

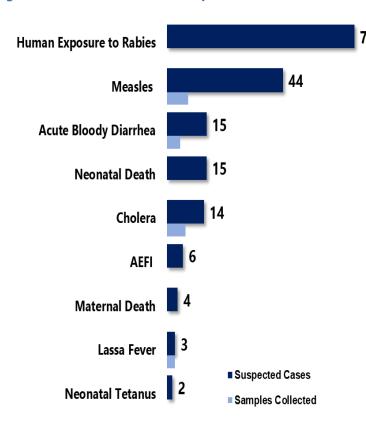
Liberia IDSR Epidemiology Bulletin

Epi-week 29 (July 17-23, 2023)

Country Population: 5,104,413 | Volume 29 Issue 18 | July 17-23, 2023 | 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 174 events of public health importance including 19 deaths reported
- Completeness and timeliness of health facility reports were 98% and 97%
- Ongoing Lassa fever outbreak in 3 Counties
- ♦ Ongoing Measles outbreak in 9 Counties

Adverse Events Following Immunization/Adverse Drug Reaction (AEFI)

Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 29, 2023

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	66	66	100	100
Maryland	28	28	28	100	100
Montserrado	418	396	389	95	93
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	956	951	98	97

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

All counties reported on time to the national level

Legend: ≥80 <80

956(98%)
Health
facilities
reported
IDSR data

98(100%)
Health
districts
reported
IDSR data

Vaccine-Preventable Diseases

<u>Measles</u>

- Forty-four (44) suspected cases were reported from 10 Counties (see distribution in Table 2)
- Eight (8) specimens collected and pending testing
- Twenty-two (22) were vaccinated (see distribution in Table 3)

Table 2: Distribution of Measles cases per county and epi-classification, Liberia, Epi week 29, 2023

COUNTY	Cases Week	Lab confirmed Epi Week		SIFICATION	ON OF S, EPI WEEK	Deaths	CFR (%)	CUMULATIVE # SUSPECTED CASES, EPI	CUMULATIVE # CONFIRMED CASES, EPI WEEK		
	29	29	Lab confirmed	Epi Linked	Clinically Compatible		(70)	WEEK 1-29	1-29		
Bomi	0	0	0	13	51	0	0.0	75	66		
Bong	0	0	2	6	193 1 0.5 201		201	201			
Gbarpolu	1	0	0	0	34	0	0.0	35	34		
Grand Bassa	2	0	0	0	163	0	0.0	165	163		
Grand Cape Mount	1	0	0	2	61	0	0.0	72	64		
Grand Gedeh	4	0	4	26	258	0	0.0	331	288		
Grand Kru	4	0	6	72	635	2	0.3	715	713		
Lofa	4	0	0	0	102	0	0.0	110	102		
Margibi	0	0	1	8	188	0	0.0	199	197		
Maryland	13	0	0	0	618	0	0.0	620	618		
Montserrado	8	0	4	53	957	2	0.2	1022	1014		
Nimba	3	0	2	33	269	3	1.1	306	304		
River Gee	3	0	0	0	108	0	0.0	128	108		
Rivercess	0	0	1	0	27	0	0.0	33	28		
Sinoe	1	0	4	11	87	0	0.0	116	102		
Grand Total	44	0	27	224	3,751	8	2	4,128	4002		

Table 3: Vaccination Status of Measles Cases, Liberia, Epi-week 29, 2023

County	Vaccinated		Number of Dose	s Received
		One Dose	Two Doses	Doses Not Indicated
Bomi	0	0	0	0
Bong	0	0	0	0
Gbarpolu	1	1	0	0
Grand Bassa	2	0	0	2
Grand Cape Mount	1	0	1	0
Grand Gedeh	2	0	1	1
Grand Kru	3	2	0	1
Lofa	4	0	1	3
Margibi	0	0	0	0
Maryland	1	0	0	1
Montserrado	4	4	0	0
Nimba	2	2	0	0
River Gee	2	0	1	1
Rivercess	0	0	0	0
Sinoe	0	0	0	0
National	22	9	4	9

