



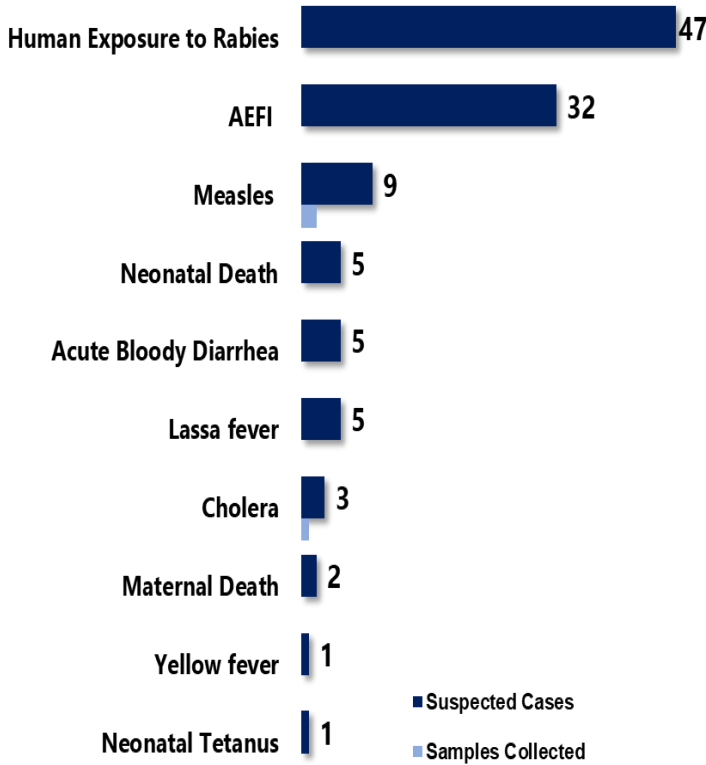
Liberia IDSR Epidemiology Bulletin

Epi-week 1 (January 1-7, 2024)

Country Population: 5,104,413 | Volume 20 Issue 1 | January 1-7, 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 110 events of public health importance including 7 deaths reported
- ◆ Completeness and timeliness of health facility reports were both 97%
- ◆ Ongoing Lassa fever outbreak in 3 Counties
- ◆ Ongoing Measles 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 1, 2024

County	Expected Reports From HF*	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	28	28	28	100	100
Bong	67	67	67	100	100
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	395	375	94	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	947	946	97	97

947(97%)
Health facilities reported IDSR data

98(100%)
Health districts reported IDSR data

946 (97%)
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

- ☛ Nine (9) suspected cases were reported from 6 counties
- ☛ Two (2) specimens were collected and pending testing
- ☛ Five (5) persons were vaccinated

Table 2: Vaccination Status of Measles Cases, Liberia, Epi-week 1, 2024

County	# of cases	Vaccinated	Number of Doses Received		
			One Dose	Two Doses	Doses Not Indicated
Gbarpolu	1	1	1	0	0
Grand Bassa	1	1	0	0	1
Grand Gedeh	2	1	1	0	0
Lofa	1	1	0	0	1
Maryland	3	0	0	0	0
River Gee	1	1	1	0	0
National	9	5	3	0	2

