



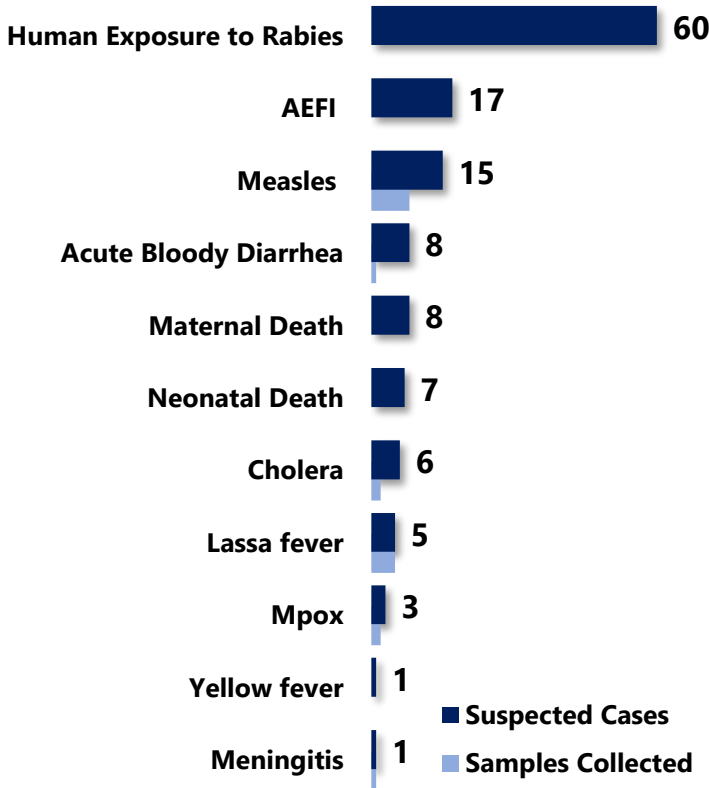
Liberia IDSR Epidemiology Bulletin

Epi-week 3 (January 15-21, 2024)

Country Population: 5,104,413 | Volume 20 Issue 3 | January 15-21, 2024 | Data Source: CSOs from 15 Counties and Laboratory

Highlights

Figure 1: Public Health Events Reported



Keynotes and Events of Public Health Significance

- ◆ A total of 131 events of public health importance including 15 deaths reported
- ◆ Completeness and timeliness of health facility reports were both 96%
- ◆ Ongoing Lassa fever outbreak in 2 Counties
- ◆ Ongoing Measles outbreak in 1 County
- ◆ Ongoing Mpox outbreak in 1 County

Adverse Events Following Immunization/Adverse Drug Reaction (AEFI)

Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 3, 2024

County	Expected Reports From HF*	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	28	28	28	100	100
Bong	67	55	55	82	82
Gbarpolu	18	18	18	100	100
Grand Bassa	37	37	37	100	100
Grand Cape Mount	34	34	34	100	100
Grand Gedeh	24	24	24	100	100
Grand Kru	24	24	24	100	100
Lofa	60	60	60	100	100
Margibi	66	63	63	95	95
Maryland	28	25	25	89	89
Montserrado	418	397	395	95	94
Nimba	92	92	92	100	100
Rivercess	21	21	21	100	100
River Gee	20	20	20	100	100
Sinoe	41	41	41	100	100
Liberia	978	939	937	96	96

939(96%)
Health facilities reported IDSR data

96(98%)
Health districts reported IDSR data

937(96%)
Health facilities reported timely IDSR data

◆ The national target for weekly IDSR reporting is 80%. Health facility timeliness is monitored at the health district level

Legend:

≥80

<80

Vaccine-Preventable Diseases

Measles

- ☞ Fifteen (15) suspected cases were reported from 6 counties
- ☞ Eight (8) specimens were collected and pending testing
- ☞ Nine (9) persons were vaccinated

Table 2: Distribution and vaccination Status of Measles Cases, Liberia, Epi-week 3, 2024