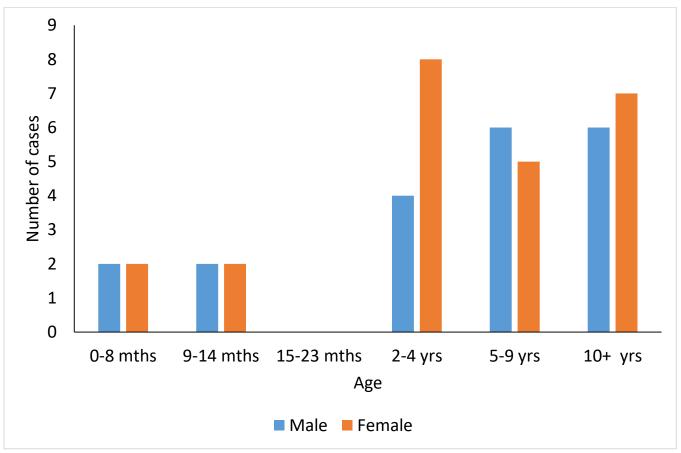


Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 29, 2023

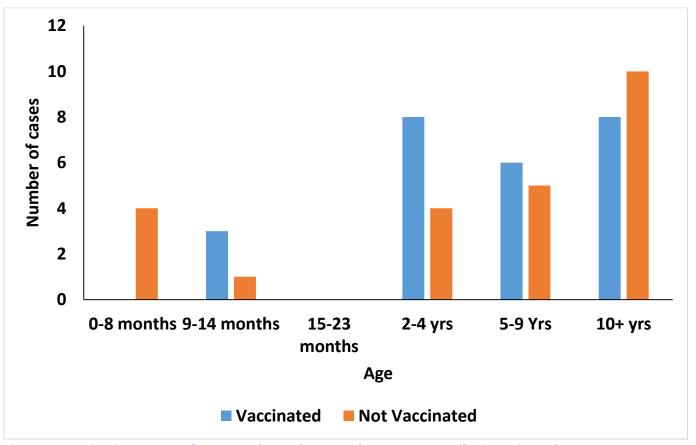


Figure 3: Vaccination Status of Suspected Measles Cases by Age Group, Liberia, Epi-Week 29, 2023

Outbreak Section

Table 4: Cumulative Distribution of Measles Cases and Deaths, December 13, 2021- July 23, 2023

COUNT Y	CUMUL ATIVE SUSPEC TED	CUMUL ATIVE CONFIR MED	CLASSIFICATION OF CONFIRMED CASES			CLA CON	CU MU LATI VE	CFR (%)	# CONFI RMED CASES	# CONFI RMED CASES WEEK 29	% Chan ge	Outbreak Status Lab confirme		
	CASES	CASES	Lab confirme d	Epi Linked	Clinica Ily Comp atible	Lab confirm ed	Epi Linked	Clinica Ily Comp atible	DEA THS		WEEK 28		,	d
Montse rrado	5, 388	5,311	145	1657	3, 509	3	61	5	69	1.3	16	8	-50	Ongoing
Nimba	1, 075	1,044	37	187	820	0	1	3	4	0.4	1	3	200	Ongoing
Margib i	827	803	34	136	633	0	0	1	1	0.1	0	0	1	Ongoing
Grand Bassa	943	905	40	212	653	1	0	6	7	0.9	6	0	-100	Ongoing
Lofa	353	284	32	66	186	0	0	0	0	0	2	4	100	Ongoing
Bong	599	574	22	21	531	0	1	2	3	0.5	2	0	-100	Ongoing
Maryla nd	1022	1007	24	308	675	0	0	0	0	0	9	11	22	Ongoing
Grand Gedeh	575	415	34	48	333	0	0	0	0	0	7	0	-100	Ongoing
Sinoe	284	231	36	84	111	0	0	0	0	0	0	0	1	Ended
Bomi	183	147	34	27	86	1	2	2	5	3	0	0	1	Ended
Grd Cape Mt	215	187	17	18	152	0	2	1	3	1.6	0	0	1	Ended
Grand Kru	974	945	22	106	817	0	0	2	2	0.2	3	3	-	Ongoing
Gbarpo lu	67	46	4	2	40	0	0	0	0	0	0	0	1	Ended
Riverce ss	112	84	23	54	7	0	1	0	1	1.1	0	0	1	Ended
River Gee	103	79	0	0	79	0	0	0	0	0	0	0	1	Ended
Total	12,720	12,062	504	2,926	8,63 2	5	68	22	95	7.8	46	29		Ongoing

Public Health Response

I. Coordination

o IMS meeting is held weekly for coordination and mobilization of resources in response counties

