number of cases as reported in week 12. Kono (7), Pujehun (4), Western Area Rural (4), and Western Area Urban (4) and Moyamba (4) districts reported the highest number of cases in the week
- A total of 484 cases of Severe malnutrition with 1 death were reported during the week. Port Loko (68), Bo (57), Pujehun (44), Moyamba (37), Kailahun (36), Kambia (34) and Tokolili (31) districts reported the highest number of cases.
- One suspected Meningococcal Meningitis case was reported from Koinadugu district. The case was admitted at Kabala Government Hospital and investigations are ongoing

Intra-District Reporting Rate for Week 13								
Bombali (100%)	Kono (99%)							
Kambia (100%)	Pujehun (99%)							
Moyamba (100%)	Western Area Urban (99%)							
Port Loko (100%)	Kailahun (98%)							
Tonkolili (100%)	Bonthe (97%)							
Western Area Rural (100%)	Kenema (90%)							
Bo (99%)	Koinadugu (88%)							

Suspected EVD case in BO district

A 11 months old female child, died on the 3rd April, 2017 with signs and symptoms of AVHF starting on 2nd April. The twin brother to the case had died the same day (2nd April) of unspecified condition. No blood or swab sample were collected before burial but a sample obtained from resuscitation equipment used on the patient tested negative for EVD. Due to the high suspicious nature of the case and a non-conventional sample used in laboratory investigations, contacts to the case totaling to 65, including health workers are being followed up for 21 days since 3rd April 2017

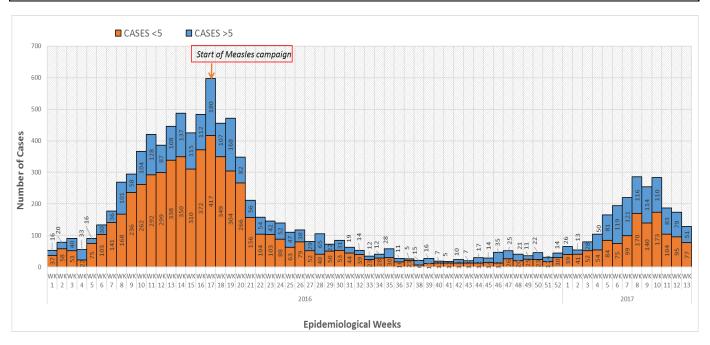
Figure 1: Average Intra-District Health Facility Reporting Rate For Weeks 1 to 13, 2017



In the period of week 1 to week 13 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

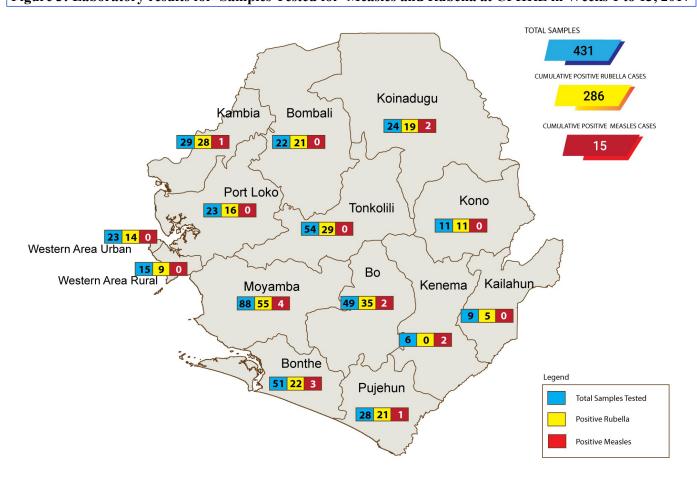
^{*}The country revised the IDSR reporting rate (completeness) target from ≥80% to ≥90% starting week 7 of 2017

Figure 2: Trend of Suspected Measles Cases Reported from Week 1, 2016 to Week 13, 2017



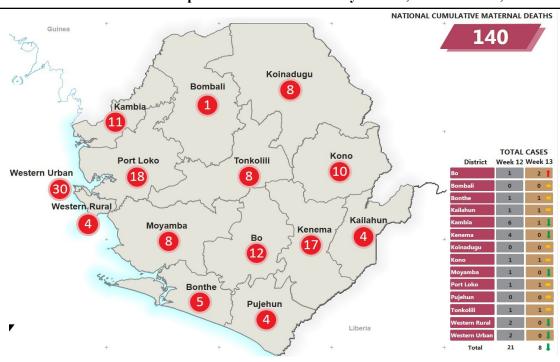
The number of reported suspected Measles cases decreased to 128 in week 13 of 2017 from 174 cases reported in the previous week. Of the cases reported in week 13, a total of 77 (60%) cases were in children under five years of age. Western Area Urban (29), Kambia (27), Tonkolili (23) and Bombali (14) districts reported the highest number of suspected Measles cases in all ages this week.