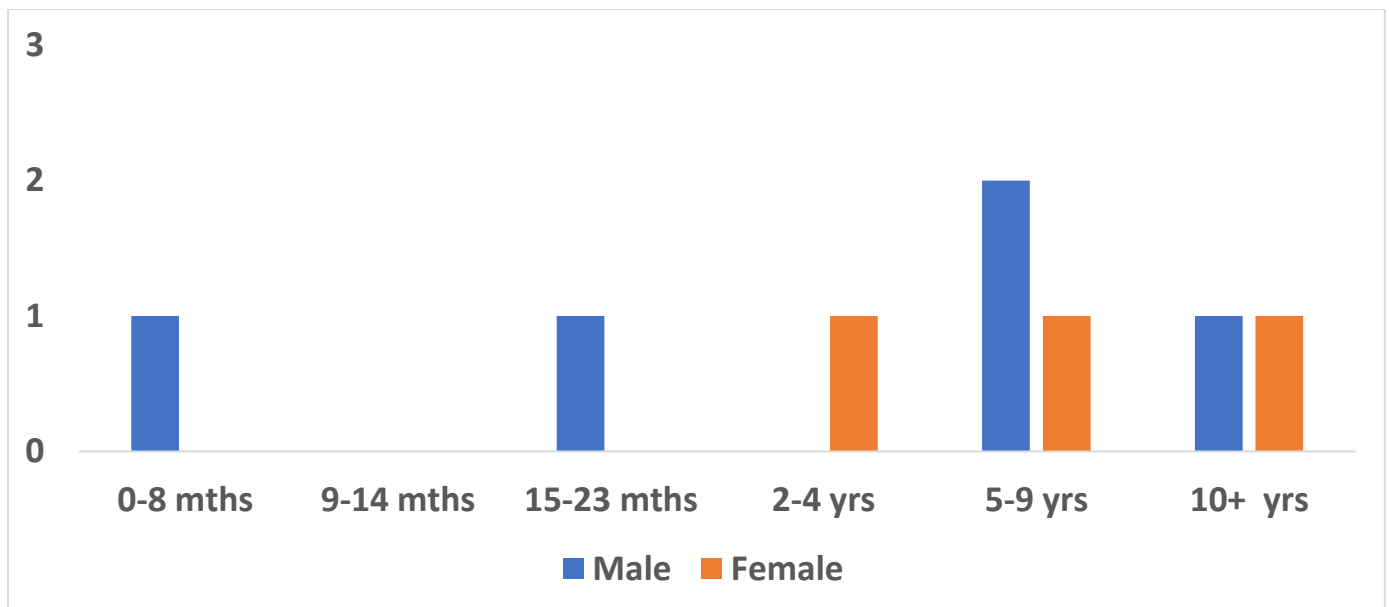


Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 1, 2024

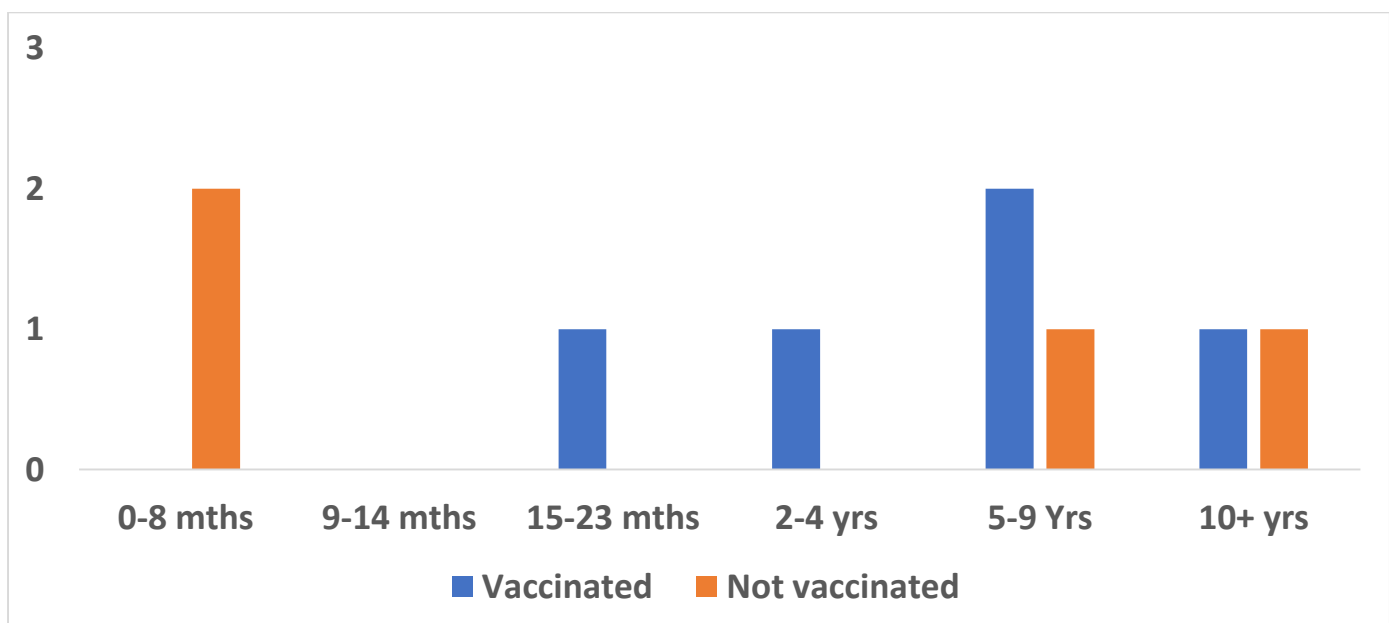


Figure 3: Vaccination Status of Suspected Measles Cases by Age Group, Liberia, Epi-Week 1, 2024

Table 3: Status of Confirmed (lab, clinically confirmed and epi-linked) Measles Cases by County, Liberia, December 13, 2021 January 7, 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	1125	9	1108	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
Gbarpolu	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	12,444	9	12,340	95	3/98

