

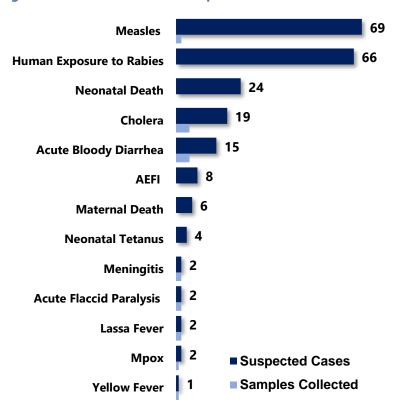
Liberia IDSR Epidemiology Bulletin

Epi-week 26 (June 26- July 2, 2023)

Country Population: 5,104,413 | Volume 25 Issue 18 | June 26 – July 2, 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 220 events of public health importance including 31 deaths reported
- ◆ Completeness and timeliness of health facility reports were 98% & 97%
- ◆ Ongoing Lassa fever outbreak in 3 Counties
- ♦ Ongoing Measles outbreak in 10 Counties

Adverse Events Following Immunization/Adverse Drug Reaction (AEFI)

Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 26, 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	391	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

951 (97%)
Health
facilities
reported
timely IDSR
data

Vaccine-Preventable Diseases

<u>Measles</u>

- Sixty-nine (69) suspected cases were reported from 14 Counties (see distribution in Table 2)
- Two (2) specimens collected and pending testing
- Thirty-nine (39) were vaccinated (see distribution in Table 3)

Table 2: Distribution of Measles cases per county and epi-classification, Liberia, Epi week 26, 2023

COUNTY	Cases Week	Lab confirmed Epi Week	CONFIRM	SIFICATION ED CASES 1-26	S, EPI WEEK	Deaths	CFR (%)	CUMULATIVE # SUSPECTED CASES, EPI	CUMULATIVE # CONFIRMED
	26	26	Lab confirmed	Epi Linked	Clinically Compatible		()	WEEK 1-26	CASES, EPI WEEK 1-26
Bomi	1	0	0	13	50	0	0.0	74	65
Bong	4	0	2	6	189	1	0.5	197	197
Gbarpolu	2	0	0	0	33	0	0.0	34	33
Grand Bassa	2	0	0	0	153	0	0.0	155	153
Grand Cape Mount	1	0	0	2	60	0	0.0	71	63
Grand Gedeh	14	0	4	26	234	0	0.0	307	264
Grand Kru	3	0	6	72	624	2	0.3	704	702
Lofa	3	0	0	0	91	0	0.0	99	91
Margibi	1	0	1	8	185	0	0.0	196	194
Maryland	17	0	0	0	585	0	0.0	587	585
Montserrado	8	0	4	53	918	2	0.2	983	975
Nimba	10	0	2	33	261	3	1.1	298	296
River Gee	0	0	0	0	101	0	0.0	121	101
Rivercess	1	0	1	0	27	0	0.0	33	28
Sinoe	2	0	4	11	78	0	0.0	107	93
Grand Total	69	0	27	224	3,589	8	2	3,966	3,840

Table 3: Vaccination Status of Measles Cases, Liberia, Epi-week 26, 2023

		Number of Doses Received									
County	Vaccinated	One Dose	Two Doses	Doses Not indicated							
Bomi	1	1	0	0							
Bong	2	1	1	0							
Gbarpolu	2	0	0	2							
Grand Bassa	0	0	0	0							
Grand Cape Mount	0	0	0	0							
Grand Gedeh	7	5	0	2							
Grand Kru	0	0	0	0							
Lofa	3	0	2	1							
Margibi	1	1	0	0							
Maryland	4	1	3	0							
Montserrado	7	6	1	0							
Nimba	4	4	0	0							
River Gee	0	0	0	0							
Rivercess	1	1	0	0							
Sinoe	0	0	0	0							
Grand Total	32	20	7	5							