II. Epidemiological Surveillance

o Active case search ongoing in Grand Gedeh County with support from Last Mile Health

III. Case management

o All reported cases were treated and sent home from isolation (Maryland and Grand Kru) Counties

IV. Immunization

Routine immunization going in affected counties

V. Laboratory

- o Specimens were collected from 2 districts in 2 counties (Lofa-Foya and Nimba-Sanniquellie-Mah)
- o Five hundred nine (504) cases have been confirmed by laboratory from December 13, 2021-July 23, 2023

VI. Risk Communication and Community Engagement

o Community engagement and health education ongoing in affected and surrounding communities

VII. Challenges

- DSO in Bong, Grand Gedeh, and Montserrado Counties are constrained in submitting report due to lack of computers
- No functional motorbike for CSOs in Margibi and Nimba Counties, Garwula District, Grand Cape Mount, all DSOs in Nimba, and all districts in Margibi Counties. Thus limiting their movement
- Limited functional laptop computers for DSOs (Gbarpolu, Bomi, Bong, Montserrado, Rivercess, and Margibi)
- o Limited specimen collection kits for priority diseases in Montserrado County

Acute Flaccid Paralysis (AFP)

- Zero suspected cases were reported
- Cumulatively, thirty-one (31) cases were reported
 - o Ten (10) tested negative
 - o Twenty-one (21) pending

Neonatal Tetanus

- Two (2) cases were reported from Bong and Montserrado Counties
- Cumulatively, forty (40) cases including 5 deaths reported

Influenza-Like Illnesses

Influenza

Cumulatively, sixty-nine (69) suspected cases reported

Viral Hemorrhagic Diseases

Lassa fever

- Three (3) suspected cases were reported from Bong County
- All three specimens were collected: 2 tested negative and 1 pending
- Cumulatively, one hundred forty-seven (147) suspected cases reported
 - o Proportion of suspected cases with a sample collected (134/147) 91%
 - o Proportion of suspected cases with sample tested (133/134) 99%

Current Outbreak

Lassa fever disease

- No new confirmed case was reported
- Cumulatively, eighty-two (82) laboratory-confirmed cases including 24 deaths reported (CFR=29%)

Table 5: Summary of Lassa fever Outbreak, Liberia, Sept 9, 2022, to present

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
Montserrad	Bushrod	13-Feb-23	5	2	0	1	50%	29	21	0	0	0 0		Completed	Over
0	Central Monrovia	3-Mar-23	13	1	0	1	100%	28	27	0	0	0	28	Completed	Over
	Suakoko	21-Apr-23	125	36	2	7	21%	325	169	6	4	15	310	Ongoing	Ongoing
Bong	Sanoyea	5-Apr-22	1	1	0	1	100%	31	15	0	0	0	31	Completed	Over
	Jorquelleh	6-Jan-22	11	8	1	2	25%	100	69	3	3	0	100	Completed	Over
Grand Bassa	District 3A&B	9-Sep-22	60	30	0	9	30%	159	28	2	0	0	159	Active	Ongoing
Nimba	Sanniquellie- Mah	6-Feb-23	2	2	0	0	0%	43	35	8	0	0	43	Completed	Over
	Tappita	13-Mar-23	5	1	0	1	100%	36	17	4	0	0	36	Completed	Over
	Bain-Garr	1-Jun-23	12	2	0	2	100%	30	25	0	0	16	14	Active	Ongoing
	8		234	83	3	24	29%	781	406	23	7	31	750		

Public Health Measures

o NPHIL continues to provide technical support to the affected counties

I. Surveillance:

Heightened case detection and reporting in affected communities and districts

- o Situational reports are produced and shared regularly at the national level
- Daily follow-up/monitoring of contacts

II. RCCE

- Health education in affected and surrounding communities
- Health workers and visitors are encouraged to enhance IPC practices by regular washing of hands

III. Case Management

Cases were isolated and ribavirin treatment was administered

IV. IPC

 Affected communities were empowered with the WASH package to enable them to undertake short-term interventions that will improve the sanitation situation in each community thereby helping in Lassa fever prevention and control

Yellow fever

- Zero suspected cases were reported
- Cumulatively sixty-four (64) suspected cases were reported
 - o Fifty-three (53) samples (53/64) 83% were collected
 - Three (3) samples (3/53) 6% not transported (Epi week 5 from Grand Gedeh, River Gee, and Grand Kru Counties)
 - The proportion of samples tested is (35/53) 66%
 - o The proportion of samples pending testing is (12/53) 23%