County	# of cases	Vaccinated	Number of Doses Received		
			One Dose	Two Doses	Doses Not Indicated
Grand Cape					
Mount	1	1	0	1	0
Grand Gedeh	2	0	0	0	0
Maryland	5	1	1	0	0
Montserrado	1	1	1	0	0
Nimba	1	1	1	0	0
River Gee	5	5	4	0	1
Total	15	9	7	1	1

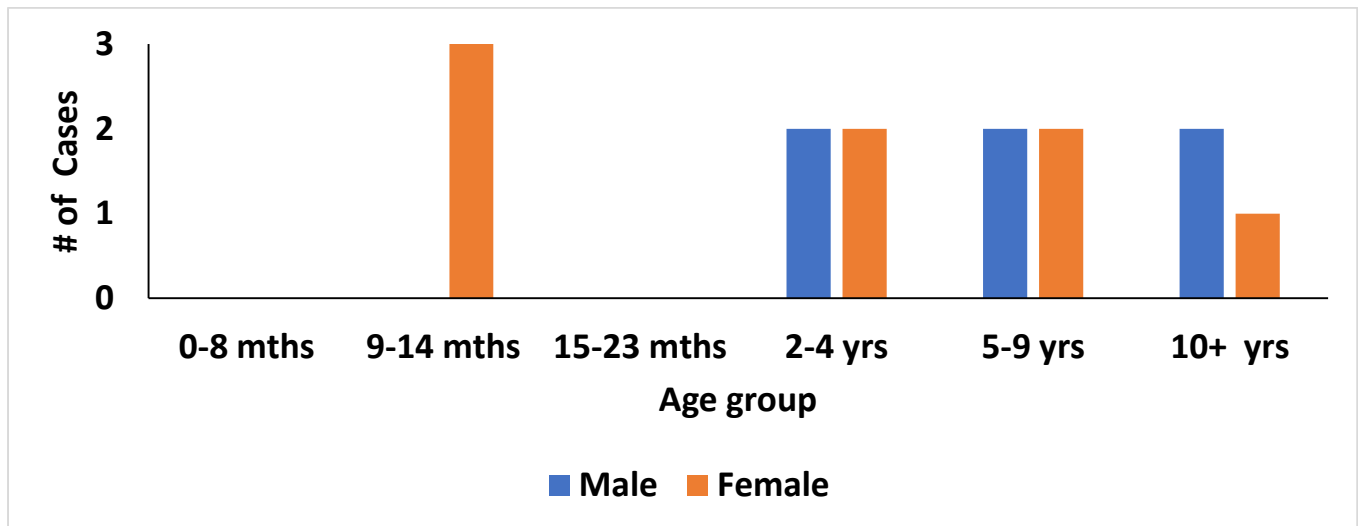


Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 3, 2024

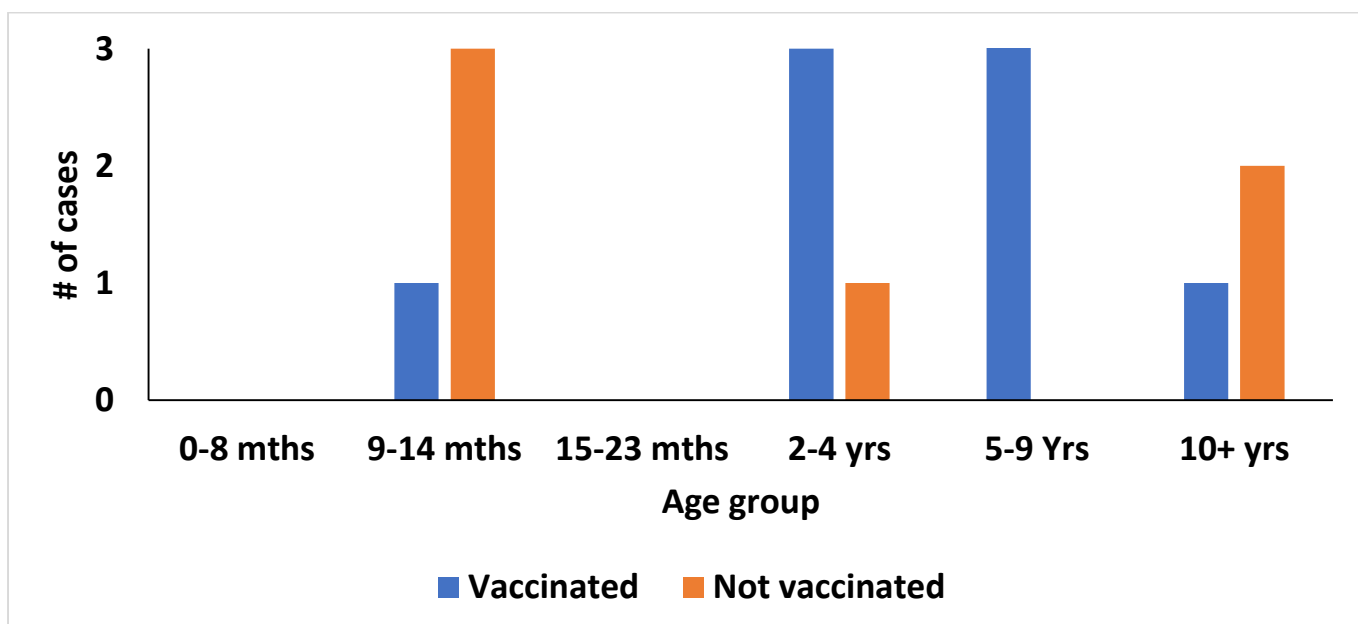


Figure 3: Vaccination Status of Suspected Measles Cases by Age Group, Liberia, Epi-Week 3, 2024

Table 3: Status of Confirmed (lab, clinically confirmed and epi-linked) Measles Cases by County, Liberia, December 13, 2021 January 21, 2024

COUNTY	CUMULATIVE SUSPECTED CASES	CUMULATIVE CONFIRMED CASES	CLASSIFICATION OF CONFIRMED CASES			CLASSIFICATION OF CONFIRMED DEATHS			CUMULATIVE DEATHS	CFR (%)	# CONFIRMED CASES WEEK 2	# CONFIRMED CASES WEEK 3	% CHANGE	Outbreak Status
			Lab confirmed	Epi Linked	Clinically Compatible	Lab confirmed	Epi Linked	Clinically Compatible						
