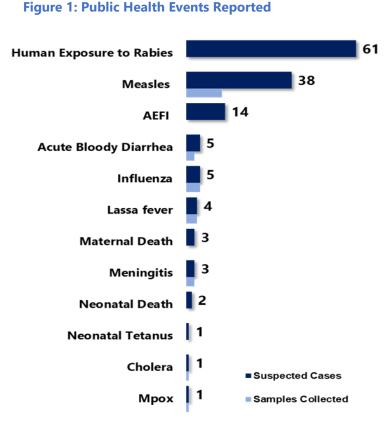
Liberia IDSR Epidemiology Bulletin

Epi-week 5 (January 29-Feb 4, 2024)

Country Population: 5,104,413 Volume 20 Issue 5 January 29-Feb 4, 2024 Data Source: CSOs from 15 Counties and Laboratory

Highlights



Keynotes and Events of Public Health Significance

- A total of 138 events of public health importance including 5 deaths reported
- Completeness and timeliness of health facility reports were both 97% respectively
- Ongoing Lassa fever outbreak in 1 County
- Ongoing Measles outbreak in 2 Counties
- 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 5, 2024

County	Expected Reports From HF*	Reports Received	Received on Time	Completeness (%)	Timeliness (%)	951(97%) Health facilities
Bomi	28	28	28	100	100	reported
Bong	67	64	64	96	96	IDSR data
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	98(100%)
Grand Kru	24	24	24	100	100	Health
Lofa	60	60	60	100	100	districts
Margibi	66	63	63	95	95	reported IDSR data
Maryland	28	28	28	100	100	
Montserrado	418	397	396	94	95	
Nimba	92	92	92	100	100	
Rivercess	21	21	21	100	100	
River Gee	20	20	20	100	100	950(97%)
Sinoe	41	41	41	100	100	Health
Liberia	978	951	950	97	97	facilities reported

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

<80

Vaccine-Preventable Diseases

<u>Measles</u>

- Frity-eight (38) suspected cases were reported (see table below)
- F Thirteen (13) specimens were collected, 12 tested: eight negative and four positive
- Sixteen (16) persons were vaccinated
- Cumulatively, 117 cases reported

Table 2: Distribution and vaccination Status of Measles Cases, Liberia, Epi-week 5, 2024

				Number of Dose	es Received
County	# of cases	Vaccinated	One Dose	Two Doses	Doses Not Indicated
Bomi	1	1	0	0	1
Bong	1	0	0	0	0
Gbarpolu	4	2	2	0	0
Grand Gedeh	9	2	2	0	0
Grand Kru	2	2	1	1	0
Maryland	16	5	2	3	0
Montserrado	1	1	1	0	0
Nimba	2	1	1	0	0
Rivercess	2	0	0	0	0
Sinoe	5	2	2	0	0
Total	43	16	11	4	1

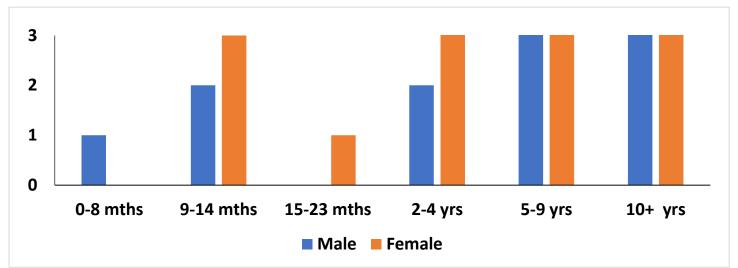


Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 5, 2024

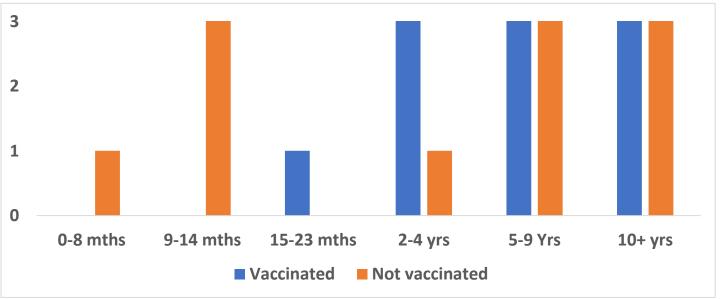


Figure 3: Vaccination Status of Suspected Measles Cases by Age Group, Liberia, Epi-Week 5, 2024