Dengue Fever

Zero cases were reported

Ebola Virus Disease

Zero cases were reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- Fifteen (15) cases were reported Nimba (4), Montserrado (2), Rivercess (2), Lofa (2), Sinoe (2), Grand Gedeh (1), Grand Kru (1), and Margibi (1) Counties
- Five (5) specimens were collected and pending testing
- Cumulatively, three hundred ninety-one (391) cases were reported
 - One hundred forty-six (146) specimens were collected
 - 70 tested negative
 - 7 specimens rejected
 - 69 specimens were not transported

Severe Acute Watery Diarrhea (Suspected Cholera)

- Fourteen (14) suspected cases were reported: Maryland (6), Bong (2), Nimba (2), Grand Kru (1), River Gee (1), Grand Gedeh (1), and Montserrado (1) Counties
- Eight (8) specimens were collected and pending testing
- Cumulatively, five hundred forty (540) cases reported
 - One hundred sixty-nine (169) specimens collected
 - 61 tested negative
 - 7 specimens rejected
 - 101 specimens were not transported

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

Seventy-one (71) animal bites reported

Table 6: Distribution of Animal Bite Cases and PEP Administration per County, Liberia, Epi week 29, 2023

Counties	Cases	Person receiving PEP	PEP doses administered	Cumulative cases (Wk 1-29)	Cumulative PEP administered (Wk 1-29)
Bomi	1	0	0	45	27
Bong	3	1	1	141	61
Gbarpolu	1	0	0	17	0
Grand Bassa	7	2	2	164	13
Grand Cape Mount	1	1	1	48	31
Grand Gedeh	0	0	0	67	9
Grand Kru	9	0	0	164	15
Lofa	3	0	0	148	55
Margibi	3	2	2	116	55
Maryland	2	0	0	106	37
Montserrado	19	8	8	563	159
Nimba	14	2	2	265	114
Rivercess	4	3	3	37	47
River Gee	1	0	0	80	0
Sinoe	3	0	0	78	6
Total	71	19	19	2,039	629

Public Health Actions

Ongoing monitoring and follow-up of cases

Meningitis

- Zero cases were reported
- Cumulatively, twenty-five (25) suspected cases reported
 - Proportion of suspected cases with samples collected (23/25) 92%
 - o Proportion of sample tested (19/23) 83%
 - o 16 negative and 3 positive

Mpox

- Zero cases were reported
- Cumulatively, ninety-eight (98) suspected cases reported
 - o Seven (7) confirmed

Unexplained cluster of deaths

Zero cases reported

Events of Public Health Importance

Maternal Mortality

- Four (4) deaths were reported: Montserrado (2), Grand Gedeh (1), and Rivercess (1) Counties
- Reported causes: postpartum hemorrhage (3), and eclampsia (1)
- Reporting Site:
 - o Health facility (4/4) 100%
- Cumulatively, one hundred ninety-two (192) deaths reported
 - o Proportion of death reviewed (41/192) 21%
 - o Proportion of community death (27/192)14%

Neonatal Mortality

- Fifteen (15) deaths were reported: Montserrado (11), Nimba (1), Sinoe (1), Grand Bassa (1), and Rivercess (1)

 Counties
- Reported causes: birth asphyxia (6), prematurity (6), and neonatal sepsis (3)
- Reporting sites:
 - o Health facility (15/15) 100%
- Cumulatively, four hundred sixty-two (462) deaths reported

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

- 🖙 Six (6) cases were reported from Grand Bassa (2), Bong (2), Gbarpolu (1), and Sinoe (1) Counties
- All reported cases were non-serious
- Related vaccine:
 - o COVID-19 (3/6) 50%
 - o Measles (2/6) 33%
 - o Penta (1/6) 17%
- Cumulatively, three hundred fifty-five (355) events were reported and COVID-19 accounted for (157/355) 44%

Neglected Tropical Diseases

YAWS

Cumulatively, one hundred sixty-eight (168) cases have been reported

Buruli Ulcer

- No new cases were reported
- Cumulatively, one hundred three (103) cases have been reported

Border Surveillance Update

A total of 5,072 travelers were recorded for the week with incoming travelers accounting for 52% (2,646/5,072)

