



Liberia IDSR Epidemiology Bulletin

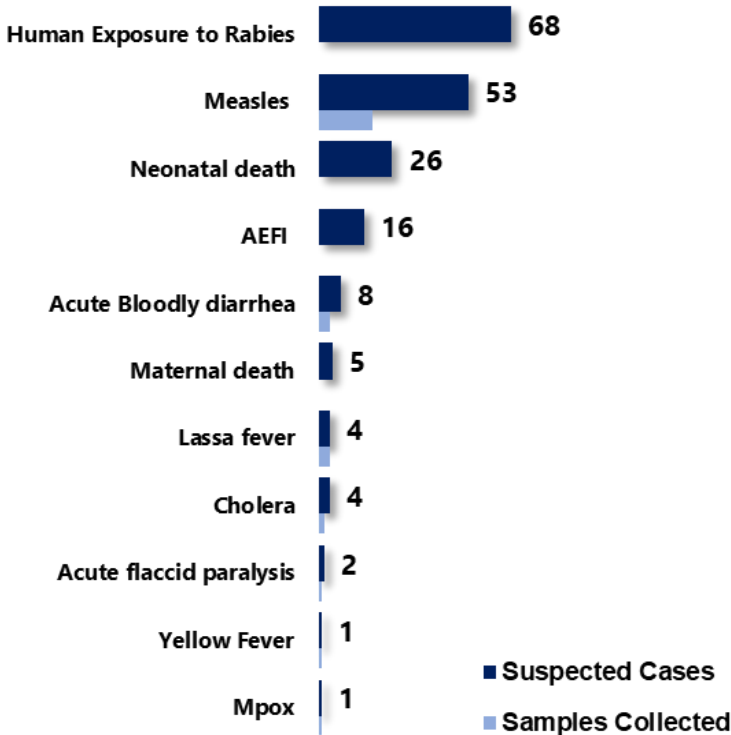
Epi-week 17 (April 22-28, 2024)

Country Population: 5,104,413 || Volume 20 Issue 17 || April 22-28, 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 **188 events** of public health importance including **31 deaths** reported
- ◆ **Completeness and timeliness** of health facility reports were both **99%**
- ◆ **Ongoing Lassa fever outbreak** in four Counties
- ◆ **Ongoing Measles outbreak** in seven Counties

Adverse Events Following Immunization/Adverse Drug Reaction (AEFI)

Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 17, 2024

County	Expected Reports from HF*	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	29	29	29	100	100
Bong	66	65	65	98	98
Gbarpolu	18	18	18	100	100
Grand Bassa	38	38	38	100	100
Grand Cape Mount	36	36	36	100	100
Grand Gedeh	25	25	25	100	100
Grand Kru	25	25	25	100	100
Lofa	60	60	60	100	100
Margibi	62	62	62	100	100
Maryland	27	27	27	100	100
Montserrado	391	385	383	98	98
Nimba	102	102	102	100	100
Rivercess	21	21	21	100	100
River Gee	21	21	21	100	100
Sinoe	41	41	36	100	88
Liberia	962	955	948	99	99

955 (99%)
Health facilities reported IDSR data

98(100%)
Health districts reported IDSR data

948(99%)
Health facilities reported timely IDSR

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

Legend:



Vaccine-Preventable Diseases

Measles

- ☞ Fifty-three (53) suspected cases were reported (see table below)
 - Nineteen (19) specimens were collected and pending testing
 - The proportion of suspected cases vaccinated (41/53) 77%
- ☞ Cumulatively, eight hundred thirty (830) cases reported
 - Proportion of suspected cases with sample collected (349/824) 42%
 - Proportion of suspected cases with sample tested (275/349) 79% (negative 173, confirmed 102)
 - Proportion of negative Measles cases tested for Rubella (148/158) 94% (negative 132, confirmed 16)

Table 2: Distribution and Vaccination Status of Measles Cases, Liberia, Epi-week 17, 2024

County	# of cases	Vaccinated	Number of Doses Received		
			One-Dose	Two Doses	Doses Not Indicated
Bong	1	1	1	0	0
Grand Bassa	1	0	0	0	0
Grand Cape Mount	8	7	3	4	0
Grand Gedeh	6	5	4	0	1
Grand Kru	6	4	2	1	1
Lofa	5	5	2	1	2
Maryland	3	2	0	2	0
Montserrado	4	4	4	0	0
Nimba	10	5	4	0	1
River Gee	7	6	1	0	5
Sinoe	2	2	2	0	0
Total	53	41	23	8	10