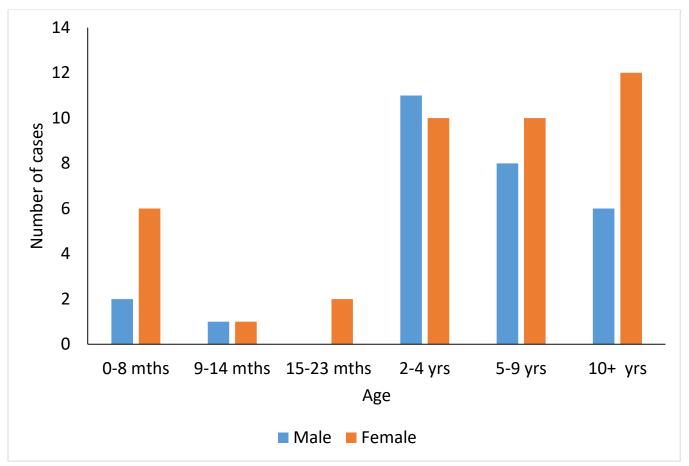


Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 26, 2023

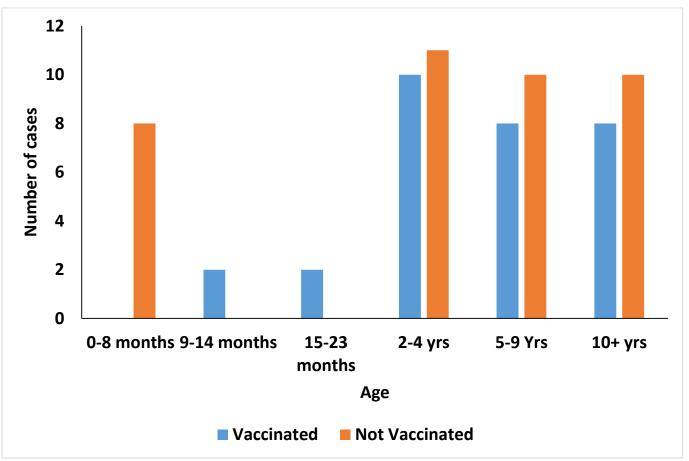


Figure 3: Vaccination Status of Suspected Measles Cases by Age Group, Liberia, Epi-Week 26, 2023

Outbreak Section

Table 4: Cumulative Distribution of Measles Cases and Deaths, December 13, 2021- July 2, 2023

COUNTY	CUMULA TIVE SUSPECTE	CUMULATI VE CONFIRME		SIFICATIO FIRMED (SIFICATI IRMED D		CUMUL ATIVE DEATHS	CFR (%)	# CONFIR MED CASES	# CONFIRME D CASES WEEK 26	% CHANGE	Outbreak Status Lab
	D CASES	D CASES	Lab confirmed	Epi Linked	Clinically Compatible	Lab confirmed	Epi Linked	Clinically Compatible			WEEK 25			confirmed
Montserr ado	5, 349	5,272	145	165 7	3470	3	61	5	69	1.3	Montse rrado	5, 349	5,272	145
Nimba	1067	1,036	37	187	812	0	1	3	4	0.4	Nimba	1067	1,036	37
Margibi	826	802	34	136	632	0	0	1	1	0.1	Margib i	826	802	34
Grand Bassa	937	899	40	212	647	1	0	6	7	0.9	Grand Bassa	937	899	40
Lofa	346	276	32	66	178	0	0	0	0	0	Lofa	346	276	32
Bong	596	571	22	21	528	0	1	2	3	0.5	Bong	596	571	22
Maryland	988	973	24	308	641	0	0	0	0	0	Maryla nd	988	973	24
Grand Gedeh	561	401	34	48	319	0	0	0	0	0	Grand Gedeh	561	401	34
Sinoe	284	231	36	84	111	0	0	0	0	0	Sinoe	284	231	36
Bomi	183	147	34	27	86	1	2	2	5	3	Bomi	183	147	34
Grd Cape Mt	215	187	17	18	152	0	2	1	3	1.6	Grd Cape Mt	215	187	17
Grand Kru	963	935	22	106	807	0	0	2	2	0.2	Grand Kru	963	935	22
Gbarpolu	67	46	4	2	40	0	0	0	0	0	Gbarpo lu	67	46	4
Rivercess	112	84	23	54	7	0	1	0	1	1.1	Riverce ss	112	84	23
River Gee	103	79	0	0	79	0	0	0	0	0	River Gee	103	79	0
Total	12,597	11,939	504	2,92 6	8,509	5	68	22	95	7.8	Total	12,597	11,939	504