Montserrado	5,456	5,373	145	1658	3,570	3	61	5	69	1.3	0	0	-	Ended
Nimba	1,137	1110	37	187	886	0	1	3	4	0.4	0	0	-	Ended
Margibi	827	803	34	136	633	0	0	1	1	0.1	0	0	-	Ended
Grand Bassa	962	924	40	212	672	1	0	6	7	0.9	0	0	-	Ended
Lofa	353	284	32	66	186	0	0	0	0	0	0	0	-	Ended
Bong	603	578	22	21	535	0	1	2	3	0.5	0	0	-	Ended
Maryland	1165	1145	24	308	808	0	0	0	0	0	7	5	-29	Ongoing
Grand Gedeh	652	508	34	48	426	0	0	0	0	0	0	0	-	Ended
Sinoe	284	231	36	84	111	0	0	0	0	0	0	0	-	Ended
Bomi	183	147	34	27	86	1	2	2	5	3	0	0	-	Ended
Grand Cape Mount	215	187	17	18	152	0	2	1	3	1.6	0	0	-	Ended
Grand Kru	994	965	22	106	837	0	0	2	2	0.2	0	0	-	Ended
Gbarpolu	67	46	4	2	40	0	0	0	0	0	0	0	-	Ended
Rivercess	112	84	23	54	7	0	1	0	1	1.1	0	0	-	Ended
River Gee	103	79	0	0	79	0	0	0	0	0	0	0	-	Ended
Total	13,113	12,484	504	2,927	9,033	5	68	22	95	7.8	7	5		

Table 4: Cumulative Distribution of Measles Cases and Deaths, December 13, 2021- January 21, 2024