Table 4: Cumulative Distribution of Measles Cases and Deaths, December 13, 2021- January 7, 2024

COUNTY	CUMULATIVE SUSPECTED CASES	CUMULATIVE CONFIRMED CASES	CLASSIFICATION OF CONFIRMED CASES			CLASSIFICATION OF CONFIRMED DEATHS			CUMULATIVE DEATHS	CFR (%)	# CONFIRMED CASES WEEK 50	# CONFIRMED CASES WEEK 51	% CHAGE	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	1145	1125	24	308	793	0	0	0	0	0	8	9	13	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
Grd Cape Mt	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	13,085	12,435	504	2,927	9,005	5	68	22	95	7.8	8	9		

Public Health Response

I. Coordination

- ☞ Response is being coordinated by the Maryland County Health Team and PIH

II. Epidemiological Surveillance

- ☞ Active case search and contact tracing ongoing in Maryland County

III. Case management

- ☞ Case management ongoing in Pleebo and Karluway-II

IV. Immunization

- ☞ Routine immunization ongoing in affected communities in Maryland County

V. Laboratory

- ☞ Five hundred seven (507) cases have been confirmed by the National Public Health Reference Laboratory from December 13, 2021 – January 3, 2024

VI. Risk Communication and Community Engagement

- ☞ Community engagement health education ongoing in Pleebo and Karluway-II

Challenges

- ☞ Limited support for response in Maryland County

Acute Flaccid Paralysis (AFP)

- ☞ Zero suspected cases were reported

Neonatal Tetanus

- ☞ One case was reported from Rivercess County
- ☞ 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), Bong (1), and Maryland (1) Counties
- ☞ Specimens were collected: 1 tested negative and 4 pending
- ☞ Cumulatively, five (5) suspected cases have been reported
 - Proportion of suspected cases with a sample collected (5/5) 100%
 - Proportion of suspected cases with sample tested (1/5) 20% (negative 1)

Current Outbreak

- ☞ No new confirmed cases were reported
- ☞ A total of 175 contacts under follow up
- ☞ Cumulative Case Fatality Rate (CFR): 29% (32/109)
- ☞ Three counties currently in Outbreak (Bong, Nimba, and Montserrado)

Table 5: Summary of Lassa fever Outbreak, Liberia, January 6, 2022- January 7, 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
	Bushrod	13-Feb-23	15	2	0	1	50%	29	21	0	0	0	0	Completed	Over
	Central Monrovia	3-Mar-23	29	1	0	1	100%	28	27	0	0	0	0	Completed	Over
Bong	Suakoko	21-Apr-23	155	45	2	9	20%	473	191	6	18	44	366	Active	Ongoing
	Sanoyea	19-Sep-23	2	2	0	1	50%	36	18	0	0	0	37	Active	Ongoing
	Kokoya	3-Oct-23	1	1	0	0	0%	5	0	0	0	5	0	Active	Ongoing
	Jorquelleh	15-Oct-23	12	13	1	3	23%	121	86	3	3	41	128	Active	Ongoing
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	Sanniquellie-Mah	6-Feb-23	42	2	0	0	0%	43	35	8	0	0	43	Completed	Over
	Tappita	20-Nov-23	14	3	0	3	100%	58	29	4	0	22	36	Active	Ongoing
	Yarwin Mehnssohoh	5-Dec-23	1	1	0	1	100%	14		0	0	14	0	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	0	Active	Ongoing
Total			370	107	3	32	30%	1098	474	61	21	126	800		

Public Health Measures

- 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 report development, etc.)

I. Surveillance

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

II. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- A total of 96 Lassa fever cases have been confirmed since this outbreak

III. Case management and IPC

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

IV. Environmental and Vector Control

- Clean-up campaigns and rodent control measures is ongoing Bong County

V. Risk Communication and Community Engagement

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

Yellow fever

- ☞ One suspected case was reported from Maryland County
- ☞ Specimen was collected and pending testing
- ☞ Cumulatively, one case has been reported
 - Proportion of suspected cases with samples collected (1/1) 100%

Dengue Fever

- ☞ Zero suspected cases were reported

Ebola Virus Disease

- ☞ Zero cases were reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- ☞ Five (5) cases were reported from Lofa (3), Grand Kru (1), and Sinoe (1) Counties
- ☞ No specimens were collected
- ☞ Cumulatively, five cases have been reported

Severe Acute Watery Diarrhea (Suspected Cholera)

- ☞ Three (3) suspected cases were reported from Lofa, Grand Kru, and Sinoe Counties
- ☞ One specimen was and pending testing
- ☞ Cumulatively, three cases have been reported