Public Health Response

I. Coordination

Weekly IMS meeting for coordination and mobilization of resources in response Counties

II. Epidemiological Surveillance.

- o Active case search ongoing in affected communities
- Line listing of cases

III. Case management

 All reported cases were treated and sent for home isolation (Bong, Montserrado, Nimba, Maryland, Grand Gedeh, and Grand Kru) Counties

IV. Immunization

Routine immunization intensified in Nimba County

V. Laboratory

- Submitted the listing of 34 districts that have gone more than 4 weeks in the response to National Public Health Reference Laboratory for re-testing.
- Specimen collection kits were distributed in Nimba County
- o Five hundred nine (509) cases confirmed by laboratory from December 13, 2021 –June 16, 2023.

VI. Risk Communication and Community Engagement

Risk communication and community engagement ongoing in affected counties

Challenges

- No functional motorbike for CSOs in Margibi and Nimba Counties, Garwula District, Grand Cape Mounty, 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)

- Two (2) suspected cases reported from Rivercess County
- Two specimens collected and shipped
- Cumulatively, twenty-nine (29) cases were reported
 - o Ten (10) tested negative
 - o Nineteen (19) pending

Neonatal Tetanus

- Four (4) cases were reported from Montserrado County
- Cumulatively, thirty-seven (37) cases including 5 deaths reported

Influenza-Like Illnesses

Influenza

- Zero suspected case was reported
- Cumulatively, 39 suspected cases reported

Viral Hemorrhagic Diseases

Lassa fever

- Two (2) suspected cases were reported: Nimba (death), and Bong Counties
- Cumulatively, one hundred thirty-six (136) suspected cases reported
 - Proportion of suspected cases with a sample collected (123/136) 90%
 - o Proportion of suspected cases with sample tested (123/123) 100%

Current Outbreak

Lassa fever disease

- No new confirmed case was reported
- Cumulatively, eighty (80) laboratory-confirmed cases including 23 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
	Bushrod	13-Feb-23	5	2	0	1	50%	29	21	0	0	0	29	Completed	Over
Montserrado	Central Monrovia	3-Mar-23	13	1	0	1	100%	28	27	0	0	0	28	Completed	Over
	Suakoko	21-Apr-23	122	34	2	7	21%	310	150	6	4	7	303	Ongoing	Active
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	26%	159	28	2	0	3	156	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	1	0	1	100%	14	11	0	0	14	0	Active	Ongoing
	8		231	80	3	23	29%	750	373	23	7	24	726		

Public Health Measures

o NPHIL continues to provide technical support to the affected counties

I. Surveillance:

- o 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
- o 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

- One (1) suspected case was reported from Grand Kru County
- Specimen was collected and pending testing
- Cumulatively Sixty-one (61) suspected cases were reported
- Fifty (50) samples 82% (50/61) were collected with 6% (3/50) samples not transported (Epi week 5 from Grand Gedeh, River Gee, and Grand Kru Counties)
- □ Lab received 94% (47/50)
 - Proportion of samples tested is 57% (27/47)
 - o Proportion of samples pending testing is 43% (20/47)

Dengue Fever

- Zero cases were reported
- Cumulatively, 2 suspected cases were reported from Lofa County with no specimens collected