County	Total Cases	Active	Recovery	Deaths	# of Districts
Montserrado	5,373	0	5,304	69	0/7
Nimba	1,110	0	1,106	4	/6
Grand Bassa	924	0	917	7	0/8
Margibi	803	0	802	1	0/4
Bong	578	0	575	3	0/9
Maryland	1165	5	1141	0	3/6
Lofa	284	0	284	0	0/6
Grand Kru	965	0	963	2	0/5
Grand Cape Mount	187	0	184	3	0/5
Bomi	147	0	142	5	0/4
Rivercess	84	0	83	1	0/6
Gbpolu	46	0	46	0	0/5
Grand Gedeh	508	0	508	0	0/6
River Gee	79	0	79	0	0/6
Sinoe	231	0	231	0	0/10
Total	12,484	5	12,384	95	3/98

Public Health Response

I. Coordination

☞ IMS meetings are being held for coordination and mobilization of resources in response counties

II. Epidemiological Surveillance

☞ Active case search and contact tracing ongoing in affected Districts (Pleebo, Harper, and Karluway II) in Maryland County

III. Case management

- ☞ Case management ongoing in Maryland County

IV. Immunization

- ☞ Routine immunization intensified in affected districts (Pleebo, Harper, and Karluway-II) in Maryland County

V. Laboratory

- ☞ Five hundred seven (507) cases have been confirmed by the NPHRL from December 13, 2021 – January 21, 2024.

VI. Risk Communication and Community Engagement

- ☞ Community engagement and health education in Maryland County

VII. Challenges

- ☞ Limited support for response in Maryland County

Acute Flaccid Paralysis (AFP)

- ☞ Zero suspected case was reported
- ☞ Specimen collected and shipped
- ☞ Cumulatively, one (1) reported

Neonatal Tetanus

- ☞ Zero cases were reported
- ☞ Cumulatively, one case has been reported

Influenza-Like Illnesses

Coronavirus Disease (COVID-19)

- ☞ Zero suspected cases were reported

Influenza

- ☞ Zero suspected cases were reported

Viral Hemorrhagic Fever

Lassa fever

- ☞ Five (5) suspected cases were reported from Nimba (3), and Bong (2) Counties
- ☞ Five (5) specimens were collected and pending testing
- ☞ Cumulatively, fourteen (14) suspected cases have been reported
 - Proportion of suspected cases with a sample collected (14/14) 100%
 - Proportion of suspected cases with sample tested (8/14) 57% (negative 7, Confirmed 1)

Current Outbreak

- ☞ No new confirmed case reported
- ☞ A total of 21 contacts including 13 healthcare workers under follow up
- ☞ Cumulative Case Fatality Rate (CFR): 29% (32/110)
- ☞ Two counties currently in outbreak (Bong and Nimba)

Table 5: Summary of Lassa fever Outbreak, Liberia, January 6, 2022 - January 21, 2024

County	Outbreak Districts	Outbreak Start Date	Total suspected cases	Total confirmed cases	Deaths in HCWs	Total Deaths	CFR %	Total Contacts	# HCW contacts	Contacts became cases	HCW became confirmed case	Contacts under follow up	Contacts completed	Days in countdown	Outbreak Status
Montserrado	Bushrod	13-Feb-23	15	2	0	1	50%	29	21	0	0	0	29	Completed	Over
	Central Monrovia	3-Mar-23	29	1	0	1	100%	28	27	0	0	0	28	Completed	Over
Bong	Suakoko	21-Apr-23	156	47	2	10	21%	480	194	6	18	7	410	Active	Ongoing
	Sanoyea	19-Sep-23	2	2	0	1	50%	36	18	0	0	0	37	Completed	Over
	Kokoya	3-Oct-23	1	1	0	0	0%	5	0	0	0	0	5	Completed	Over
	Jorquelleh	15-Oct-23	12	13	1	3	23%	121	86	3	3	0	169	Completed	Over
Grand Bassa	District 3A&B	21-Aug-23	86	32	0	9	28%	177	40	40	0	0	159	Completed	Over
	Buchanan	11-Aug-23	2	1	0	1	100%	4	2	0	0	0	0	Completed	Over
Nimba	Sanniquele-Mah	6-Feb-23	42	2	0	0	0%	43	35	8	0	0	43	Completed	Over
	Tappita	20-Nov-23	15	4	0	3	75%	72	39	4	0	14	50	Active	Ongoing
	Bain-Garr	1-Jun-23	10	3	0	3	100%	61	25	0	0	0	31	Completed	Over
Montserrado	Central Monrovia	27-Nov-23	1	1	0	0	0%	49	0	0	0	0	49	Completed	Over
Total			371	109	3	32	29%	1105	487	61	21	21	1010		