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<u>Current Outbreak</u>

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

 13, 2021 February 4, 2024

COUNTY	CUMULATIVE SUSPECTED	CUMULATIVE CONFIRMED	CLASSIFICAT	TION OF CONFI		SSIFICATI FIRMED DI		CUMULATIV E DEATHS	CFR (%)	# CONFIRMED CASES WEEK 4	# CONFIRMED CASES WEEK 5	% Change	Outbreak Status	
COUNTY	CASES	CASES	Lab confirmed	Epi Linked	Clinically Compatible	Lab confirmed	Epi Linked	Clinically Compatible						
Mont	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	1191	1171	26	308	837	0	0	0	0	0	11	15	36	Ongoing
Grand Gedeh	662	513	34	48	431	0	0	0	0	0	0	5	-	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	13,149	12,475	506	2,927	9062	5	68	22	95	7.8	11	20		

Table 4: Status of Confirmed Measles Cases by County, Liberia, December 13, 2021 February 4, 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	0/6
Grand Bassa	924	0	917	7	0/8
Margibi	803	0	802	1	0/4
Bong	578	0	575	3	0/9
Maryland	1171	15	1156	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	513	5	508	0	1/6
River Gee	79	0	79	0	0/6
Sinoe	231	0	231	0	0/10
Total	12,495	20	12, 380	95	4/98

I. Coordination

o IMS meetings are being held for coordination and mobilization of resources in Maryland county

II. Epidemiological Surveillance

 Active case search and contact tracing ongoing in affected Districts (Pleebo, Konobo, Karkuway-II, and Harper) in Maryland County

III. Case management

o Case management ongoing in Maryland and Grand Gedeh Counties

IV. Immunization

o Routine immunization intensified in affected districts (Pleebo, Konobo, Karkuway-II, and Harper) in Maryland County

V. Laboratory

- National Public Health Reference Laboratory confirmed two measles cases from Konobo-1, Grand Gedeh County and Saclepea Mahn-1, Nimba County
- Five hundred seven (507) cases have been confirmed by the NPHRL from December 13, 2021 January 31, 2023.

VI. Risk Communication and Community Engagement

o Community engagement and health education ongoing n Maryland and Grand Gedeh Counties

VII. Challenges

o Limited support for response in Maryland County

Acute Flaccid Paralysis (AFP)

- 🖙 Zero (0) case were reported
- Cumulatively, three (3) cases reported, and pending testing

Neonatal Tetanus

- One (1) case was reported from Grand Bassa County
- Cumulatively, three (3) cases have been reported

Influenza-Like Illnesses

Coronavirus Disease (COVID-19)

Zero (0) case were reported

Influenza

- Five (5) cases have been reported from Montserrado County
- Five specimens were collected and tested negative
- Cumulatively, ten (10) specimens collected
 - \circ $\,$ Ten specimens collected: 5 tested negative, 5 pending $\,$

Viral Hemorrhagic Fever

<u>Lassa fever</u>

- Four (4) suspected cases were reported from Bong (2), and Nimba (2) Counties
- Specimens were collected and tested negative
- Free Cumulatively, twenty-three (23) suspected cases have been reported
 - Proportion of suspected cases with sample collected (23/23) 100%
 - Proportion of suspected cases with sample tested (22/23) 96% (negative 19, Confirmed 1)

<u>Current Outbreak</u>

- No new confirmed case reported
- All contacts completed 21 days follow up
- Cumulative Case Fatality Rate (CFR): 29% (32/110)

One county currently in countdown (Nimba)

Table 5: Summary of Lassa fever Outbreak, Liberia, January 6, 2022- February 4, 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	29	Completed	Over
Montserra do	Central Monrovia	27-Nov-23	1	1	0	0	0%	49	0	0	0	0	49	Completed	Over
uu	Central Monrovia	3-Mar-23	29	1	0	1	100%	28	27	0	0	0	28	Completed	Over
	Suakoko	21-Apr-23	160	47	2	10	21%	480	194	6	18	0	417	Completed	Over
Bong	Sanoyea	19-Sep-23	2	2	0	1	50%	36	18	0	0	0	37	Completed	Over
Dong	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	District 3A&B	21-Aug-23	86	32	0	9	28%	177	40	40	0	0	159	Completed	Over
Bassa	Buchanan	11-Aug-23	2	1	0	1	100%	4	2	0	0	0	0	Completed	Over
N 71 N	Sanniquell ie-Mah	6-Feb-23	42	2	0	0	0%	43	35	8	0	0	43	Completed	Over
Nimba	Tappita	20-Nov-23	16	4	0	3	75%	88	39	4	0	0	77	2	Countdown
	Bain-Garr	1-Jun-23	10	3	0	3	100%	61	25	0	0	0	31	Completed	Over
Total			376	110	3	32	29%	1121	487	61	21	0	1044		

Public Health Measures

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.