Ebola Virus Disease

Zero cases were reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- Fifteen (15) cases were reported: Gbarpolu (4), Nimba (2), Lofa (2), Grand Gedeh (2), Grand Kru (1), Rivercess (1), Margibi (1), Grand Bassa (1), and Bong (1) Counties
- Five (5) specimens were collected and pending testing
- Cumulatively, three hundred forty-nine (349) cases were reported
 - One hundred thirty-seven (137) specimens were collected
 - 62 tested negative
 - 7 specimens rejected
 - 67 specimens were not transported
 - 1 pending testing

Severe Acute Watery Diarrhea (Suspected Cholera)

- Nineteen (19) suspected cases were reported: Grand Kru (6), Montserrado (3), Nimba (3), Maryland (3), Margibi (1), River Gee (1), Bong (1), and Lofa (1) counties
- Five (5) specimens were collected and pending testing
- Cumulatively, four hundred seventy-four (474) cases reported
 - One hundred forty-four (144) specimens collected
 - 55 tested negative
 - 7 specimens rejected
 - 82 specimens were not transported

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

Sixty-six (66) animal bites including one (1) death reported

Table 6: Distribution of Animal bite cases and PEP administration per county, Liberia, Epi week 26, 2023

Counties	Cases	Person receiving PEP	PEP doses administered	Cumulative cases (Wk 1-26)	Cumulative PEP administered (Wk 1-26)
Bomi	0	0	0	38	22
Bong	1	0	0	132	59
Gbarpolu	1	0	0	15	0
Grand Bassa	6	0	0	149	11
Grand Cape Mount	1	1	1	46	29
Grand Gedeh	3	0	0	63	9
Grand Kru	6	0	0	145	15
Lofa	9	4	2	137	52
Margibi	7	1	1	110	52
Maryland	4	1	1	98	37
Montserrado	16	4	4	510	141
Nimba	7	4	5	223	96
Rivercess	3	2	2	34	42
River Gee	0	0	0	71	0
Sinoe	2	0	0	74	6
Total	66	17(26%)	16	1845	571

Public Health Actions

Ongoing monitoring and follow-up of cases

Meningitis

- Two (2) case was reported from Grand Kru and Nimba Counties
- Two (2) specimens were collected and pending testing
- Cumulatively, twenty-five (25) suspected cases reported
 - o Proportion of suspected cases with samples collected (23/25) 92%
 - o Proportion of sample tested (19/23) 83%
 - o 16 negative and 3 positive

<u>Mpox</u>

- Two (2) cases were reported from Sinoe and Nimba Counties
- One specimen was collected and pending testing
- Cumulatively, eighty-nine (89) suspected cases reported
 - o Seven (7) confirmed

Events of Public Health Importance

Maternal Mortality

- Six (6) deaths were reported: Nimba (2), Grand Kru (1), Montserrado (1), Grand Bassa (1), and Grand Gedeh (1) Counties
- Reported causes: Postpartum Hemorrhage (4), and Maternal sepsis (2)
- Reporting Site:
 - Health facility (5/6) 83%
 - o Community (1/6) 17%

- Cumulatively, one hundred seventy-five (175) deaths reported
 - o Proportion of death reviewed (41/175) 23%
 - o Proportion of community death (25/175)14%

Neonatal Mortality

- Twenty-four (24) deaths were reported: Montserrado (17), Sinoe (3), Grand Kru (1), Lofa (1), Nimba (1), and Grand Gedeh (1) Counties
- Reported causes: Birth Asphyxia (14), Neonatal sepsis (5), prematurity (3), Neonatal Tetanus (1), and Anemia (1)
- Reporting sites:
 - Health facility (12/12) 100%
- Cumulatively, four hundred eighteen (418) deaths reported

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

- Eight (8) cases were reported from Grand Gedeh (4), Rivercess (1), Grand Bassa (1), Maryland (1), and Lofa (1) Counties
- All reported cases were non-serious
- Related vaccine:
 - o Penta (6/8) 75%
 - o Measles (2/8) 25%
- Cumulatively, three hundred thirty-seven (337) events were reported and COVID-19 accounted for (154/337) 46%