Figure 3: Laboratory results for Samples Tested for Measles and Rubella at CPHRL in Weeks 1 to 13, 2017



Available results for samples tested for measles and Rubella since the beginning of the year show that 3% (15/431) of the samples tested for Measles are positive, while 286 (76%) of the 378 samples tested for Rubella were positive. Rubella results for 53 samples are still pending. The results suggest that the current upsurge in suspected Measles cases is due to Rubella virus circulation

Cumulative Reported Maternal Deaths by district, Weeks 1 to 13, 2017



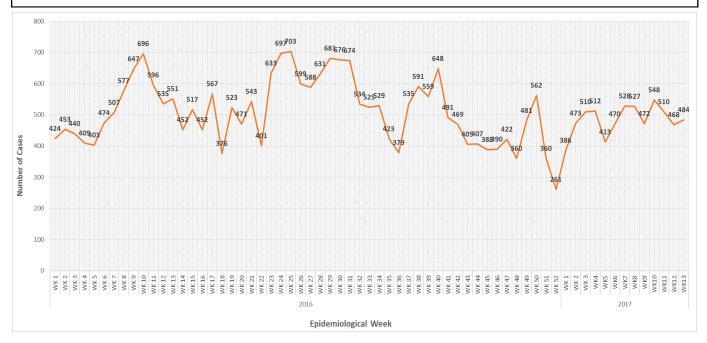
Eight (8) maternal deaths were reported in the week, increasing the national cumulative reported maternal deaths since the beginning of the year to 140. Western Area Urban district (30) has reported the highest number in the year so far followed by Port Loko (18), Kenema (17), Bo (12) and Kambia (11). DHMTs are supported to ensure all reported maternal deaths are line -listed and reviewed accordingly.

Table 1: Summary report of Priority Diseases, Conditions and Events Reported Through CBS, Week 13, 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	408	751	NR	534	591	874	952	848	900	5,858
Completeness of CHWs Reporting	49%	93%	NR	48%	71%	90%	95%	92%	90%	70%
Total Alerts Reported	16	8	NR	2	22	0	1	9	20	78
Total Alerts Verified	16	8	NR	2	0	0	0	9	20	55
Total Alerts Investigated	16	8	NR	2	0	0	0	0	20	46
AFP	0	0	NR	0	0	0	1	0	0	1
AWD	0	0	NR	1	16	0	0	9	20	46
Cluster of Deaths	0	0	NR	0	0	0	0	0	0	0
Guinea Worm	0	0	NR	0	0	0	0	0	0	0
Maternal Death	1	1	NR	0	0	0	0	0	0	2
Measles	14	2	NR	1	6	0	0	0	0	23
Neonatal Death	1	0	NR	0	0	0	0	0	0	1
Neonatal Tetanus	0	0	NR	0	0	0	0	0	0	0
Suspected Ebola	0	0	NR	0	0	0	0	0	0	0
Yellow Fever	0	0	NR	0	0	0	0	0	0	0

Community Based Surveillance (CBS) reports were received from 70% of the Community Health Workers (CHWs) in the 9 trained districts that are currently implementing CBS. Kailahun district did not submit a report. The reports for the week included cases of Acute watery diarrhea (46), suspected Measles (23), Maternal Death (2) AFP (1) and Neonatal Death (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.

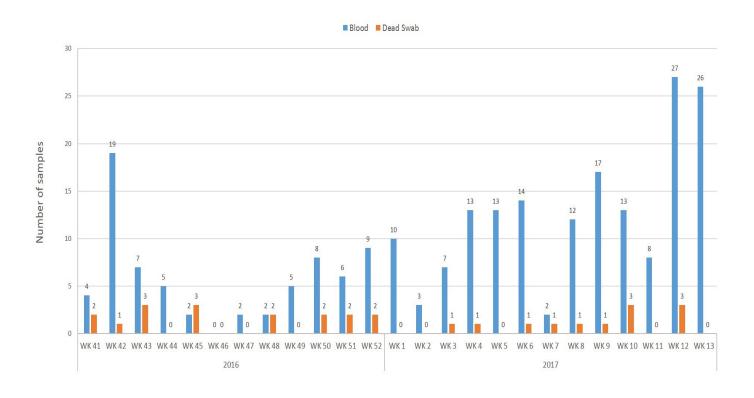
Figure 5: Trend of Reported Severe Malnutrition Cases in Children Under Five, Week 1, 2016 to Week 13, 2017



