

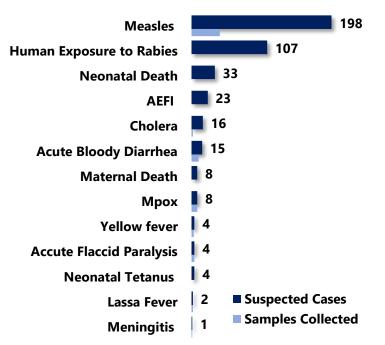
# Liberia IDSR Epidemiology Bulletin

Epi-week 16 (April 17-23, 2023)

Country Population: 5,104,413 | Volume 18 Issue 16 | April 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 423 events of public health importance including 42 deaths reported
- Completeness and timeliness of health facility reports were 98 % and 100%
- Ongoing Lassa fever outbreak in 3 Counties
- ♦ Ongoing Mpox outbreak in 3 Counties
- ◆ Ongoing Measles outbreak in 14 Counties

Adverse Events Following Immunization/Adverse Drug Reaction (AEFI)

### **Reporting Coverage**

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 16, 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	403	403	96	96
Nimba	91	91	91	100	100
Rivercess	21	21	21	100	100
River Gee	20	20	20	100	100
Sinoe	41	41	41	100	100
Liberia	978	963	963	98	100

• 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

963 (100%)

### Vaccine-Preventable Diseases

### Measles

- One hundred ninety-eight (198) suspected cases were reported from 13 Counties (see distribution in table 2)
- Forty (40) specimens collected and pending testing
- One hundred five (105) were vaccinated (see distribution in table 3)

Table2: Distribution of Measles cases per county and epi-classification, Liberia, Epi week 16, 2023

OUNTY	CASES WEEK	Lab confirmed		ATION OF (	CONFIRMED K 1-16	DEATHS	CFR (%)	CUMULATIVE # SUSPECTED	CUMULATIVE # CONFIRMED
OUNTY	16	EPI WEEK 16	Lab confirmed	Epi Linked	Clinically Compatible	DEATHS	CFK (%)	CASES, EPI WEEK 1-16	CASES, EPI WEEK 1-16
Bomi	12	0	2	13	42	0	0.0	66	57
Bong	7	0	2	6	145	1	0.7	153	153
Gbarpolu	0	0	0	0	28	0	0.0	29	28
Grand Bassa	6	0	0	0	125	0	0.0	127	125
Grand Cape Mount	3	0	1	2	46	<b>46</b> 0 <b>0.0 57</b>		57	49
Grand Gedeh	12	0	4	26	98	0	0.0	171	128
Grand Kru	47	0	6	72	524	2	0.3	604	602
Lofa	6	0	0	0	50	0	0.0	58	50
Margibi	3	0	1	8	144	0	0.0	155	153
Maryland	19	0	0	0	415	0	0.0	417	415
Montserrado	53	0	4	53	648	0	0.0	713	705
Nimba	14	0	2	33	180	3	1.4	217	215
River Gee	9	0	0	0	57	0	0.0	77	57
Rivercess	0	0	1	0	23	0	0.0	29	24
Sinoe	7	0	4	11	44	0	0.0	73	59
<b>Grand Total</b>	198	0	27	224	2,569	6	3	2,946	2,820

**Table 3: Vaccination Status of Measles Cases, Liberia, Epi week 16, 2023** 

			Number of Do	ses Received
County	Vaccinated	One Dose	Two Doses	Doses Not indicated
Bomi	12	5	7	0
Bong	0	0	0	0
Gbarpolu	0	0	0	0
Grand Bassa	3	1	0	2
Grand Cape Mount	3	3	0	0
Grand Gedeh	6	3	0	3
Grand Kru	4	1	3	1
Lofa	6	1	0	5
Margibi	0	0	0	0
Maryland	2	2	0	0
Montserrado	44	40	4	0
Nimba	11	9	0	2
River Gee	9	0	2	7
Rivercess	0	0	0	0
Sinoe	5	0	0	5
Grand Total	105	65	16	25

