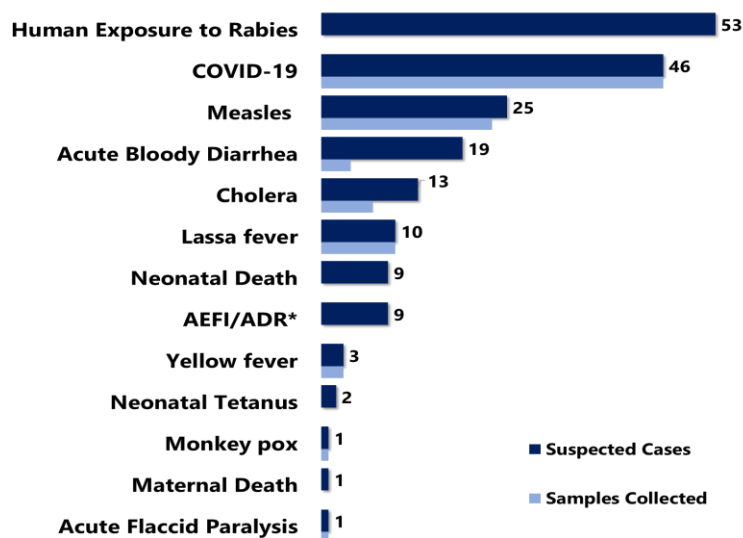


Highlights

Figure 1: Public Health Events Reported during this week

Keynotes and Events of Public Health Significance



- ♦ A total of **192** events of public health importance including **14** deaths were reported
- ♦ Completeness and timeliness of health facility reports were both **99%** and **98%** respectively
- ♦ **Ongoing Lassa fever** outbreaks in Bong, Nimba and Grand Bassa Counties
- ♦ **Forty-six new confirmed COVID-19 cases** reported from six counties

*Adverse Event Following Immunization/Adverse Drug Reaction

Reporting Coverage

Table 1: Health Facility Weekly DSR Reporting Coverage, Liberia, Epi week 3, 2022

County	Expected Report from Health Facility	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	26	26	26	100	100
Bong	57	53	53	93	93
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	100	100
Maryland	27	24	24	100	100
Montserrado	326	326	319	98	96
Nimba	91	88	88	97	97
Rivercess	21	21	21	100	100
River Gee	20	20	20	100	100
Sinoe	37	37	37	100	100
Liberia	859	847	840	99	98

847(99%)
Health facilities reported IDSR data

91(98%)
Health districts reported IDSR data

840(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

- ☞ Twenty-five (25) suspected cases were reported from Montserrado (7), Nimba (4), River Gee (2), Lofa (2), Bong (2), Bomi (1), Gbarpolu (1), Grand Cape Mount (1), Grand Kru (1), Grand Gedeh (1), Margibi (1), Maryland (1) and Rivercess (1), Counties
 - Twenty-three specimens were collected and 21 tested; 10 positive (Montserrado-5, Nimba-1, Bong-1, Lofa-1, Margibi-1, Nimba-1 and River Gee-1 Counties), 11 negative and 2 pending testing
- ☞ Vaccination status among suspected cases
 - Vaccinated: 13 (52%), Not vaccinated: 7 (28%), Unknown: 5 (20%)
- ☞ Vaccination status among lab-confirmed cases
 - Vaccinated: 3 (30%), Not vaccinated: 3 (30%), Unknown: 4 (40%)
- ☞ Age distribution among suspected cases
 - < 5 years: 17 (68%), ≥ 5 years: 8 (32%)
- ☞ Proportion of samples tested: 90% (43/48)
- ☞ Cumulatively, fifty-nine (59) suspected cases have been reported
 - Laboratory confirmed: 20, clinically compatible: 20, epidemiologically linked: 1, non-measles discarded (negative) cases: 24

Acute Flaccid Paralysis (AFP)

- ☞ One case was reported from Nimba County
- ☞ Specimen was collected, shipped and pending testing
- ☞ Cumulatively, three (3) AFP cases have been reported

Neonatal Tetanus

- ☞ Two (2) cases were reported from Montserrado (dead) and River Gee Counties
- ☞ Cumulatively, four (4) clinically diagnosed cases have been reported

Influenza-Like Illnesses

Coronavirus Disease (COVID-19)