Reported cases of severe malnutrition in children under five increased by 16 to 484 in week 13 of 2017 compared to the previous week. Port Loko (68) reported the highest number of cases in week 13 followed by Bo (57), Pujehun (44), Moyamba (37), and Kailahun (36) 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

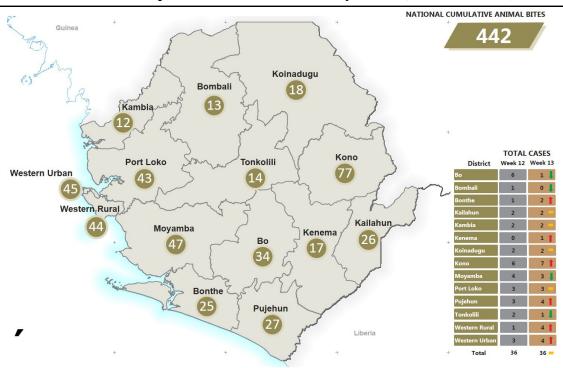


EVD Laboratory Data, Week 41, 2016 to Week 13, 2017



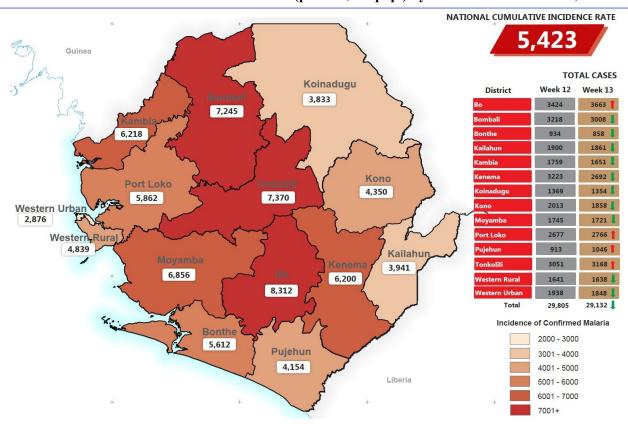
The number of samples tested for EVD reduced to 26 this week from 30 samples tested in week 12. All the samples tested in week 13 were from live alerts. All the samples tested negative for EVD. DHMTs are urged to maintain vigilance in detecting, reporting and investigating suspected EVD cases and deaths both at community and health facility levels

Figure 7: Cumulative Reported Animal Bite Cases by district, Weeks 1 to 13, 2017



In week 13, a total of 36 animal bites cases were reported from 13 districts. Kono (7), Western Area Urban (4), Western Area Rural (4) and Pujehun (4) districts reported the highest number of cases in the week. Since the beginning of the year, 442 animal bites cases have been reported nationwide, with 2 deaths from Kenema(1) and Kono (1) districts. The national cumulative incidence rate of animal bites cases for weeks 1 to 13 of 2017 is 6 cases per 100,000 population

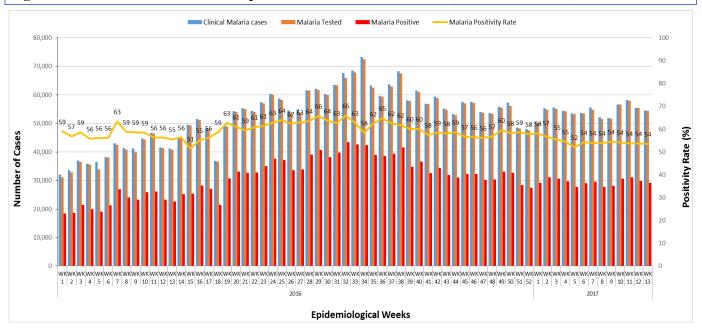
Figure 8: Incidence of Confirmed Malaria Cases (per 100,000 pop.) by district - Weeks 1 to 13, 2017



The national cumulative incidence rate of confirmed Malaria cases for weeks 1 to 13 of 2017 is 5,423 per 100,000 population. Bo district has reported the highest burden of confirmed Malaria cases in the first thirteen weeks of the year, recording a cumulative incidence rate of 8,312 cases per 100,000 population. Other districts with high incidence rates are Tonkolili (7,370), Bombali (7,245) and Moyamba (6,856). For week 13, the national Malaria incidence rate is 412 per 100,000 population, a reduction from 421 per 100,000 population in week 12. The highest incidence rate of Malaria cases in week 13 was recorded in Bo (638), Tonkolili (597) and Moyamba (541) districts.

