



Liberia IDSR Epidemiology Bulletin

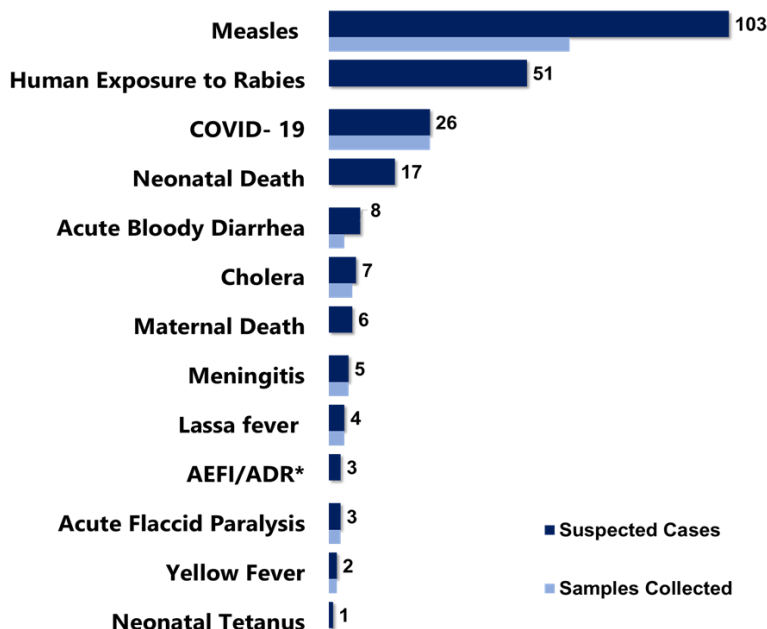
Epi-week 7 (February 14-20, 2022)

Country Population: 5,104,413 | Volume 18 Issue 7 | Feb 14 -20, 2022 | Data Source: CSOs from 15 Counties and Laboratory

Highlights

Figure 1: Public Health Events Reported during this week

Keynotes and Events of Public Health Significance



- ◆ A total of **236** events of public health importance including **24** deaths were reported
- ◆ Completeness and timeliness of health facility reports were **99% and 98%**
- ◆ **Ongoing Lassa fever** outbreak in Bong, Nimba and Grand Bassa Counties
- ◆ **Ongoing Measles** outbreak in five Counties
- ◆ **Twenty-six new confirmed COVID-19 cases** reported from three counties

*Adverse Event Following Immunization/Adverse Drug Reaction

Reporting Coverage

Table 1: Health Facility Weekly DSR Reporting Coverage, Liberia, Epi week 7, 2022

County	Expected Report from Health Facility	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	26	26	26	100	100
Bong	57	57	57	100	100
Gbarpolu	16	15	15	94	94
Grand Bassa	36	36	36	100	100
Grand Cape Mount	34	34	34	100	100
Grand Gedeh	24	24	24	100	100
Grand Kru	23	23	23	100	100
Lofa	66	66	66	100	100
Margibi	55	54	54	98	98
Maryland	27	27	27	100	100
Montserrado	329	329	327	100	99
Nimba	91	89	89	98	98
Rivercess	21	21	18	100	86
River Gee	20	20	20	100	100
Sinoe	37	37	37	100	100
Liberia	867	858	853	99	98

858 (99%)
Health facilities reported IDSR data

93 (100%)
Health districts reported IDSR data

853 (98%)
Health facilities reported timely IDSR data

- ◆ The national target for weekly IDSR reporting is 80%. Health facility timeliness is monitored at health district level
- ◆ All counties submitted weekly IDSR reports to the national level on times.