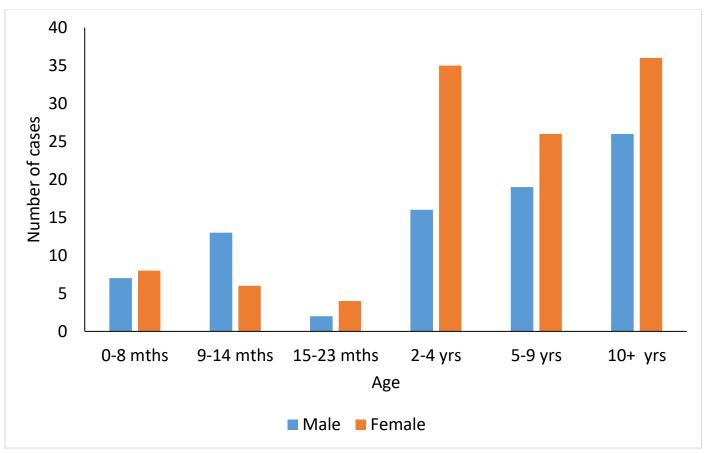


Figure 2: Distribution of Measles Cases by Sex, Liberia Epi Week 16, 2023

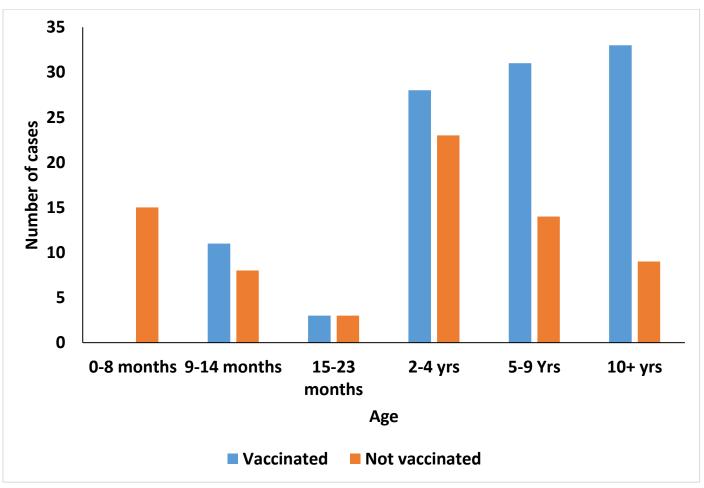


Figure 3: Vaccination Status of Suspected Measles Cases by Age group, Liberia, Epi-Week 16, 2023

### **Outbreak Section**

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

COUNTY	CUMULA TIVE SUSPECT	CUMULATI VE CONFIRME		SIFICAT FIRMED			SIFICAT IRMED I		CUMUL ATIVE DEATHS	CFR (%)	# CONFIR MED CASES	# CONFIRM ED CASES WEEK 16	% CHANGE	Outbrea k Status
	ED CASES	D CASES	Lab confirm ed	Epi Linke d	Clinically Compati ble	Lab confirm ed	Epi Linke d	Clinically Compati ble	DEATHS		WEEK 15			
Montserrado	5, 071	5,009	141	4,449	419	3	61	3	67	1.6	66	53	-20	Ongoing
Nimba	976	948	37	837	74	0	0	4	4	0.1	16	14	-86	Ongoing
Margibi	755	733	33	663	37	0	1	0	1	0	7	3	-97	Ongoing
Grand Bassa	886	849	40	677	132	1	6	0	7	1	1	6	500	Ongoing
Lofa	293	232	32	141	61	0	0	0	0	0	4	5	-95	Ongoing
Bong	520	500	19	413	68	0	1	2	3	0.6	4	7	-93	Ongoing
Maryland	780	772	22	661	89	0	0	0	0	0	31	17	-41	Ongoing
Grand Gedeh	400	287	30	113	144	0	0	0	0	0	10	12	20	Ongoing
Sinoe	238	187	33	58	96	0	0	0	0	0	2	2	-98	Ongoing
Bomi	175	151	33	72	46	1	2	2	5	7.4	1	12	1,100	Ongoing
Grd Cape Mt	184	161	16	116	29	0	2	1	3	2.7	1	1	-	Ongoing
Grand Kru	884	818	16	635	167	0	2	0	2	0	19	45	121	Ongoing
Gbarpolu	86	72	5	60	7	0	0	0	0	0	2	0	-100	Ongoing
Rivercess	102	83	22	54	7	0	1	0	1	1.3	0	0		Ended
River Gee	45	35	3	0	32	0	0	0	0	0	2	2	-	Ongoing
Total	11,395	10,837	482	8,949	1,408	5	76	12	93	1.5	166	179		