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Figure 9: National Trend of Reported Malaria Cases, Week 1, 2016 to Week 13, 2017



The Malaria positivity rate remained at 54% in week 13 as it has been in the previous seven weeks, while reported suspected Malaria cases reduced by 2% compared to week 12. 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 13, 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(%)
Acute Flaccid Paralysis	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	0	0
AVHF	1	0	0	0	0	0	0	1	0	0	0	0	0	1	3	2	66.7
Acute jaundice syndrome	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	0	0	0	0
Animal bite case (dog/cat)	1	0	2	2	2	1	2	7	3	3	4	1	4	4	36	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	3	11	33	19	5	53	25	5	0	13	44	9	5	20	245	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)	10	3	0	5	0	4	20	4	1	6	6	18	2	2	81	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	6,667	6,654	1,600	3,691	3,115	4,784	2,479	3,425	2,483	5,374	1,979	5,662	2,780	3,809	54,502		
Suspected Malaria cases tested	6,667	6,646	1,600	3,670	3,115	4,784	2,441	3,425	2,483	5,374	1,979	5,585	2,769	3,809	54,347	27	0.1
Malaria positive Cases	3,663	3,008	858	1,861	1,646	2,686	1,354	1,855	1,721	2,765	1,046	3,166	1,638	1,838	29,105		
Severe Malnutrition	57	14	30	36	34	33	29	20	37	68	44	31	22	29	484	1	0.2
Maternal death	2	0	1	1	1	0	0	1	0	1	0	1	0	0		8	
Suspected Measles (All ages)	6	14	2	3	27	1	8	0	1	10	1	23	3	29	128	0	0
Suspected Meningococcal Meningitis	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
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	0	0	1	1	0	0
Suspected Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Severe Pneumonia	90	39	52	4	9	32	97	11	7	27	57	8	5	102	540	9	1.7
Suspected Small pox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suspected Typhoid fever	69	112	50	34	107	54	5	316	1	138	92	15	78	250	1,321	0	0
Suspected Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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 13, 2017

		Current Week : 1	3	Cumulative : Weeks 1 — 13			
Disease	Cases	Deaths	CFR (%)	Cases	Deaths	CFR (%)	
Acute Flaccid Paralysis	2	0	0	16	0	0	
AVHF	3	2	66.7	22	15	68.2	
Acute jaundice syndrome	0	0	0	4	0	0	
AEFI	0	0	0	21	0	0	
Animal bite case (dog/cat)	36	0	0	442	2	0.5	
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	245	2	0.8	4,018	38	0.9	
Dracunculiasis (Guinea worm)	0	0	0	0	0	0	
Dysentery (Bloody diarrhea)	81	0	0	1,090	4	0.4	
Suspected Influenza due to new subtype	0	0	0	0	0	0	
Suspected Malaria cases	54,502			707,754			
Suspected Malaria cases tested	54,347	27	0.1	703,568	445	0.1	
Malaria positive Cases	29,105			383,280			
Severe Malnutrition	484	1	0.2	6,301	44	0.7	
Maternal death		8			140		
Suspected Measles (All ages)	128	0	0	2,193	1	0.0	
Suspected Meningococcal Meningitis	1	0	0	46	2	4.3	
Suspected Monkey pox	0	0	0	1	0	0	
Neonatal Tetanus	1	0	0	3	1	33.3	
Suspected Plague	0	0	0	0	0	0	
Severe Pneumonia	540	9	1.7	6,868	104	1.5	
Suspected Small pox	0	0	0	0	0	0	
Suspected Typhoid fever	1,321	0	0	18,987	15	0.1	
Suspected Yellow fever	0	0	0	8	0	0	

Table 4: Timeliness and completeness of weekly reports for Week 13, 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	Т	
Bonthe	57	55	97	Т	
Kailahun	86	84	98	Т	
Kambia	71	71	100	Т	
Kenema	124	111	90	Т	
Koinadugu	74	65	88	Т	
Kono	90	89	99	Т	
Moyamba	103	103	100	Т	
Port Loko	111	111	100	Т	
Pujehun	78	77	99	Т	
Tonkolili	107	107	100	Т	
Western Area Rural	54	54	100	Т	
Western Area Urban	67	66	99	Т	
Total	1,268	1,238	98		
Completeness <50%	>50% TO <80%	≥80% Timeliness	Late report	Timely No Report	

In week 13, 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 1,238 (98%) submitted their reports to the district level. All the districts except Koinadugu achieved the national Intra-district HF reporting rate of ≥90%