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

- ☞ Forty-seven (47) animal bites reported from Montserrado (9), Nimba (8), Grand Kru (6), Margibi (4), Sinoe (4), Grand Gedeh (4), Maryland (4), Grand Bassa (2), Bong (2), Bomi (1), Rivercess (1), Grand Cape Mount (1), and Lofa (1) Counties

Public Health Actions

- ☞ Ongoing monitoring and follow-up of cases

Meningitis

- ☞ Zero suspected cases were reported

Mpox

- ☞ Zero suspected cases were reported

Unexplained cluster of deaths

- ☞ Zero cases reported

Unexplained cluster of Health Events

- ☞ Zero cases reported

Events of Public Health Importance

Maternal Mortality

- ☞ Two (2) deaths were reported Nimba County
- ☞ Reported causes: Cardio pulmonary arrest and one pending
- ☞ Reporting Site:
 - Health Facility (2/2) 100%
- ☞ Cumulatively, two deaths reported
 - No death reviewed

Neonatal Mortality

- ☞ Five (5) deaths were reported from Nimba, Grand Cape Mount, Maryland, Lofa, and Bong Counties
- ☞ Reported causes: Birth Asphyxia (3) and Low birth weight (2)
- ☞ Reporting site:
 - Health facility: (5/5) 100%
- ☞ Cumulatively, five (5) deaths reported

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

- ☞ Thirty-two (32) cases were reported: Sinoe (15), Gbarpolu (7), Bomi (3), Grand Kru (2), Rivercess (2), Grand Gedeh (1), Maryland (1), and Montserrado (1) Counties
- ☞ All reported cases were classified as non-serious
- ☞ Related vaccine:
 - Penta (5/32) 16%
 - Others (4/32) 13%
- ☞ Related Drug:
 - Mectizan (23/32) 72%
- ☞ Cumulatively, thirty-two (32) events were reported

Neglected Tropical Diseases

YAWS

- ☞ Zero cases were reported

Buruli Ulcer

- ☞ Zero cases were reported

Border Surveillance Update

A total of 4,787 travelers were recorded for the week with incoming travelers accounting for 47% (2,230/4,787)

Table 6: Border activity at the PoE for incoming and outgoing travelers, Liberia, Epi week 1, 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 book	Alerts detected/ Verified	Evidence of COVID-19 vaccination card/certificate
Airport	James S. Paynes	99	41	58	25	0	0	0	0	25
	Robert Int'l Airport	3742	1817	1925	3723	25	19	0	0	3717
Seaport	Freeport of Monrovia	92	46	46	92	0	0	0	0	92
	Buchanan Port	28	14	14	28	0	0	0	0	28
Land Crossing	Bo Water Side	440	147	293	426	0	14	0	0	240
	Ganta	216	108	108	77	4	4	0	0	49
	Yekepa	57	28	29	16	0	0	0	0	23
	Loguatu	113	29	84	59	0	0	0	0	42
Total		4,787	2,230	2,557	4,446	29	37	0	0	4,216

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

Public Health Measures

National level

- ☞ Continue to distribute surveillance weekly ledgers and triplicate Lab alert and submission forms to the counties
- ☞ Providing remote technical and operational support to counties
- ☞ Produced and disseminated situation reports (Lassa fever, Measles, and Mpox outbreaks)

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 Diseases	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
	Measles	A	0	0	1	1	0	2	0	1	0	3	0	0	0	1	0	9	9	0
		D	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	1	0	0	1	1	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow fever	A	0	0	0	0	0	0	0	0	1	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	
Viral Hemorrhagic Diseases	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
	Ebola Virus Disease	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
	Lassa fever	A	0	1	0	0	0	0	0	0	1	0	3	0	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
Influenza-Like Diseases	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
	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
Diarrheal Diseases	Acute Bloody Diarrhoea (Shigellosis)	A	0	0	0	0	0	1	3	0	0	0	1	0	0	0	5	5	0	
		D	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	1	1	0	0	0	0	0	0	1	3	3	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Events of Public Health Interest	Maternal Mortality	D	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2		
	Neonatal Mortality	D	0	1	0	0	1	0	1	0	0	1	1	0	0	0	5	5		
	AEFI	A	3	0	7	0	0	1	2	0	0	1	1	0	2	0	15	32	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	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	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
	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	1	2	0	2	1	4	6	1	4	4	9	8	1	0	4	47	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 Tropical Diseases	Buruli Ulcer	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
	Yaws	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
TOTAL		4	4	8	3	0	7	0	7	0	10	0	15	0	1	20	110	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

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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.