Table 7: Border activity at the PoE for incoming and outgoing travelers, Liberia, Epi week 29, 2023

					Total	Yellow		Travelers Vaccinated against YF	Alerts detected		Evidence of COVID-19
Type of Ports	Point of Entry	Weekly total	Arrival	Departure	traverlers with YB	Book Damage	Card Replaced	& Issued		COVID-19 Reactive	vaccination card/certificate
	James S. Paynes	145	73	72	10	0	0	0	0	0	20
Airport	Robert Int'l Airport	3808	1988	1820	3705	95	95	16	0	0	3734
Seaport	Freeport of Monrovia	124	62	62	124	0	0	0	0	0	124
•	Buchanan Port	0	0	0	0	0	0	0	0	0	0
	Bo Water Side	600	298	302	595	0	0	5	0	0	560
Land	Ganta	217	121	96	81	0	0	0	0	0	82
	Yekepa	75	56	19	40	0	0	0	0	0	43
	Loguatuo	103	48	55	91	0	0	0	0	0	48
Total	1	5,072	2,646	2,426	4,646	95	95	21	0	0	4,611

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

Public Health Measures

National level

- © Community engagement and border meeting airing messages on Lassa fever, Mpox, COVID-19, and Measles in Nimba, Grand Cape Mount, and Grand Bassa Counties
- Review and validation of AEFI guidelines and SOP
- Providing remote technical and operational support to counties
- Produced and disseminated situation reports (Lassa fever, Measles, and Mpox outbreaks)

County-level

o Partner coordination and resource mapping

Surveillance

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

Case Management

- o Administration of PEP
- Management of measles cases ongoing

Appendi	x																			
Summar	y of Immediately Reportable D	Dise	ease	es, C	ond	litio	ns, a	and	Eve	nts	by (Cou	nty							
			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
•	ted Health District		4	9	5	8	5	6	5	6	4	6	7	6	6	6	10	93		
	District Reported		4	9	5	8	5	6	5	6	4	6	7	6	6	6	10	93		
Events of Public Healt Diarrheal Dise Influenza-Lik Viral Hemorrhagic FVaccine Preventable Disea	Acute Flaccid Paralysis (Suspected Polio) Measles	A D A D	0 0 0	0 0 0	0 0 1 0	0 0 2 0	0 0 1 0	0 0 4 0	0 0 4 0	0 0 4 0	0 0 0	0 0 13 0	0 0 8 0	0 0 3 0	0 0 3 0	0 0 0	0 0 1 0	0 0 44 0	31 0 4,128 8	0 0 27 2
e Preve	Neonatal Tetanus	A	0	1 0	0	0	0	0	0	0	0	0	1 0	0	0	0	0	2	35 5	0
FVaccin	Yellow fever	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64 0	0
rrhagic I	Dengue fever	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Нето	Ebola Virus Disease	A D A	0 0	0 0 3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0 3	0 0 120	0 0 26
ik Viral	Lassa fever	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	14
uenza-L	COVID-19	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ised Influ	Influenza Like Illnesses	D A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arrheal Di	Acute Bloody Diarrhoea (Shigellosis) Severe Acute Watery Diarrhoea (Cholera)	D A	0	0 2	0	0	0	0	0	0	0	0 6	0	0 2	0	0	0	0 14	0 540	0
ea It Di	Maternal Mortality	D D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 4	0 192	0
. <u>∵</u>	Neonatal Mortality	D	0	0	0	1	0	0	0	0	0	0	11	1	1	0	1	15	462	
of Publ	AEFI	A D	0	0	1 0	0	0	0	0	0	0	0	0	0	0	0	0	6 0	355 0	0
Events	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	0
a ses	Мрох	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98 0	7
Other Reportable Diseases	Tuberculosis	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
eportak	Human Exposure to Rabies (Suspected Human	D	0	0	0	7 0	0	0	0	0	0	0	0	0	0	0	0	71 0	2,041	0
Other R	Meningitis -	A D A	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	25 0 0	0 0
	Unexplained Cluster of deaths	D A	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	1 103	0
Neglected Ti	Buruli Ulcer	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 170	0 4
ž	Yaws	D	0	0	0	0	0	0 7	0	0	0	0 21	0	0 24	0	0	0	0 174	0 8867	0 51

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

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

I. P. Pewu

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

B. Gbelee

Ministry of Health WHO Liberia Office US CDC Liberia Office AFENET

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.