Border Surveillance Update

A total of 5,142 travelers were recorded for the week with incoming travelers accounting for 47% (2,409/5,142)

Table 7: Border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 26, 2023

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	COVID-19 Reactive	Evidence of COVID-19 vaccination card/certificate
	James S. Paynes	104	36	68	15	0	0	0	0 0		15
Airport	Robert Int'l Airport	3769	1754	2015	3677	118	0	0	0	0	3658
Seaport	Freeport of Monrovia	274	137	137	274	0	0	0	0	0	274
	Buchanan Port	184	92	92	184	0	0	0	0	0	184
	Bo Water Side	408	149	259	403	0	0	5	0	0	302
Land	Ganta	205	146	59	127	5	5	0	0	0	119
Crossing	Yekepa	94	47	47	27	0	0	0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	40
	Loguatuo	104	48	56	78	Book Damage R	0	0	0	0	74
Total		5,142	2,409	2,733	4,785	123	5	5	0	0	4,666

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 guideline and SOP
- Providing remote technical and operational support to counties
- Produced and disseminated situation reports (Lassa fever, Measles, and Mpox outbreaks)

County-level

☞ Coordination

Partner coordination and resource mapping

☞ Surveillance

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

Case Management

- o Administration of PEP
- o Management of measles cases ongoing

pendi																				
mmar	y of Immediately Reportable	Dis	eas	es, (Con	ditio	ons,	and	I Ev	ents	by	Co	unty	/						
			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
. of Expec	ted Health District		4	9	5	8	5	6	5	6	4	6	7	6	6	6	10	93		
	h District Reported		4	9	5	8	5	6	5	6	4	6	7	6	6	6	10	93		
Diarrheal Dise Influenza-Like Viral Hemorrhagic Fe Vaccine Preventable Disease	Acute Flaccid Paralysis (Suspected Polio) Measles	A D A	0 0 1	0 0 4	0 0 2	0 0 2	0 0 1	0 0 14	0 0 3	0 0 3	0 0 1	0 0 17	0 0 8	0 0 10	0 1	0 0	0 0 2	0 69	29 0 3,966	0 0 25
revent	Neonatal Tetanus	D A	0	0	0	0	0	0	0	0	0	0	0 4	0	0	0	0	0 4	32	0
accine F	Yellow fever	D A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5 61	0
agic Fe V	Dengue fever	A D	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	0 2 0	0
emorrh	Ebola Virus Disease	A 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Viral He	Lassa fever	A D	0	1 0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	103 23	57 23
ıza-Like	COVID-19	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influe	Influenza Like Illnesses	A D	0	0	0	0 0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	39 0	0
eal Dise	Acute Bloody Diarrhoea (Shigellosis)	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15 0	137 0	0
	Severe Acute Watery Diarrhoea (Cholera)	A D	0	0	0	0	0	0	6	0	0	3 0	3	3 0	0	0	0	19 0	474 0	0
ealth	Maternal Mortality	D	0	0	0	1	0	1	1	0	0	0	1	2	0	0	0	6	175	
¥	Neonatal Mortality	D	0	0	0	0	0	1	1	1	0	0	17	1	0	0	3	24	418	
of Public Health	AEFI	A D	0	0	0	1 0	0	4 0	0	1 0	0	1 0	0	0	1 0	0	0	8	337 0	0
Events	Unexplained Cluster of Health Events/Diseas	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ses	Мрох	A D	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	89 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
portabl	Human Exposure to Rabies (Suspected Hum	A D	0	0	0	6	0	3	6 0	9	7	4 0	16 0	7	3	0	2	66 0	1,845 0	0
ther Re	Meningitis	A D	0	0	0	0	0	0	1 0	0	0	0	0	1 0	0	0	0	2	25 0	0
	Unexplained Cluster of deaths	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Neglected Tr	Buruli Ulcer	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Negle	Yaws	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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

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For comments or questions, please contact

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National Public Health Institute of Liberia (NPHIL)

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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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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.