Legend: ≥80 <80

Vaccine Preventable Diseases

Measles

One hundred three (103) suspected cases were reported from Montserrado (68), Maryland (7), Gbarpolu (6), Lofa (5), Margibi (4), Nimba (4), Grand Gedeh (3), Grand Cape Mount (2), Grand Kru (2), River Gee (1), and Sinoe (1) counties

- Sixty-two (62) specimens were collected, 43 tested, 26 laboratories confirmed, 17 negative and 19 pending

Vaccination status among suspected cases

- Vaccinated - 41 (40%)
- Not vaccinated - 39 (38%)
- Unknown - 23 (22%)

Vaccination status among confirmed

- Vaccinated - 8 (31%)
- Not vaccinated - 11 (42%)
- Unknown - 7 (27%)

Age distribution among suspected cases

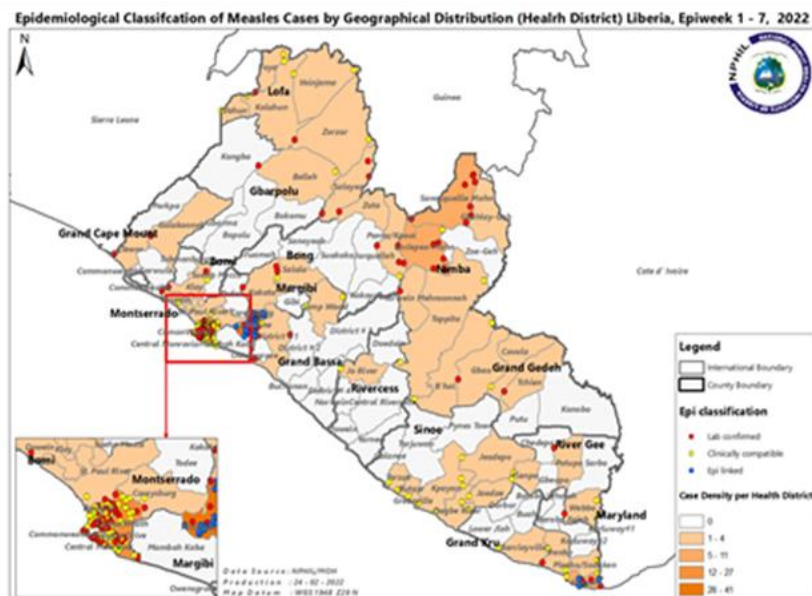
- < 5 years: 72 (70%)
- ≥ 5 years: 31 (30%)

Proportion of samples collected: 70% (226/324)

Proportion of samples tested: 83% (187/226)

Cumulatively, three hundred nineteen (324) suspected cases have been reported

- Laboratory confirmed: 103, clinically compatible: 105, epidemiologically linked: 33, non-measles discarded cases: 83



Outbreak

Montserrado County: Commonwealth, Bushrod, Somalia Drive, and Central Monrovia Districts (Situation update as of the 14th December 2021-February 21, 2022)

- Sixty-three (63) new cases recorded from Somalia Drive (26), Central Monrovia (13), Bushrod, (12), and Commonwealth (12)
- A total of 183 cases line listed up to date, Bushrod (49), Commonwealth (61) and Somalia Drive (49) and Central Monrovia (24) of which 46 laboratories confirmed
- All reported cases are undergoing treatment
- Median age 4 (range 8months- 31 years)
- Death in confirmed one
- CFR is (2%)

Vaccination status among lab confirmed:

- Vaccinated - 26% (12/46)
- Not vaccinated - 67% (31/46)
- Unknown - 7% (3/46)



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Bong County: Zota, and Panta Districts (Situation update as of the 18th January – 21st February, 2022)

- No new case recorded
- A total of 49 cases line listed of which 4 laboratories confirmed Zota (27) and Panta (22)
- All reported cases are undergoing treatment
- Median age 4 (range 7months- 52 years)

Vaccination status among lab confirmed:

- Vaccinated by history - 50% (2/4)
- Not vaccinated - 25% (1/4)
- Unknown - 25% (1/4)

Margibi County: Firestone District (Situation update as of February 1-7, 2022)

- One new confirmed
- Total of twenty-eight (28) cases recorded
- Eight (8) laboratory confirmed
- All reported cases are undergoing treatment
- Age range (1- 12 years)

Vaccination status in lab confirmed:

- Vaccinated 100% (8/8)

Nimba County: Saclepea District (Situation update as of the 26th January – 21st February, 2022)

- Two new cases recorded
- Fifteen (15) laboratory confirmed
- Total of twenty-two (22) cases line listed; Saclepea-Mah (16), and Sanniquellie-Mah (6)
- All reported cases are undergoing treatment
- Median age 6 (range 7months- 14 years)