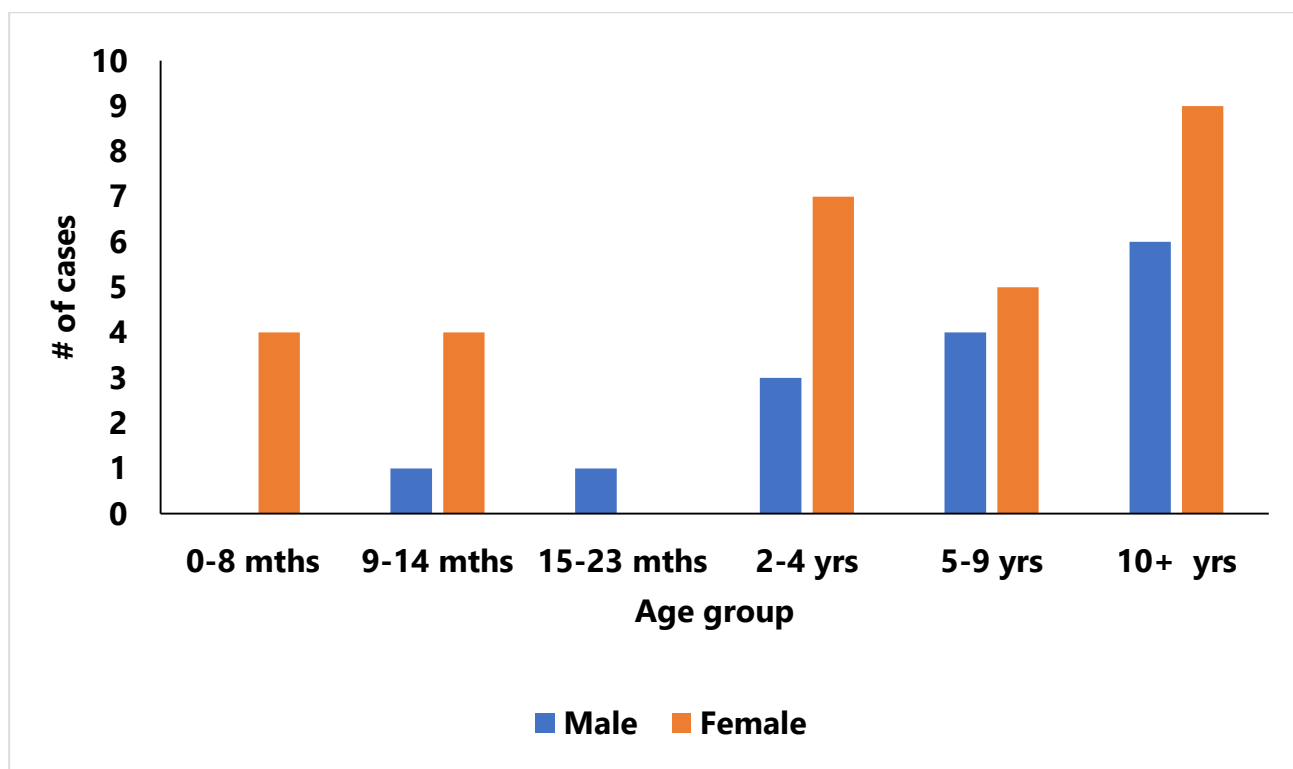


Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 17, 2024

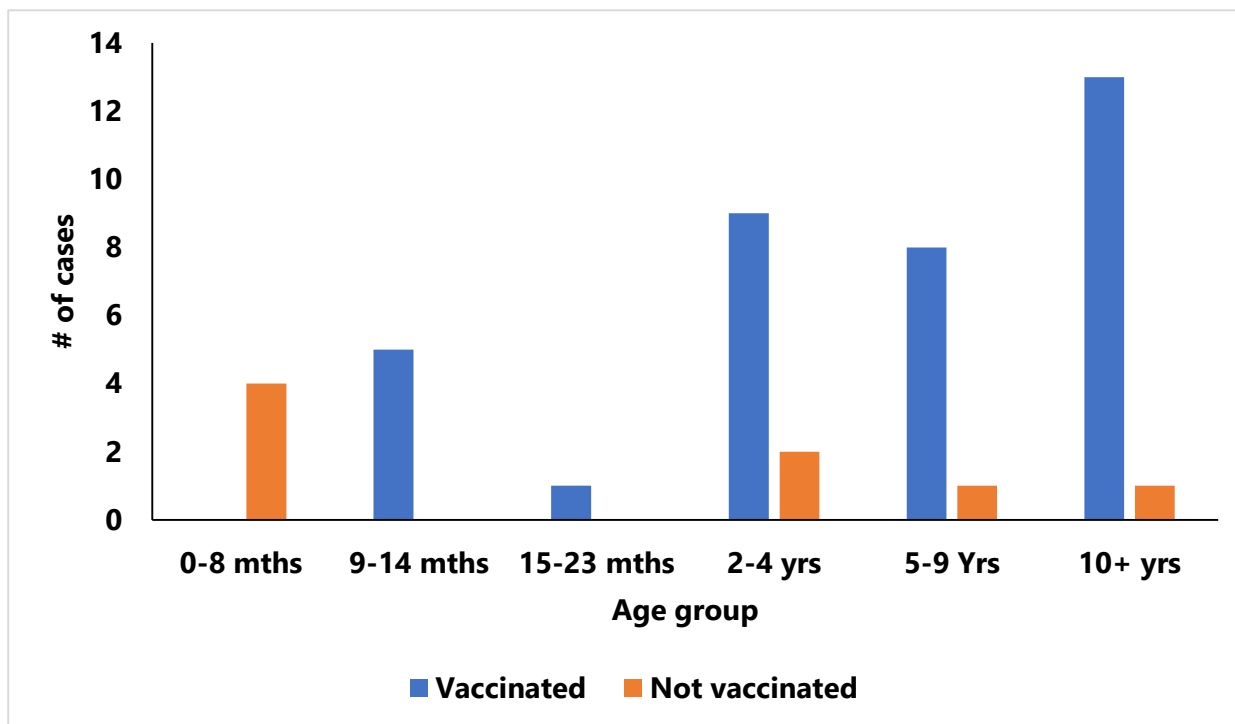


Figure 3: Vaccination Status of Suspected Measles Cases by Age Group, Liberia, Epi-Week 17, 2024

Table 3: Status of Confirmed (lab, clinically confirmed, and epi-linked) Measles Cases by County, Liberia, December 13, 2021- April 28, 2024

COUNTY	CUMULATIVE SUSPECTED CASES	CUMULATIVE CONFIRMED CASES	CLASSIFICATION OF CONFIRMED CASES			CLASSIFICATION OF CONFIRMED DEATHS			CUMULATIVE DEATHS	CFR (%)	# CONFIRMED CASES WEEK 15	# CONFIRMED CASES WEEK 16	Outbreak Status
			Lab confirmed	Epi Linked	Clinically Compatible	Lab confirmed	Epi Linked	Clinically Compatible					
Montserrado	5,456	5,373	148	1658	3,567	3	61	5	69	1.3	0	0	Ended
Nimba	1,232	1,207	59	239	909	0	1	3	4	0.4	9	9	Ongoing
Margibi	827	803	37	136	630	0	0	1	1	0.1	0	0	Ended
Grand Bassa	962	924	41	212	671	1	0	6	7	0.9	0	0	Ended
Lofa	358	289	35	66	188	0	0	0	0	0	0	5	Ongoing