### Public Health Response

### I. Coordination

o Response efforts have been coordinated by CHTs with support from partners

### II. Epidemiological Surveillance

- Surveillance activities have been intensified at all levels in affected counties (Grand Kru, Montserrado Grand Gedeh, River Gee, Margibi and Bong).
- Active case search
- Line listing of cases

### III. Case management

 Patients were managed at health facilities and sent for home-based isolation (Grand Gedeh, Maryland, Grand Kru, and Nimba).

#### **IV.** Immunization

- Mini campaign in Grand Gedeh County still pending
- o Target age group 7-59 months
- o Targeted number of children to be vaccinated: 5,927

### V. Laboratory

- Specimens were collected from 10 districts in 8 counties for testing (Grand Kru- Barclayville and Trehn, Grand Gedeh-Putu, Konobo, Cavalla, B'hai, and Tchien, River Gee- Gbeapo, Potupo, Sarbo, and Webbo, Sinoe- Jedepo, Greenville, Kpanyan, and Tarjuwon, Lofa- Foya, Grand Cape Mount- Commonwealth C, Margibi- Kakata, Mamba-Kaba, and Gibi).
- o Five hundred twenty-one cases have been confirmed by the laboratory from December 13, 2021 April 26, 2023.

### VI. Risk Communication and Community Engagement

A five-day community engagement activity completed in affected and surrounding communities from April 20-24, 2023
 in Grand Gedeh County. The activity was supported by Last Mile Health

#### **Challenges**

- Lack of essential medications and medical supplies for case management (Grand Gedeh County)
- No movement and communication support for surveillance team for field work (Grand Gedeh County)
- Delay lab result from NPHRL
- o Lack of budget support for response (Grand Gedeh)
- Resident DSO (Tchien District, Grand Gedeh County) motor bike is in deplorable condition, needs repair or to be replaced

### Acute Flaccid Paralysis (AFP)

- Four (4) cases were reported from Nimba (1), Montserrado (2) Grand Gedeh (1) Counties
- 4 Specimens was collected: 3 shipped
- Cumulatively, twenty-two (22) cases were reported
  - Eight (8) tested negative
  - Fourteen (14) pending

#### **Neonatal Tetanus**

- Four (4) new cases reported from Montserrado County
- Cumulatively, twenty-four (24) cases including 3 deaths reported

### Influenza-Like Illnesses

### Coronavirus Disease (COVID-19)

### Outbreak

- No new confirmed cases reported
- Cumulatively, eight thousand, twenty-two (8,022) confirmed cases, including 294 deaths
  - o 601 healthcare workers
- A total of 17,827 contacts have been generated
  - 1,772 healthcare workers

### **Public Health Actions**

- o IMS coordination meeting ongoing
- Surveillance activities including active case search and case investigation ongoing in the affected counties using WHO interim guidelines
- Case management ongoing for confirmed cases
- Compulsory testing among outgoing travelers as required by the country of destination ongoing

### Influenza

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

### **Viral Hemorrhagic Diseases**

### Lassa fever

- Two (2) suspected cases were reported from Montserrado County (including 1 death)
- Specimen collected and tested negative
- Cumulatively, one hundred (100) suspected cases reported
  - Proportion of suspected cases with a sample collected (90/100) 90%
  - o Proportion of suspected cases with sample tested (88/90) 97%

### **Current Outbreak**

### Lassa fever disease

- No new confirmed case was reported
- Eight (8) contacts under 21 days' follow-up
- © Cumulatively, seventy-one (71) laboratory-confirmed cases including 17 deaths reported (CFR=24%)