Surveillance

- Active case search ongoing in affected communities and districts
- Weekly Situation reports developed and disseminated to stakeholders

Laboratory

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

Case management and IPC

- o Cases are being isolated and managed at designated facilities
- Ribavirin supply in country are being distributed for treatment of Lassa fever cases to 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 Lofa County
- Specimen was collected and pending testing
- Cumulatively, seven (7) cases have been reported
 - Proportion of suspected cases with samples collected (7/7) 100%
 - Proportion of suspected cases with samples tested (1/7) 14% (negative 1)
 - \circ $\,$ Proportion of specimen did not reach the lab (1/7) 14% $\,$

Dengue Fever

- Zero suspected cases were reported
- Cumulatively, one (1) suspected case reported with sample pending testing

Ebola Virus Disease

Zero cases were reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- Five (5) suspected cases were reported from Lofa (2), Maryland (1), Nimba (1), and Grand Cape Mount (1) Counties
- Three (3) specimens were collected and pending testing
- Cumulatively, thirty (30) cases have been reported
 - 10 specimen collected, 6 reached the Lab
 - \circ 3 tested negative, while 3 pending results

Severe Acute Watery Diarrhea (Suspected Cholera)

- One (1) suspected case was reported from Margibi County
- Specimen was collected and pending testing
- Cumulatively, twenty-four (24) cases have been reported
 - 10 samples received ,1sample rejected
 - 2 tested negative, 7 pending result

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

- Sixty- one (61) animal bite cases were reported from Nimba (16), Montserrado (12), Rivercess (9 including one snake bite), Grand Kru (6), Bong (3), Maryland (3), Grand Bassa (3), Bomi (2), Gbarpolu (2), Grand Gedeh (1) Grand Cape Mount (1), Lofa (1), Rive Gee (1), and Sinoe (1) Counties
- 54 bites were attributed to dog
- 1 bite was attributed to snake bite
- Proportion of cases investigated: 40/54 (74%)
 - Proportion of dogs vaccinated: 0/40 (0%)
- Cumulatively, 310 cases have been reported

Public Health Actions

- All cases were clinically managed and sent home
- PEP Administered to 2 persons: Bong (1) and Lofa (1)
- Thirty-seven (37) dogs restrained and undergoing 14 days' follow-up
 - All cases were investigated only by the human health surveillance team

Tuberculosis

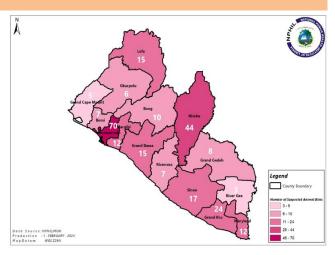
- Zero (0) case was reported
- Cumulatively, twenty-five (25) cases have been reported

Meningitis

- Three (3) suspected cases reported from Nimba(2) and Montserrado(1) counties
- Specimens were collected and pending tested
- Cumulatively, five (5) suspected cases have been reported
 - Proportion of specimen collected 5/5 100%
 - \circ $\,$ $\,$ Proportion of specimen tested 5/5 100% $\,$

Mpox

- One (1) suspected case reported from Grand Kru County
- Cumulatively, six (6) suspected cases have been reported, 1 tested positive, 5 pending results



Zero cases reported

Unexplained cluster of Health Events

Zero cases reported

Events of Public Health Importance

Maternal Mortality

- Free (3) deaths were reported Grand Cape Mount (1), Montserrado(1), and Nimba (1) Counties
- Reported causes: PPH (3)
 - o Reporting sites
 - Health facility (2/3) 67%
 - Community (1/3) 33%
 - Cumulatively, twenty-five (24) deaths reported
 - Proportion of deaths reviewed (11/24) 46%

Neonatal Mortality

- From Grand Kru (1), and Montserrado (1) Counties
- Reported causes: Birth Asphyxia (1), and Preterm (1)
 - All deaths occurred at the health facility (2/2) 100%
- Cumulatively, thirty-two (32) deaths reported
 - Proportion of deaths reviewed (8/32) 25%