Bong	603	578	25	21	532	0	1	2	3	0.5	0	0	Ended
Maryland	1270	1260	30	343	887	0	0	0	0	0	7	3	Ongoing
Grand Gedeh	718	570	64	111	395	0	0	0	0	0	1	2	Ongoing
Sinoe	289	236	48	84	104	0	0	0	0	0	5	0	Ongoing
Bomi	183	147	37	27	83	1	2	2	5	3	0	0	Ended
Grd Cape Mt	215	187	23	18	146	0	2	1	3	1.6	0	0	Ended
Grand Kru	1101	1,071	49	190	832	0	0	2	2	0.2	8	6	Ongoing
Gbarpolu	67	46	5	2	39	0	0	0	0	0	0	0	Ended
Rivercess	112	84	26	54	4	0	1	0	1	1.1	0	0	Ended
River Gee	143	112	30	32	50	0	0	0	0	0	5	5	Ongoing
Total	13,536	12,887	657	3,193	9,037	5	68	22	95	7.8	35	30	

Table 4: Status of Confirmed Measles Cases by County, Liberia, December 13, 2021 – April 28, 2024

County	Total Cases	Active	Recovery	Deaths	# of Districts
Montserrado	5,373	0	5,304	69	0/7
Nimba	1,207	9	1,161	4	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	1,260	3	1247	0	3/6
Lofa	294	5	284	0	1/6
Grand Kru	1,071	6	1041	2	3/5
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	570	2	563	0	2/6
River Gee	112	5	98	0	1/6
Sinoe	231	0	231	0	1/10
Total	12,887	30	12,759	95	15/98