Table 5: Summary of Lassa fever Outbreak, Liberia, Jan 6, 2022-April 23, 2023

Cou	Outbreak Dates	District of Outbreak	Total suspected cases	Total confirmed cases	Total confirmed cases in HCWs	Total Deaths	CFR %	Total contacts	Total HCWs contacts	Total contact completed	Total contacts under follow-up
Bong	Jan. 6, 2022, to date	Suakoko	110	38	7	7	18	366	200	366	0
Nimba	Feb. 6, 2023 to date	Sanniquellie- Mah & Tappita	9	3	0	1	33	79	67	79	0
	Sept. 9, 2022 to date	District #3 A&B	52	27	0	7	26	147	28	139	8
Mont	Feb 13, 2023 to date	Central Monrovia	8	3	0	2	67	56	48	56	0
	Total	4	179	71	7	17	24	648	343	640	8

#### **Public Health Measures**

NPHIL continues to provide technical support to the affected counties

#### I. Surveillance:

- o Heightened case detection and reporting in affected communities and districts
- 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 isolated and ribavirin treatment 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

- Four (4) cases were reported from Grand Kru (2), Grand Gedeh (1), and River Gee (1)
- Cumulatively thirty-six (36) suspected cases reported
  - Proportion of suspected cases with samples collected (33/36) 92%
    - Three samples were collected but not transported (Epi week 5 from Grand Gedeh, River Gee, and Grand Kru Counties)
  - o Proportion of samples collected and tested (18/30) 60%
    - Negative- 18
    - Pending testing -12

### **Ebola Virus Disease**

Zero suspected case was reported

### **Diarrheal Diseases**

### Acute Bloody Diarrhea (Suspected Shigellosis)

- Fifteen (15) cases were reported from Maryland (3), Grand Gedeh (3), Nimba (2), Grand Kru (2), River Gee (2), Gbarpolu (1), Montserrado (1), and Sinoe (1) (Counties
- Ten (10) specimens were collected, 4 not transported and 6 pending testing
- Cumulatively, two hundred nine (209) cases were reported
  - o Ninety-two (92) specimens were collected
    - 40 negative
    - 8 specimens rejected
  - Twelve (12) specimens were not transported in epi weeks 8, 12, & 16

### Severe Acute Watery Diarrhea (Suspected Cholera)

- 🖙 Sixteen (16) cases were reported from Montserrado (6), Lofa (4), Bong (3), River Gee (2), and Sinoe (1) Counties
- Two (2) specimens were collected: 1 not transported and 1 pending testing
- Cumulatively, two hundred seventy-four (274) cases reported
  - Eighty-one specimens collected
  - 37 negative
  - 7 rejected
  - o Ten (10) specimens were not transported in epi weeks 8, 12 & 16

### **Other Reportable Diseases**

### Animal bite (Human Exposure to Rabies)

One hundred seven (107) animal bites were reported:

Table 7: Distribution of Animal bite cases and PEP administration per county, Liberia, Epi week 16, 2023

Counties	Cases	Person receiving PEP	PEP doses administered	Cumulative cases (Wk 1-16)	Cumulative PEP administered (Wk 1-16)
Bomi	1	1	1	23	12
Bong	11	7	7	92	41
Gbarpolu	0	0	0	10	0
Grand Bassa	9	1	1	85	5
Grand Cape Mount	2	2	2	31	16
Grand Gedeh	3	2	2	40	4
Grand Kru	9	0	0	95	15
Lofa	2	2	2	84	26
Margibi	6	3	3	67	35
Maryland	3	1	1	46	17
Montserrado	33	8	8	264	90
Nimba	12	3	3	125	40
Rivercess	2	2	2	22	13
River Gee	7	0	0	40	0
Sinoe	7	0	0	44	2
Total	107	32 (30%)	32	1,068	316