Public Health Measures

Coordination

- o The National Public Health Institute of Liberia (NPHIL) and the Ministry of Health (MoH) are Providing technical support to the surveillance (i.e. guidance on case investigation, contact tracing, situation reports development, etc.)

Surveillance:

- o Active case search and contact tracing ongoing in affected communities and districts
- o Development and dissemination of weekly situation reports by affected counties

Laboratory

- o The National Public Health Reference Laboratory continues testing of Lassa fever samples
- o A total of 110 Lassa fever cases have been confirmed since this outbreak

Case management and IPC

- o Cases isolated and managed at designated facilities
- o Ribavirin supply in country are being distributed for treatment of Lassa fever cases to affected counties

Environmental and Vector Control

- o Clean-up campaigns and rodent control measures ongoing in affected Counties

Risk Communication and Community Engagement

- o Risk communication and community engagement ongoing in affected and surrounding communities

Yellow fever

- ☞ One (1) suspected case was reported from River Gee County
- ☞ Specimen was collected and pending testing
- ☞ Cumulatively, three (3) cases have been reported
 - o Proportion of suspected cases with samples collected (3/3) 100%

Dengue Fever

- ☞ Zero suspected cases were reported
- ☞ Cumulatively one (1) suspected case reported

Ebola Virus Disease

- ☞ Zero cases were reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- ☞ Eight (8) cases were reported from Grand Kru (2), Lofa (2), Sinoe (2), Margibi (1), and Rivercess (1) Counties
- ☞ One specimen was collected pending testing
- ☞ Cumulatively, nineteen (19) cases have been reported

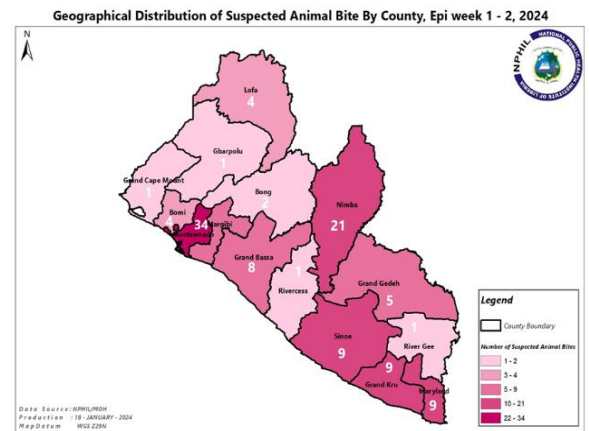
Severe Acute Watery Diarrhea (Suspected Cholera)

- ☞ Six (6) suspected cases were reported from Lofa, (4), and Maryland (2) Counties
- ☞ Two (2) specimens were collected and pending testing
- ☞ Cumulatively, fifteen (15) cases have been reported

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

- ☞ Sixty (60) animal bite cases were reported from Montserrado (13), Nimba (10), Bong (6), Margibi (6), Lofa (5), Grand Bassa (4), Rivercess (4), Grand Kru (4), Bomi (2), Sinoe (2), Maryland (2), Grand Cape Mount (1), and Grand Gedeh (1), counties
- ☞ Proportion of cases jointly investigated: 4/60 (7%)
- ☞ Cumulatively, 177 cases have been reported