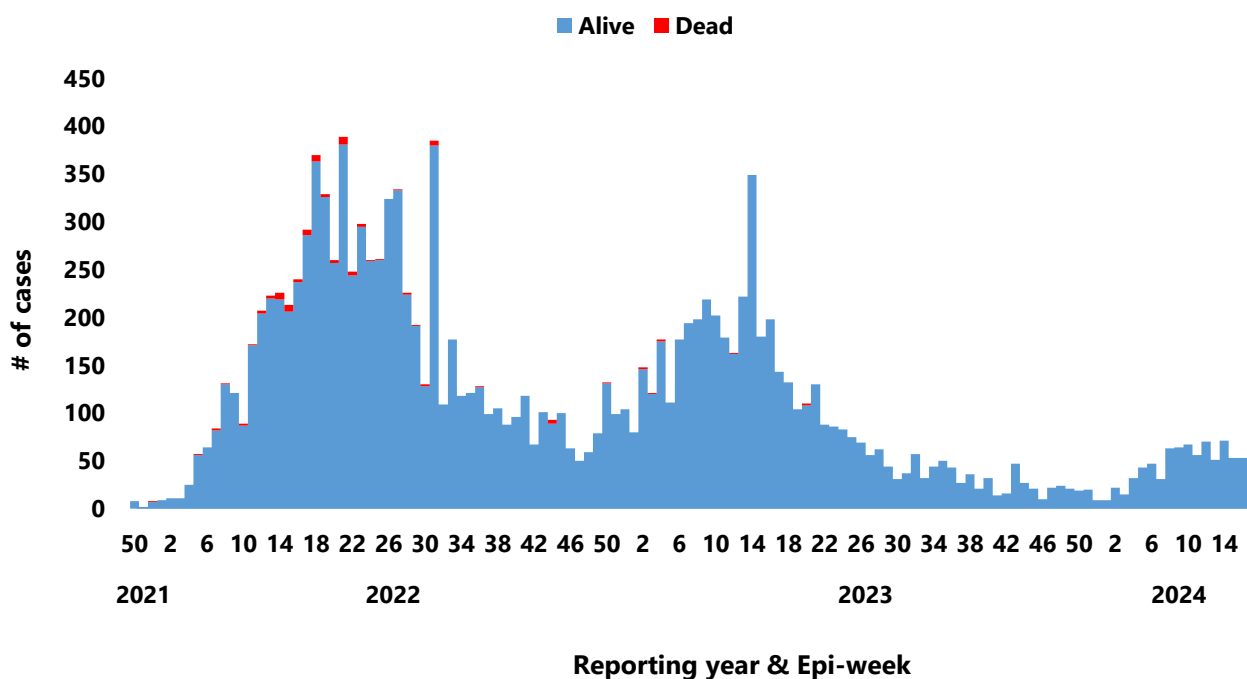


Figure 4: Epi Curve of Measles Cases Liberia, Epi week 50, 2021 – Epi week 17, 2024

I. Coordination

- IMS meetings are being held to coordinate and mobilize resources in affected Counties.

II. Epidemiological Surveillance

- Active case search and contact tracing ongoing in affected Counties/Districts; Maryland (Pleebo, Karluway-II, and Harper), River Gee (Sarbo), Nimba (Saclepea-Mah, Zoe-Geh, and Yarwin Mehnsonnoh), Grand Kru (Buah, Dorbor, Trench, and Barclayville), Sinoe (Kpanyan), Lofa (Voinjama), and Grand Gedeh (Konobo, and Tchien).

III. Case management

- Cases are being treated with Paracetamol, Amoxicillin/Erythromycin/Azithromycin, Vitamin A, Tetracycline eye ointment, Paracetamol/Ibuprofen/Diclofenac and Calamine Lotion.

IV. Immunization

- Routine immunization intensified in affected districts (Pleebo, Harper, Karluway-II, Tchien, Konobo, Buah, Dorbor, Barclayville, Saclepea-Mah, and Putu) in Maryland, Grand Gedeh, Grand Kru, Nimba, and River Gee Counties.
- Conducted a mini measles campaign and vaccinated 129 children under 2 years male-60 (46.5%, and female 69 (53.5%) in Grand Kru County.

V. Laboratory

- The NPHRL has confirmed six hundred fifty-seven (657) cases from December 13, 2021 – April 28, 2024.