Vaccination status in lab confirmed:

- Vaccinated by history 58% (7/12)
- Not vaccinated 25% (3/12)
- Unknown-17% (2/12)

Maryland County: Harper District (Situation update as of the 31st January – 6th February, 2022)

- Four (4) new cases recorded
- Four (4) laboratory confirmed
- Total of twelve (12) cases line listed from Harper
- All reported cases are undergoing treatment
- Median Age 11, (range 4-18 years)

Vaccination status in lab confirmed:

- Unknown-100% (4/4)

Public Health Actions

- 👉 Community sensitization on utilization of vaccination services
- 👉 Case investigation, active case search and line listing ongoing
- 👉 Case management of affected cases ongoing

Challenges

- Limited logistical and operational support for response activities
- Stock out of measles vaccines and vitamin A, in some counties (Bong and Margibi Counties)
- Delay in specimen's transportation and feedback
- Limited medical supplies for case management

Acute Flaccid Paralysis (AFP)

- 👉 Three (3) cases reported from Nimba, Maryland, and River Gee Counties
- 👉 Three specimens collected, one (1) shipped and two (2) pending shipment
- 👉 Cumulatively, fifteen (15) AFP cases have been reported

Neonatal Tetanus

- 👉 One case reported from Rivercess County
- 👉 Cumulatively, eight (8) clinically diagnosed cases reported

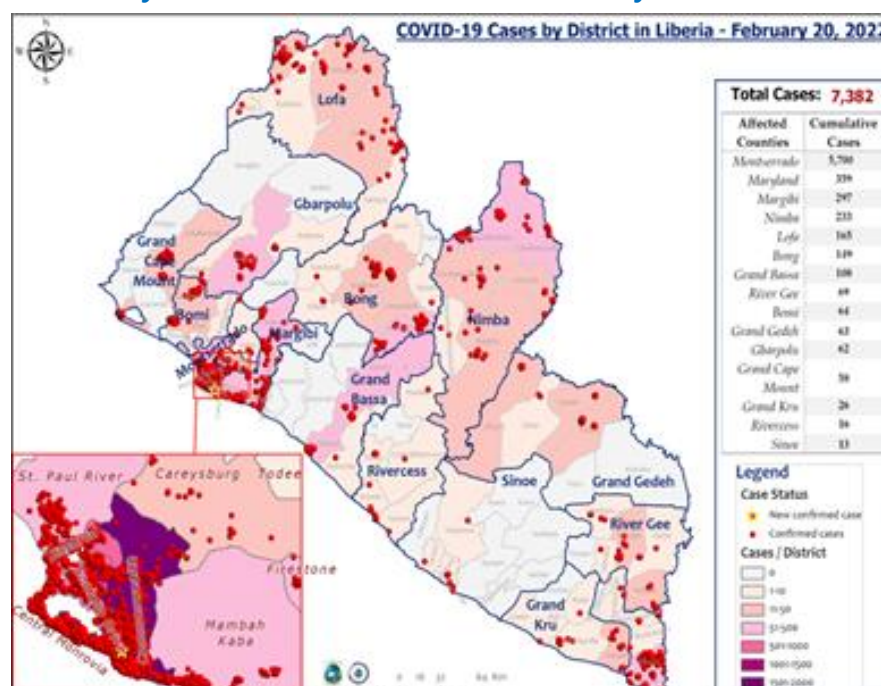
Influenza-Like Illnesses

Coronavirus Disease (COVID-19)

Outbreak

- 👉 Twenty-six (26) new confirmed cases were reported from Montserrado (24), Bomi (1), and Grand Bassa (1) Counties
 - Twenty-six (26) contacts are being followed up in Bomi, Grand Bassa and Montserrado Counties
- 👉 A total of five hundred four (504) confirmed cases have been reported since epi week 1
- 👉 Cumulatively, seven thousand three hundred eighty-two (7,382) confirmed cases recorded including 294 deaths and 601 healthcare workers reported with 17,614 contacts generated

Figure 2: Geographical Distribution of Laboratory Confirmed COVID-19 Cases by Health Districts, Liberia, as of February 20, 2022