### **Public Health Actions**

Ongoing monitoring and follow-up of cases

### **Meningitis**

- One (1) case was reported from Grand Kru County
- Specimen collected and pending testing
- Cumulatively, sixteen (16) suspected cases reported
  - Proportion of suspected cases with samples collected (14/16) 88%
  - o Proportion of sample tested (9/14) 64%

### **Mpox**

- Eight (8) cases were reported from Sinoe (5), Maryland (1), Grand Cape Mount (1), and Nimba (1) counties
- Specimen collected: 2 positive (Nimba & Sinoe), 1 negative and 5 pending testing
- Cumulatively, forty-seven (47) suspected cases reported
  - o Seven (7) confirmed

### **Outbreak**

#### Mpox:

Two (2) new confirmed cases were reported Nimba and Sinoe counties

Total confirmed cases reported: 10
Total contacts under follow-up: 7

© Counties currently in outbreak: 3

Table 8: Summary of Mpox Outbreak, Liberia, Dec 5, 2022 - April 23, 2023

County	Outbreak Start Date	Outbreak Districts	Total suspected cases	Total confirmed cases	Total Deaths	CFR %	Total Contacts	# HCW contacts	Contacts under follow up	completed
20 20		Central "C"	3	2	0	0	16	2	0	16
Rivercess	Dec 5 to date	Jo-River	1	1	0	0	6	2	0	6
Grand Cape Mt	Feb 24 to date	Garwula	2	2	0	0	6	0	0	6
Gbarpolu	March 17, 2023 to date	Belle	2	1	0	0	7	0	7	0
Total		4	8	6	0	0	35	4	7	28

#### **Public Health Measures**

#### I. Coordination

 National Public Health Institute of Liberia (NPHIL) and Ministry of Health (MOH) and partners are providing technical support to the County Health Teams

### II. Epidemiological Surveillance

- Active case search, case investigation, and contact tracing are ongoing in affected and neighboring communities and districts
- Daily monitoring of contacts ongoing by the surveillance team

#### III. Laboratory

- Ongoing testing of Mpox samples
- Seven (7) Mpox cases have been confirmed

### IV. Risk Communication and Community Engagement

o Community engagement and awareness in the affected community and surrounding towns ongoing

### **Key Challenges**

- No support from county-based partners for response activities
- Limited IPC materials for response activities
- Limited copies of Mpox standard case definitions

### **Events of Public Health Importance**

### Maternal Mortality

Eight (8) deaths were reported from Montserrado (3), Maryland (1), Bong (1), River Gee (1), Grand Cape Mount (1), and Grand Bassa (1) Counties

Reported causes: PPH (2), Eclampsia (2), Sepsis (1), Anemia (1), and 2 pending reviews

- Reporting Site:
- Health facility (7) 87.5%
- Community (1) 12.5%
- Cumulatively, ninety-eight (98) deaths reported
  - o Proportion of death reviewed (26/98) 27%
  - o Proportion of community death (14/98)14%

### **Neonatal Mortality**

- Thirty-three (33) deaths were reported: Montserrado (28), Margibi (2), Nimba (2), and Grand Kru (1) Counties
- Reported causes: Birth Asphyxia (22), Neonatal sepsis (5), Prematurity (5), and Jaundice (1)
- Reporting sites:
  - o Health Facility (32) 97%
  - o Community (1) 3%
- Cumulatively, two hundred thirty-eight (238) deaths reported

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

- Twenty-three (23) cases were reported from Sinoe (13), Grand Gedeh (4), Lofa (2), Rivercess (1), Grand Bassa (1), Grand Kru (1), and Maryland (1) Counties
- All reported cases were non-serious
- Related vaccine:
  - o COVID-19/J&J (7/23) 30%
  - o Penta (3/23) 13%
  - o Others (13/23) 57%
- Cumulatively, two hundred twenty-nine (229) events were reported and COVID-19 accounted for (118/229) 52%

### **Border Surveillance Update**

A total of 4,987 travelers were recorded for the week with incoming travelers accounting for 45% (2,236/4,987)