VI. Risk Communication and Community Engagement

- Continual community advocacy meetings with local leaders and family members in the affected communities.
- Awareness and health education on the spread and prevention of Measles ongoing at health facilities and communities
- Community engagement meetings in the affected communities are ongoing

Challenges

- No support for a radio talk show (Grand Kru County)
- Limited supply of essential medications and medical supplies for case management
- Insufficient essential medications such as; Amoxicillin, Erythromycin, Vitamin A, Calamine Lotion, and Tetracycline eye ointment

Acute Flaccid Paralysis (AFP)

- ☞ Two (2) cases were reported from Grand Cape Mount and Bong Counties
 - Specimens were collected and pending shipment
- ☞ Cumulatively, thirty (30) cases have been reported
 - Fourteen (14) tested negative, 16 pending testing

Neonatal Tetanus

- ☞ Zero cases were reported
- ☞ Cumulatively, nine (9) cases have been reported including four (4) deaths

Influenza-Like Illnesses

Coronavirus Disease (COVID-19)

- ☞ Zero suspected cases were reported
- ☞ Cumulatively, two (2) cases have been reported

Influenza

- ☞ Zero cases were reported
- ☞ Cumulatively, seventy (70) suspected cases reported
 - Seventy (70) specimens were collected: 65 tested negative, 5 specimens were discarded

Viral Hemorrhagic Fever

Lassa fever

- ☞ Four (4) suspected cases were reported from Grand Bassa (2), Bong (1), and Montserrado (1) Counties
 - All specimens were collected and tested: 2 positives including 1 death, 2 negative
- ☞ Cumulatively, seventy-two (72) suspected cases have been reported
 - Proportion of suspected cases with the sample collected (72/72) 100%
 - Proportion of suspected cases with sample tested (69/72) 96%
 - Confirmed 9 including 3 deaths, negative 60, and 3 discarded
 - Case fatality rate: (3/9) 33.3%

Outbreak

- ☞ Two (2) new confirmed cases including one death reported
- ☞ Nineteen (19) contacts including 9 healthcare workers line-listed
- ☞ Total of 103 contacts including 19 HCWs line-listed
 - Twenty-one (21) completed including 10 HCWs completed 21 days follow up
 - Eighty-two (82) contacts under 21 days of follow-up

A total of 147 confirmed cases were reported including 44 deaths

- ☞ Cumulative Case Fatality Rate (CFR): 30% (44/147)

Four counties are currently in the outbreak

Table 5: Summary of Lassa fever Outbreak, Liberia, January 6, 2022- April 28, 2024

County	Outbreak Districts	Outbreak Start Date	Total suspected	Total confirmed	HCWs confirmed	Total Deaths	Deaths in HCWs	CFR %	Total Contacts	# HCW contacts	Contacts became cases	Contacts under follow up	Contacts completed	Days in countdown	Outbreak Status
Montserrado	Bushrod	13-Feb-23	17	1	0	0	0	0%	29	21	0	0	29	Completed	Over
	Central Monrovia	27-Nov-23	1	2	0	1	0	50%	49	0	0	0	49	Completed	Over
	Central Monrovia	3-Mar-23	38	2	0	1	0	50%	28	27	0	0	28	Completed	Over
	Bushrod	30-Apr-24	2	1	0	0	0	0%	14	6	0	14	0	Active	Ongoing
Bong	Suakoko	21-Apr-23	192	54	18	13	2	24%	496	114	6	0	417	Completed	Over
	Jorquelleh	15-Oct-23	14	6	3	1	1	17%	121	86	3	0	169	Completed	Over
	Suakoko	23-Feb-24	12	2	0	0	0	0%	21	10	0	0	16	Active	Ongoing
	Salala	8-Mar-24	2	2	0	1	0	50%	21	0	0	21	0	Active	Ongoing
	Jorquelleh	11-Apr-24	2	1	0	1	0	0%	22	17	0	22	0	Active	Ongoing
Grand Bassa	District 3A&B	21-Aug-23	87	44	0	10	0	23%	177	40	40	0	159	Completed	Over
	Buchanan	11-Aug-23	2	1	0	1	0	100%	4	2	0	0	4	Completed	Over
	District 3A&B	30-Apr-24	2	1	0	1	0	100%	5	3	0	5	0	Active	Ongoing
Nimba	Saclepea-Mah	21-Nov-23	4	2	0	1	0	50%	5	0	0	0	5	Completed	Over
	Sanniquellie-Mah	6-Feb-23	42	15	0	6	0	40%	43	35	8	0	43	Completed	Over
	Tappita	20-Nov-23	12	5	0	3	0	60%	88	39	4	0	77	Completed	Over
	Bain-Garr	1-Jun-23	24	6	0	3	0	50%	61	25	0	0	31	Completed	Over
	Bain-Garr	15-Apr-24	1	1	0	0	0	0%	14	0	0	14	0	Active	Ongoing
River Gee	Putupo	25-Nov-22	1	1	0	1	0	100%	14	0	0	0	14	Completed	Over
Total			455	147	21	44	3	30%	1212	425	61	76	1041		