Public Health Actions

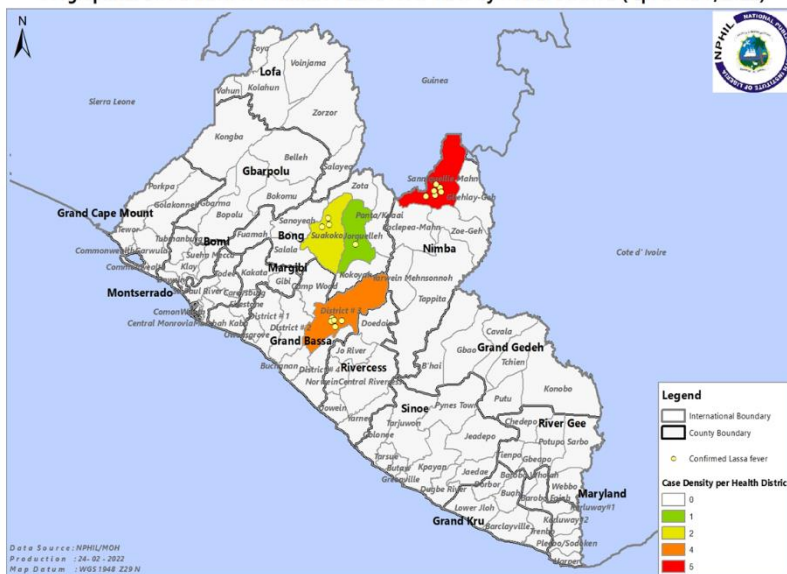
- 👉 Weekly IMS coordination meeting on-going
- 👉 Surveillance activities including active case search, contact tracing and case investigation on-going in affected counties using WHO interim guidelines
- 👉 Reinforcing hand washing in all public areas (markets, health facilities, public offices, checkpoints etc.)
- 👉 Case management ongoing for confirmed cases
- 👉 Compulsory testing among outgoing and incoming travelers ongoing

Viral Hemorrhagic Diseases

Lassa fever

- ☞ Four (4) suspected cases reported from Grand Bassa (2), Nimba (1) and Bong (1) Counties
 - Four specimens collected and tested negative Cumulatively, thirty-three (33) suspected cases reported including 7 deaths
- ☞ Proportion of suspected cases with sample collected 100% (33/33)
 - Proportion of suspected cases with sample tested 100% (33/33)
 - Sixteen confirmed cases including 5 deaths CFR 31.3%

Geographical Distribution of Confirmed Lassa fever cases by Health Districts (Epi week 7, 2022)



Outbreak

Three Counties currently in Outbreak: Grand Bassa, Nimba, and Bong

Grand Bassa County: District 3 A&B

- ☞ No new confirmed case reported
- ☞ Confirmed case discharged Feb 18, 2022. No confirm case in admission. A total of 24 contacts generated from epi-week 1-7, 2022. All 24 contacts were family and community members. Twenty-two (22) completed and 2 currently under monitoring. Contacts have gone 14 days follow up. The suspected cases reported for epi week 6 were tested negative. Total confirmed cases five. CFR 20% (n=1/5)

Nimba County: Sanniquellie-Mah District

- ☞ Since the 7th of January 2022, an 8 years-old male who result was positive, is still been managed at the E&J Medical Health Center Cumulatively, 104 contacts generated of which 56 completed and 48 currently under monitoring. The 48 contacts (25 HCWs) have gone 16 days follow up. Cumulatively, seven confirmed cases since January 2022. CFR 57% (n=4/7).

Bong County: Suakoko District

- ☞ Confirmed case discharged February 12, 2022. A total 39 contacts generated from epi-week 1-7, 2022. All 39 contacts completed 21 days. The suspected case reported for epi week 6 was tested negative. Total confirmed cases four. CFR 0% (all cases alive).