Public Health Actions

- ☞ All cases were clinically managed and sent home
- ☞ PEP Administered to 10 persons in Bomi, Bong, Margibi and Nimba counties
- ☞ Dogs retrained and undergoing 14 days follow-up

Meningitis

- ☞ One (1) suspected case was reported from Grand Bassa county
- ☞ Specimen was collected and pending testing
- ☞ Cumulatively, one (2) case reported

Mpox

- ☞ Three (3) suspected cases were reported from River Gee (1), Sinoe (1), and Maryland (1) counties
- ☞ Two (2) specimens were collected and pending testing
- ☞ Cumulatively, five (5) cases reported

Unexplained cluster of deaths

- ☞ Zero cases reported

Unexplained cluster of Health Events

- ☞ Zero cases reported

Events of Public Health Importance

Maternal Mortality

- ☞ Eight (8) deaths were reported Montserrado (4), Margibi (2), Lofa (1), and Nimba (1) Counties
- ☞ Reported causes: PPH (6), and Sepsis (2)
 - Health Facility (7/8) 88%
 - Community (1/8) 12%
- ☞ Cumulatively, sixteen (16) deaths reported
 - Proportion of deaths reviewed (5/16) 31%

Neonatal Mortality

- ☞ Seven (7) death was reported from Montserrado (5), Lofa (1), and Maryland (1) Counties
- ☞ Reported causes: Birth Asphyxia (3), Preterm (3), and Sepsis (1)
- ☞ All deaths occurred in the health facility
- ☞ Cumulatively, thirteen (13) deaths reported

Adverse Events Following Immunization (AEFI)/Adverse Drug Reaction (ADR)

- ☞ Seventeen (17) cases were reported: Grand Kru (8), Grand Cape Mount (3), Gbarpolu (2), Bong (1), Bomi (1), Lofa (1), and Sinoe (1) Counties
- ☞ All reported cases were classified as non-serious
- ☞ Related vaccine:
 - Typhoid Conjugate vaccine (7/17) 41%
 - penta (4/17) 24%
 - Others (6/17) 35%
- ☞ Cumulatively, fifty-five (55) events were reported

Neglected Tropical Diseases

YAWS

- ☞ Zero cases were reported

Buruli Ulcer

- ☞ Zero cases were reported

Border Surveillance Update

A total of 5,536 travelers were recorded for the week with incoming travelers accounting for 56% (3,092/5,536)

Table 6: Border activity at the PoE for incoming and outgoing travelers, Liberia, Epi week 3, 2024

Type of Ports	Point of Entry	Weekly total	Arrival	Departure	Total travelers with YB	Yellow Book Damage	Card Replaced	Travelers Vaccinated against YF & Issued	Alerts detected/ Verified	Evidence of COVID-19 vaccination card/certificate
Airport	James S. Paynes	150	75	75	18	0	0	0	0	20
	Robert Int'l Airport	4480	2571	1909	4459	21	0	0	0	4487
Seaport	Freeport of Monrovia	104	52	52	104	0	0	0	0	104
	Buchanan Port	32	16	16	32	0	0	0	0	32
Ground Crossing	Bo Water Side	495	251	244	478	0	0	0	0	350
	Ganta	104	38	66	60	1	1	9	0	30
	Yekepa	67	39	28	32	0	0	0	0	38
	Loguatu	104	50	54	97	0	0	0	0	58
Total		5,536	3,092	2,444	5,280	22	1	9	0	5,119

Note: Yellow book issue for both arrival and departure; Vaccination coverage for both arrival and departure

Public Health Measures

National level

- ☞ Providing remote technical and operational support to counties
- ☞ Produced and disseminated situation reports (Lassa fever, Measles, and Mpox outbreaks)
- ☞ Produced and disseminate weekly bulletin

County-level

☞ Surveillance

- Publication of situational reports
- Active case search ongoing in affected and surrounding communities

☞ Case Management

- Administration of PEP
- Management of measles and Lassa fever cases ongoing in affected counties