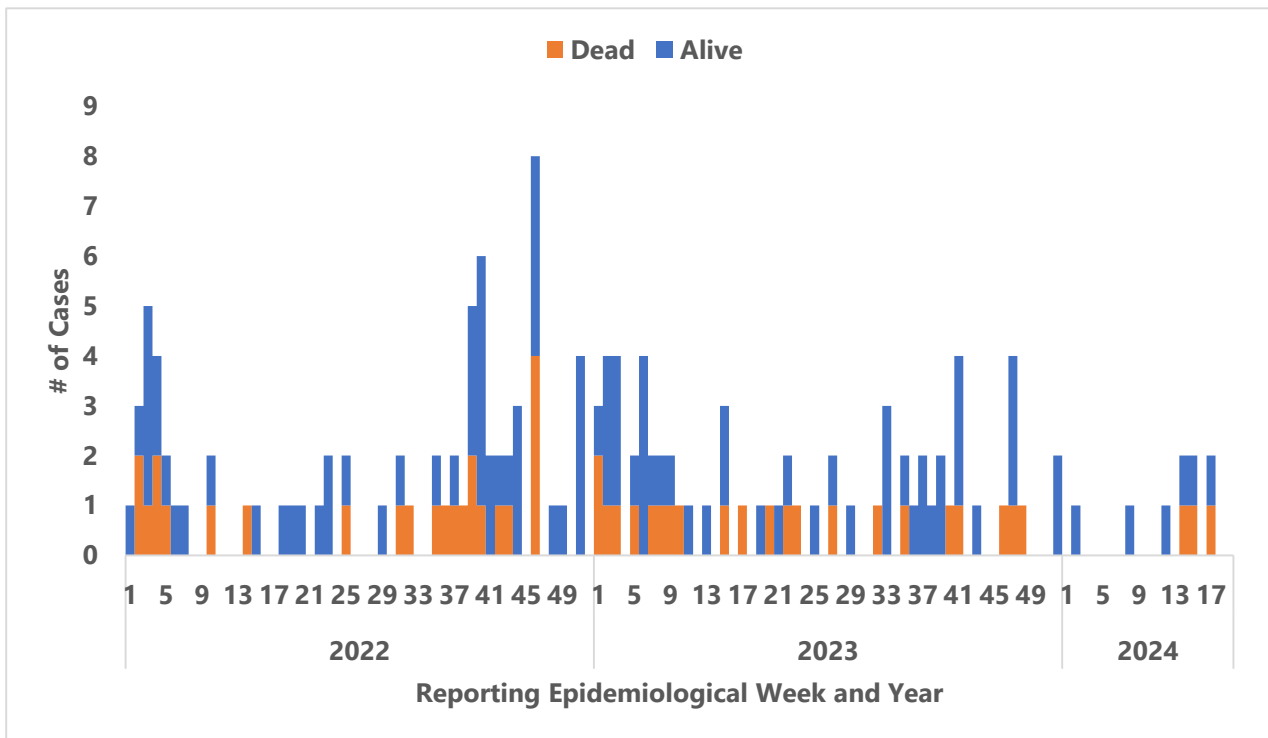


Figure 5: Epi-curve of Lassa fever cases, Liberia, January 6, 2022- April 28, 2024

Public Health Measures

I. Coordination

- The National Public Health Institute of Liberia (NPHIL) and the Ministry of Health (MOH) are providing technical support to the surveillance team with support from partners.

II. Surveillance

- Active case search ongoing in affected communities and districts
- Fifty-five (55) contacts line listing and under 21 days follow ongoing
- Weekly sit-reps developed and disseminated to stakeholders

III. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- A total of 147 Lassa fever cases have been confirmed since this outbreak

IV. Case management and IPC

- Ribavirin supply in the country is being distributed for treatment of Lf cases to affected counties
- Ribavirin is being administered to the current confirmed case

Challenges

- Limited supply of IPC materials in affected counties
- Limited logistics (gasoline, communication cards, fuel, etc) to support active case search and contact tracing in the affected county
- Limited stationeries in the EOC to produce case alert forms, contact tracing forms, and other tools for investigation

Yellow fever

- ☞ One (1) suspected case was reported from Rivercess Counties
 - Specimen was collected and pending testing
- ☞ Cumulatively Thirty-six (36) cases have been reported
 - Proportion of suspected cases with samples collected (35/36) 97%, however, 3 samples were discarded*
 - Proportion of suspected cases with samples tested (29/35) 83% (negative 29)
 - Three (3) samples pending testing