Public Health Actions

- ☞ Case management ongoing for the confirmed cases in isolation
- ☞ Continue to air LF prevention and control message in affected and surrounding districts



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Yellow fever

- 📁 Two (2) suspected cases reported from Grand Kru and Rivercess Counties
 - Two (2) specimens collected, one (1) pending testing and one (1) enroute to the Lab
- 📁 Cumulatively, sixteen (16) suspected cases reported
 - Proportion of suspected cases with sample collected 88% (14/16)
 - Proportion of suspected cases with sample tested 57% (8/14)

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- 📁 Eight (8) suspected cases reported from Margibi (2), Sinoe (1), Nimba (1), River Gee (1), Bomi (1), Grand Gedeh (1) and Rivercess (1) Counties
 - Four (4) specimens collected and pending testing
- 📁 Cumulatively, one hundred six (106) suspected shigellosis cases reported with 37 specimens collected: 19 negative, 1 positive 17 pending

Severe Acute Watery Diarrhea (Suspected Cholera)

- 📁 Seven (7) suspected cases reported from Maryland (3), Lofa (1), Nimba (1), Gbarpolu (1), and Grand Gedeh (1) Counties
 - Seven (6) specimens collected and pending testing
- 📁 Cumulatively, sixty-one (61) suspected cholera cases reported with thirty (30) specimens collected and eleven (11) tested negative

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

- 📁 Fifty-one (51) animal bite cases reported from Montserrado (14), Nimba (13), Grand Kru (8), Grand Bassa (4), Maryland (3), Grand Cape Mount (2), Lofa (2), Bomi (1), Bong (1), Margibi (1), Sinoe (1), and River Gee (1), Counties
- 📁 Dog bites accounts for 100%
- 📁 Cumulatively, three hundred twenty-six (326) animal bite cases reported

Public Health Actions

- 📁 1-4 doses of post exposure prophylaxis administered to about 8% (4/51) persons
- 📁 Cumulatively, 1-4 doses of post exposure prophylaxis were administered to about 17% (55/327)

Meningitis

- 📁 Five suspected cases reported from Grand Kru County
- 📁 Five specimens collected and testing negative
- 📁 Cumulatively, eleven (11) suspected cases reported including one confirmed

Monkeypox

- 📁 Zero suspected case reported
- 📁 Cumulatively, four (4) suspected cases reported, two (2) specimens collected pending shipment

Events of Public Health Importance

Maternal Mortality

- 📁 Six (6) deaths reported from Sinoe (2), Nimba (1), Lofa (1), Grand Gedeh (1) and Grand Kru (1) Counties
 - Causes of death: Eclampsia (2), PPH (1), Antepartum hemorrhage (1) and 2 under investigation
 - Five deaths occurred at the health facility



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📁 Cumulatively, forty (40) deaths reported

- Proportion of deaths reviewed 40% (16/40)
- Proportion of community deaths 22.5% (9/40)
 - Proportion of deaths reviewed in the community 44.4% (4/9)

Neonatal Mortality

📁 Seventeen (17) deaths reported from Montserrado (13), Gbarpolu (2), Nimba (1), and Margibi (1), Counties

📁 Causes of deaths: birth asphyxia (13), Preterm (2), sepsis (1), and one under investigation

📁 All occurred at the health facility

📁 Cumulatively: ninety-two (92) deaths have been reported

- Proportion of deaths reviewed 10.9% (10/92)
- Proportion of community deaths 3.3% (3/92)
 - Proportion of deaths reviewed from the community 20% (2/10)

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

📁 Three (3) cases reported from Bomi (1), Grand Kru (1) and Grand Bassa (1) Counties

📁 Cumulatively: forty-seven (47) events reported with 87% (41/47) related to COVID-19

- Proportion of J&J - 83% (34/41)
- Proportion of AstraZeneca - 5% (2/41)
- Proportion of other related events -13% (6/47)

Public Health Actions

📁 All events were investigated, categorized as *non-serious AEFI and symptomatically treated*

📁 Active case search and community engagement ongoing

Border Surveillance Update

📁 A total of 11,254 travelers recorded for the week with incoming travelers accounting for 51% (5793/11,254)

📁 Four travelers reactive for COVID-19.