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

- Fourteen (14) suspected cases were reported from Sinoe (5), Grand Kru (2), Montserrado (2), Grand Gedeh (2), Lofa (1), Gbarpolu (1), and Bomi (1) Counties
- Main All reported cases were classified as non-serious
- Related vaccine:
 - Penta (6/14) 43%
 - o COVID-19 (3/14) 21%
 - Others (5/14) 36%
- re cumulatively, ninety-two (92) events were reported

Neglected Tropical Diseases

YAWS

Zero cases were reported

Buruli Ulcer

Zero cases were reported

Border Surveillance Update

A total of 4879 travelers were recorded for the week with incoming travelers accounting for 51% (2508/4879) Table 6: Border activity at the PoE for incoming and outgoing travelers. Liberia. Epi week 5, 2024

	oraci acti	vity at the		incoming	und outg	oning dravere	is, Liberia			-
T f					Total traverler	Yellow		Travelers Vaccinated against YF	Alerts	Evidence of COVID-19 vaccination
Type of Ports	Point of Entry	Weekly total	Arrival	Departure	s with YB		Card Replaced	& Issued book	detected/ Verified	card/certific ate
	James S. Paynes Kobert	62	29	33	2	0	0	0	0	3
Anport	Int'l	3885	2041	1844	3867	0	15	0	0	3854
S	Areeport of Morrowia	120	60	60	120	0	о	0	0	120
Seaport	Buchanan Port	0	о	о	0	0	о	0	0	О
	Bo Water Side	531	217	314	421	Book Damage 0 0 0	6	7	0	328
Ground Crossin	Ganta	124	62	62	84	9	9	0	0	37
g	Yekepa	67	37	30	22	0	0	0	0	31
	Loguatuo	90	62	28	82	0	О	0	0	46
Total		4,879	2,508	2,371	4,598	9	30	7	0	4,419

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
- o Active case search ongoing in affected and surrounding communities

Case Management

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

																				•
			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	-
of Expe	cted Health District		4	9	5	8	5	6	5	6	4	6	2 7	11	6	6	10	98		
	th District Reported		4	9	5	8	5	6	5	6	4	6	7	11	6	6	10	98		
isea	Acute Flaccid Paralysis (Suspected Polio)	Α	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
le D		D	0	0	0 2	0	0	0 8	0	0	0	0	0	0	0	0	0	0 38	0 117	+
ntab	Measles	D	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	30 0	0	+
evel	N	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	3	1
le Pr	Neonatal Tetanus	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diarrheal Dise Influenza-Lik Viral Hemorrhagic f Vaccine Preventable Disea	Yellow fever	Α	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	7	
FVa		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_
agic	Dengue fever	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-
orrh		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
emo	Ebola Virus Disease	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
al H		Α	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	4	21	+
Vir	Lassa fever	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
-Liko	COVID-19	Α	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
nza		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
flue	Influenza Like Illnesses	Α	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	10	_
eiln		D	0	0	0	0	0 1	0	0	0	0	0	0	0	0	0	0	0 5	0 30	-
l Dis	Acute Bloody Diarrhoea (Shigellosis)	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
hea		A	0	0	0	0	0	•	0	0	1	0	0	0	0	0	0	1	24	+
Diarr	Severe Acute Watery Diarrhoea (Cholera)	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
-	N de terre el 10 de rete l'iter			-		-	-	-	-		-	-			-	-	-	-	-	
ealtŀ	Maternal Mortality	D	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	3	24	_
Events of Public Health	Neonatal Mortality	D	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	32	
Pub	AEFI	Α	3	0	0	1	0	1	0	2	0	0	2	0	0	0	5	14	92	_
s of		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_
rent	Unexplained Cluster of Health Events/Disease	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
Ē			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_
s	Мрох	Α	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	6	_
ease		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_
Dist	Tuberculosis	A D	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0	25 0	+
able		Δ	2	3	2	3	1	1	6	1	0	3	12	16	9	1	1	61	310	+
Other Reportable Diseases	Human Exposure to Rabies (Suspected Humar	1 D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
Rep	Meningitis	Α	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ther		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ò	Unexplained Cluster of deaths	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_
Ē		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
ted 1	Buruli Ulcer	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
Neglected Tr		A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
ec.	Yaws	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+

D = Dead **A** = Alive

-12

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:
 - $\circ~$ 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
- Image: 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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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

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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.