Dengue

- Zero cases were reported
- Cumulatively, three (3) suspected cases were reported

Ebola Virus Disease

- Zero cases have been reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- Eight (8) cases were reported from Sinoe (2), Rivercess (2), Grand Kru (1), River Gee (1), Lofa (1), and Grand Gedeh (1) Counties
 - Four (4) specimens were collected and pending testing
- Cumulatively, one hundred fifty (150) cases have been reported
 - 74 specimens collected, 57 reached the Lab
 - 44 tested negative, 3 rejected, 10 pending testing

Severe Acute Watery Diarrhea (Suspected Cholera)

- Four (4) cases were reported from Gbarpolu (1), Lofa (1), Bong (1), and Maryland (1) Counties
 - Two specimens were collected and pending testing
- Cumulatively, one hundred five (105) cases have been reported
 - 57 specimens collected, 35 reached the Lab
 - 23 tested negative, 3 rejected, and 9 pending testing

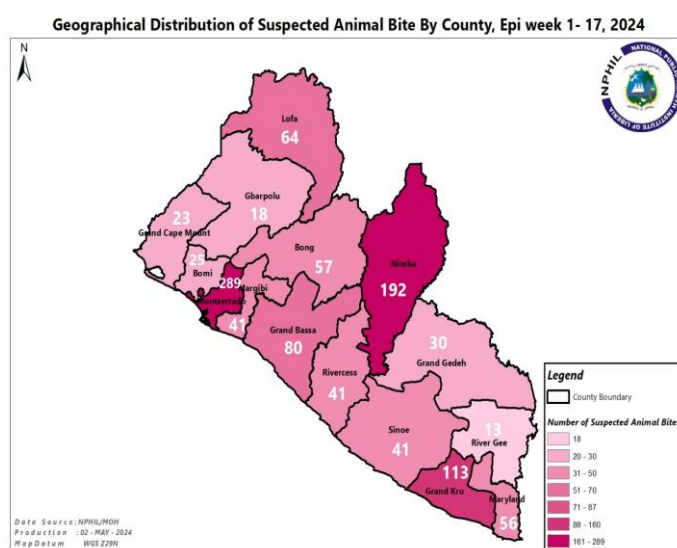
Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

- Sixty-eight (68) animal bite cases were reported from Montserrado (17), Grand Kru (15), Nimba (7), Bong (5), Lofa (5), Rivercess (4), Maryland (4), Grand Bassa (3), Grand Gedeh (3), Sinoe (3), Grand Cape Mount (1), and Bomi (1) Counties
- All bites were attributed to dog
- Proportion of cases investigated: 10/68 (15%)
- Proportion of dogs vaccinated: 0/10 (0%)
- Cumulatively, 1,090 cases have been reported

Public Health Actions

- All cases were clinically managed and sent home
- PEP Administered to 10 persons (15%): Montserrado, Lofa, Maryland, Grand Bassa, Sinoe, and Bong Counties
- Twenty-three (23) dogs were restrained and underwent 10-14 days' follow-up
 - All cases were investigated only by the human health surveillance team



Meningitis

- Zero cases reported
- Cumulatively, fourteen (14) suspected cases have been reported
 - Proportion of specimen collected (12/14) 86%
 - Proportion of specimens tested (10/12) 83% (9 negative, 1 positive)

Mpox

- ☞ One case was reported from Grand Kru County
- ☞ Cumulatively, thirty (30) suspected cases have been reported, 4 tested positive, 17 were negative, 6 discarded, 2 pending testing, and 1 rejected

Unexplained cluster of deaths

- ☞ Zero cases reported

Unexplained cluster of Health Events

- ☞ Zero cases reported

Other Events of Public Health Importance

Maternal Mortality

- ☞ Five (5) deaths were reported from Montserrado (2), Margibi (1), Grand Cape Mount (1), and Bong (1) Counties
- ☞ Reported causes: Sepsis (2), PPH (1), Eclampsia (1), and Hypovolemic shock (1)
- ☞ Reporting sites
 - Health facility (4/5) 80%
 - Community (1/5) 20%
- ☞ Cumulatively, ninety-seven (97) deaths reported
 - Proportion of deaths reviewed (29/97) 30%.