Table2: Border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 7, 2022

Type of Ports	Point of Entry	Weekly total	Arrival	Departure	Yellow Book Issued	Yellow Book Damage	Card Replaced	Travelers Vaccinated	Alerts Verified	COVID-19 Reactive	Fully vaccinated
Airport	James S. Paynes	45	25	20	0	0	0	0	0	0	10
	Robert Int'l Airport	3193	1489	1704	227	225	0	2	0	4	3185
Seaport	Freeport of Monrovia	112	56	56	0	0	0	0	0	0	56
	Harper	0	0	0	0	0	0	0	0	0	0
	Buchanan Port	96	48	48	0	0	0	0	0	0	48
Land Crossing	Bo Water Side	587	269	318	33	16	0	17	0	0	53
	Ganta	412	180	232	18	18	0	0	0	0	400
	Yekepa	204	150	54	15	15	0	0	0	0	25
	Loguatu	180	80	100	12	12	0	0	0	0	30
	Yeala	633	304	329	0	0	0	0	0	0	0
	Kpazagizzia	228	87	141	0	0	0	0	0	0	0
	Safedu	663	471	192	0	0	0	0	0	0	0
	Konadu	915	526	389	0	0	0	0	0	0	0
	Bolongoidu	569	216	353	0	0	0	0	0	0	0
	Lawalazu	1086	557	529	0	0	0	0	0	0	0
	Foya Tengia	700	390	310	0	0	0	0	0	0	0
	Sorlumba	461	271	190	0	0	0	0	0	0	0
	Mendicoma	900	505	395	0	0	0	0	0	0	0
	Worsonga	270	169	101	0	0	0	0	0	0	0
Total travelers		11,254	5,793	5,461	114	286	0	19	0	4	2850

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



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Public Health Measures

National level

- 👉 Providing technical, logistical, and financial support to counties
 - Publication of situational reports
 - 3rd edition IDSR training ongoing in Bomi County including 54 participants from 27 health facility
- 👉 Operational Activity
 - Continued support for operational activities ongoing

County level

👉 Surveillance

- Quarantine and monitoring of domestic animal (Dog) and cases possibly exposed to rabies
- Publication of situational reports
- Active case search ongoing in affected and surrounding communities

👉 Case Management

- PEP administered to four cases
- Management of admitted cases ongoing
- Ensure the appropriate medical protocol in place

Appendix

Summary of Immediately Reportable Diseases, Conditions, and Events by County

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	Cumulative Lab-confirmed	
No. of Expected Health District			4	8	5	8	5	6	5	6	4	5	7	6	6	6	10	91			
No. of Health District Reported			4	8	3	8	5	6	5	6	4	5	7	6	6	6	10	89			
Vaccine Preventable Diseases	Acute Flaccid Paralysis (Suspected Polio)	A	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	3	15	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Measles	A	0	0	6	0	2	3	2	5	4	7	67	4	0	1	1	102	321	102	
		D	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3	0	
	Neonatal Tetanus	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	
Yellow fever	A	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	16	0		
	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Viral Hemorrhagic Fever	Dengue fever	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	
	Ebola Virus 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	
	Lassa fever	A	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	4	33	11	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	5	
Influenza-Like Illnesses	COVID-19	A	1	0	0	1	0	0	0	0	0	0	24	0	0	0	0	26	504	7382	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294	
Diarrheal Diseases	Acute Bloody Diarrhoea (Shigellosis)	A	1	0	0	0	0	1	0	0	2	0	0	1	1	1	1	8	106	1	
		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	0	1	0	0	1	0	1	0	3	0	1	0	0	0	7	61	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Events of Public Health Importance	Maternal Mortality	D	0	0	0	0	0	1	1	1	0	0	0	1	0	0	2	6	40		
	Neonatal Mortality	D	0	0	2	0	0	0	0	1	0	13	1	0	0	0	17	61			
	Adverse Events Following Immunization (AEFI)	A	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	47	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Reportable Diseases	Monkeypox	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
		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	0	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 Rabies)	A	1	1	0	4	2	0	8	2	1	3	14	13	0	1	1	51	325	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	5	0	0	0	0	0	0	0	0	5	11	0	
		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	0	
	D	0	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			4	2	9	8	4	6	18	9	8	14	119	23	3	4	5	236	1558	7795	

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: $\geq 80\%$). Time requirement for weekly IDSR reports:
 - Health facility - required on or before 5:00pm every Saturday to the district level
 - Health district - required on or before 5:00pm every Sunday to the county level
 - County - required on or before 5:00pm 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 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 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 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

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.