Table 9: Border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 16, 2023

	Point of Entry	_		Departure	Total travelers with YB		Card		Alerts detected/		Evidence of COVID-19 vaccination card/certificate
	James S. Paynes	118	45	73	20	0	0	0	0	0	20
Airport	Robert Int'l Airport	3689	1646	2043	3920	62	53	14	0	0	3636
Seaport	Freeport of Monrovia	118	59	59	118	0	0	0	0	0	118
_	Buchanan Port		71	71	142	0	0	0	0	0	142
	Bo Water Side	443	142	301	440	3	3	0	0	0	438
Land	Ganta	328	164	164	65	0	0	0	0	0	83
Crossing	Yekepa	71	52	19	39	0	0	0	0	0	53
	Loguatuo	78	57	27	70	0	0	0	0	0	61
Total		4,987	2,236	2,757	4,814	65	56	14	0	0	4,551

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

#### **Public Health Measures**

### **National level**

- Community engagement on Lassa fever ongoing in Grand Bassa County
- IDSR data harmonization ongoing in Bong and Montserrado Counties

### **County-level**

- - o Partner coordination and resource mapping

### **☞** Surveillance

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

### **☞ Case Management**

- Administration of PEP and ribavirin
- Management of measles and Lassa fever cases ongoing

appendix	:																			
Summar	y of Immediately Reportable	Dis	eas	es, C	one	ditic	ns,	and	Eve	ents	by	Cou	nty							
0			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 Expect	ed 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		
Diarrheal Dises Influenza-Like Viral Hemorrhagic Fe Vaccine Preventable Diseas	Acute Flaccid Paralysis (Suspected Polio)  Measles	A D A D	0 0 1 0	0 0 5 0	0 0 2 0	0 2 0	0 0 4 0	0 0 11 0	0 0 21 0	0 0 4 0	0 0 7 0	0 0 31 0	0 0 66 0	0 0 16 0	0 0 0	0 0 4 0	0 0 6 0	1 0 180	17 0 2,743 0	0 0 22 0
ne Prever	Neonatal Tetanus	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0
: Fe Vaccii	Yellow fever	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	30 0 0	0 0
morrhagi	Dengue fever  Ebola Virus Disease	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
Viral He	Lassa fever	A D	0	0 2 0	0	0 2 1	0 0	0 0	0 0	0	0	0 0	0	0 2 0	0	0 0	0	6	93 15	0 21 7
enza-Liko	COVID-19	A D A	0 0	0 0 1	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 1	0 0 39	<b>0 0</b> 0
is ear Influ	Influenza Like Illnesses	D A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 21	0	0
Diarrheal D	Acute Bloody Diarrhoea (Shigellosis)  Severe Acute Watery Diarrhoea (Cholera)	D A D	0 1 0	0 0	0 0	0 0	0 0	0 0	0 1 0	0 7 0	0 0	0 6 0	0 6 0	0 2 0	0 2 0	0 0	0 0	0 25 0	0 258 0	0 0
Public Health	Maternal Mortality  Neonatal Mortality	D D	0	0	0	0	0	0	0	1	1	1	3	4	0	0	0	10 16	90 205	
of Public	AEFI	A	1 0	0	0	1 0	0	6	3	3	0	0	0	0	0	0	11 0	25 0	206	0
Events	Unexplained Cluster of Health Events/Disease	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
sesses	Mpox	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	0
Other Reportable Diseases	Tuberculosis  Human Exposure to Rabies (Suspected Huma	D A D	0 4 0	0 <b>5</b> 0	0 0	0 3 0	0 0	0 2 0	0 3 0	0 5 0	0 1 0	0 6 0	0 44 0	0 14 0	0 6 0	0 0	0 4 0	0 97 0	0 961 1	0 0
ther Rep	Meningitis	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
	Unexplained Cluster of deaths	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 0	0 0
Neglected Tn	Buruli Ulcer	D A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ž	Yaws	D	0 10	0 13	0	0 10	0	0 <b>22</b>	0	0 <b>25</b>	0	0 <b>44</b>	0	0 <b>40</b>	0	0 <b>6</b>	0 24	0 384	0 4931	0 34

**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

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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

#### VISION

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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.