Neonatal Mortality

- ☞ Forty-six (46) deaths were reported from Montserrado (28), Maryland (8), Nimba (4), Grand Kru (2), Sinoe (2), Margibi (1), and Grand Gedeh (1) Counties
- ☞ Eighteen (18) of these cases were backlogs
- ☞ Reported causes: Birth asphyxia (23), Neonatal sepsis (18), Prematurity (3), and pending (2)
 - Reported sites:
 - All deaths occurred in the health facility
- ☞ Cumulatively, two hundred forty-nine (249) deaths reported
 - Proportion of deaths reviewed (55/249) 22%

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

- ☞ Sixteen (16) cases were reported from Sinoe (9), Grand-Bassa (2), Montserrado (2), River Gee (1), Lofa (1), and Grand Cape Mount (1) Counties
- ☞ All reported cases were classified as non-serious
- ☞ Related vaccine:
 - Penta (11/16) 69%
 - Measles (4/16) 25%
 - BCG (1/16) 6%
 - IPV (1/16) 6%
- ☞ Cumulatively, three hundred eighty-two (382) events were reported and all were classified as non-serious.

Neglected Tropical Diseases

YAWS

- ☞ Zero cases were reported

Buruli Ulcer

- ☞ Zero cases were reported

Border Surveillance Update

A total of 5060 travelers were recorded for the week with incoming travelers accounting for 52% (2882/5526)

Table 7: Border activity at the PoE for incoming and outgoing travelers, Liberia, Epi week 17

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
Airport	James S. Paynes	42	21	21	1	0	0	0	0
	Robert Int'l Airport	4074	2150	1924	4025	2	49	7	0
Seaport	Freeport of Monrovia	414	207	207	414	0	0	0	0
	Buchanan Port	40	20	20	40	0	0	0	0
Ground Crossing	Bo Water Side	420	179	241	408	0	12	7	0
	Ganta	97	57	40	56	0	0	0	0
	Yekepa	60	34	26	11	0	0	0	0
	Loguatu	379	214	165	335	0	0	0	0
Total		5,526	2,882	2,644	5,290	2	61	14	0

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 disseminated 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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	30	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	0	1	0	1	8	6	6	5	0	3	4	10	0	7	2	53	824	102	
		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	0	9	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
	Yellow fever	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	36	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza-Like Viral Hemorrhagic Disease	Dengue fever	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	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	1	0	2	0	0	0	0	0	0	1	0	0	0	0	4	54	7	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	
Influenza-Like Disease	COVID-19	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
		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	69	6	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
Diarrheal Disease	Acute Bloody Diarrhoea (Shigellosis)	A	0	0	0	0	1	1	1	0	0	0	0	2	1	2	8	150	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	1	1	0	0	0	1	0	1	0	0	0	0	0	0	4	105	0	
		D	0	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	1	0	0	1	0	0	1	0	2	0	0	0	0	5	97			
	Neonatal Mortality	D	0	1	0	0	0	3	2	0	8	11	1	0	0	0	26	203			
	AEFI	A	0	0	0	2	1	0	1	0	0	2	0	0	1	9	16	398	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	1	0	0	0	0	0	0	0	0	1	30	4		
		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	20	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	5	0	3	1	3	15	5	0	4	17	7	4	0	3	68	1,090	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
	Meningitis	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1	
		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		1	11	1	8	0	10	0	15	0	16	0	18	0	9	16	188	3148	126		

D = Dead A = Alive

Notes

- ☞ **Completeness** refers to the proportion of expected weekly IDSR reports received (target: $\geq 80\%$)
- ☞ **Timeliness** refers to the proportion of expected weekly IDSR reports received by the next level on time (target: $\geq 80\%$). 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: $\geq 2/100,000$)
- ☞ **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

Ralph W. Jetoh, MD, MPH
Director

Infectious Disease and Epidemiology Division
National Public Health Institute of Liberia
Republic of Liberia

Email: ralphica2000@gmail.com

Phone: +231 886526388/777372655

Website: www.nphil.gov.lr

National Public Health Institute of Liberia (NPHIL)

MISSION

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

VISION

A center of excellence to create health outcomes for Liberians through a strong preventive health system and expertise

EDITORIAL TEAM

DIDE / NPHIL

A. N. Mianah
T. O. Yeabah
J. S. Kokro
M.G. Jeuronlon
E. Dwalu
A.B. Corvah
G. B. Williams
S. K. Zayzay
L. W. Colee
M. Tegli
T. L. Hall
S. L. Flomo
M. S. Quiah
J. O. Abel
P. J. Thomas
H. M. Sherman
M.D. Vaye
N. K. Dovillie
A. Coker
S. Nuwolo
M. Gbeyeah

Ministry of Health
WHO Liberia Office
US CDC Liberia Office
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.