Appendix

Summary of Immediately Reportable Diseases, Conditions, and Events by County

		Bomi	Bong	Gbarpolu	Grand Bassa	Grand Cape Mount	Grand Gedeh	Grand Kru	Lofa	Margibi	Maryland	Montserrado	Nimba	Rivercess	River Gee	Sinoe	Total Weekly	Cumulative Reported	Cumulative Lab-confirmed		
No. of Expected Health District		4	9	5	8	5	6	5	6	4	6	7	11	6	6	10	98				
No. of Health District Reported		4	9	5	8	5	6	5	6	4	6	7	11	6	6	10	98				
Vaccine Preventable Disease	Acute Flaccid Paralysis (Suspected Polio)	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	0	0	0	0	1	2	0	0	0	5	1	1	5	0	0	15	9	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Neonatal Tetanus	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow fever	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0		
	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Viral Hemorrhagic	Dengue fever	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ebola Virus Disease	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lassa fever	A	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	5	5	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza-Like	COVID-19	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Influenza Like Illnesses	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diarrheal Disease	Acute Bloody Diarrhoea (Shigellosis)	A	0	0	0	0	0	2	2	1	0	0	0	1	0	2	8	5	0		
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Severe Acute Watery Diarrhoea (Cholera)	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0		
		D	0	0	0	0	0	0	4	0	2	0	0	0	0	0	6	0	0		
Events of Public Health	Maternal Mortality	D	0	0	0	0	0	0	1	2	0	4	1	0	0	0	8	2			
		D	0	0	0	0	0	0	0	1	0	1	5	0	0	0	7	5			
	AEFI	A	1	1	2	0	3	0	8	1	0	0	0	0	0	1	17	32	0		
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Unexplained Cluster of Health Events/Disease	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Reportable Diseases	Mpox	A	0	0	0	0	0	0	0	0	1	0	0	0	1	1	3	0	0		
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Tuberculosis	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Human Exposure to Rabies (Suspected Human)	A	2	6	0	4	1	1	4	5	6	2	13	9	4	0	2	59	47	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Meningitis	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Unexplained Cluster of deaths	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Neglected T	Buruli Ulcer	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Yaws	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL		3	9	2	5	0	3	0	14	0	11	0	14	0	1	6	129	110	0		

D = Dead **A** = Alive

Notes

- ☞ **Completeness** refers to the proportion of expected weekly IDSR reports received (target: ≥80%)
- ☞ **Timeliness** refers to the proportion of expected weekly IDSR reports received by the next level on time (target: ≥80%). The time requirement for weekly IDSR reports:
 - Health facility - required on or before 5:00 pm every Saturday to the district level
 - Health district - required on or before 5:00 pm every Sunday to the county level
 - County - required on or before 5:00 pm every Monday to the national level
- ☞ **Non-polio AFP rate** is the proportion of non-polio AFP cases per 100,000 among the estimated population under 15 years of age in 2017 (annual target: ≥2/100,000)
- ☞ **Non-measles febrile rash illness rate** refers to the proportion of Negative measles cases per 100,000 population
- ☞ **Annualized maternal mortality rate** refers to the maternal mortality rate of a given period of less than one year and it is the number of maternal deaths per 100,000 live births
- ☞ **Annualized neonatal mortality rate** refers to the neonatal mortality ratio of a given period of less than one year and it is the number of neonatal deaths per 1,000 live births
- ☞ **Epi-linked** refers to any suspected case that has not had a specimen taken for serologic confirmation but is linked to a laboratory-confirmed case
- ☞ **Confirmed case** refers to a case whose specimen has been tested positive or reactive upon laboratory testing, or has been classified as confirmed by either epidemiologic linkage with a confirmed case or clinical compatibility with the disease or condition

Epidemiological bulletin published with support from WHO and CDC

For comments or questions, please contact

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To prevent and control public health threats by promoting healthy outcomes and serving as a source of knowledge

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AFENET-Liberia Office

Data sources

Data and information is provided by the fifteen County Surveillance Officers and National Public Health Reference Laboratory via regular weekly reports, telephone calls and email exchanges. Situations are evolving and dynamic therefore numbers stated are subject to change.