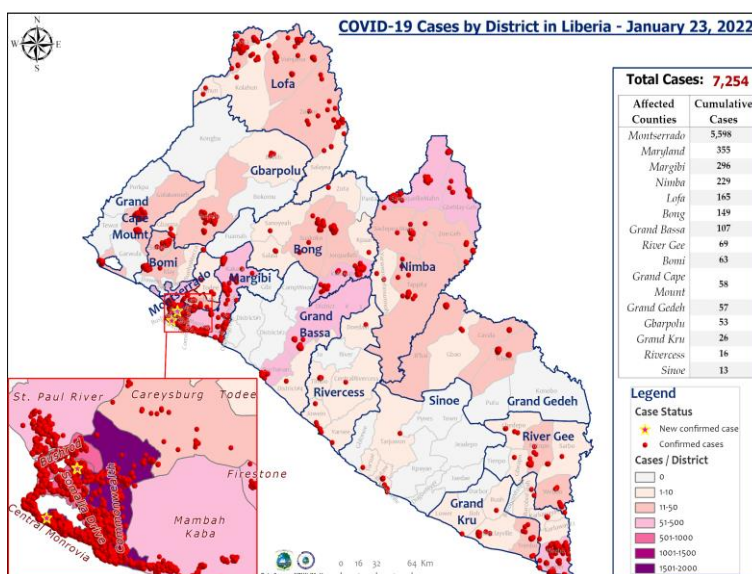
Outbreak

- ☞ Forty-six (46) new confirmed cases were reported from Montserrado (28), Maryland (8), Grand Gedeh (7), Grand Bassa (2), and Margibi (1) Counties
- ☞ Five hundred eighty (580) contacts are being followed up in Margibi (212), Maryland (189), Gbarpolu (46), Nimba (45), Bong (36), Montserrado (31), Grand Gedeh (10), Grand Cape Mount (7), and Grand Bassa (4) Counties
- ☞ A total of 436 confirmed cases have been reported since epi week 1
- ☞ Cumulatively, 7,254 confirmed cases have been reported including 290 deaths and 358 healthcare workers and 17,403 contacts generated

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

Figure 2: Geographical Distribution of Laboratory Confirmed COVID-19 Cases by Health Districts, Liberia, as of January 23, 2022



Viral Hemorrhagic Diseases

Lassa fever

- ☛ Ten (10) suspected cases were reported from Grand Bassa (4), Nimba (2 including 1 dead), Bong (2), Montserrado (1 dead) and Grand Kru (1 dead) Counties
 - Specimens were collected, 4 tested positive (Grand Bassa-2 and Nimba-2), 5 negatives and 1 pending testing
- ☛ Cumulatively, eighteen (18) suspected cases have been reported
 - Proportion of suspected cases with sample collected 100% (18/18)
 - Proportion of suspected cases with sample tested 94% (17/18)
 - Confirmed cases: 9
 - Case fatality rate (CFR) 33% (3/9)

Outbreak

Nimba County: Sanniquelleh-Mah District

- One new confirmed case for week 3
- On the 2nd of January 2022, a 29-year-old female, resident of Success Community, Ganta City, Sanniquelleh-Mah District, sought treatment at E & J hospital for pregnancy complications on January 2, 2022. She was suspected of Lassa fever on January 18, 2022, and a sample was collected on January 19, 2022. Positive lab result was released on January 23, 2022. A total of 19 contacts were generated, including 15 HCWs.

Grand Bassa: District #3A&B

- Two New Confirmed Cases for week 3. This is a continuous outbreak for Grand Bassa. This outbreak started November 5, 2021

Case #1

- On the 18th of January 2022, a 23-year-old female, resident of Seeko Camp, District #3A&B presented with fever, headache, swollen neck, weakness, and sore throat. At home, she self-medicated with paracetamol for the high fever. With no improvement, she was taken to the Liberia Agriculture Company (LAC) Hospital on the 19th of January 2022, isolated, specimen collected, and sent to NPHRL. On 23rd January 2022, a PCR positive result was released. The case is alive and undergoing treatment. A total of 8 contacts line listed and under follow-up. The case had no epi-link to previous confirmed cases or was a contact to a confirmed case.

Case #2

- On the 18th of January 2022, a 12-year-old female, resident of Café Barn Camp, located in LAC Plantation, District #3A&B presented high fever, headache, weakness, loss of appetite, facial swelling, sore throat, nausea, swollen neck, and a history of persistent fever on January 18, 2022. Based on a high suspicion of Lassa fever, the case was immediately isolated, specimen collected, and sent to NPHRL on January 19, 2022, and a PCR positive result was released by NPHRL. A total of 3 contacts have been line-listed and under monitoring. The case is alive and has no epi-link to previously confirmed cases; neither was a contact to a confirmed case.

Bong County: Suakoko Districts

- A 39-year-old female resident of Jacob's Town Community, Paynesville, presented with fever and headache with date onset on January 5, 2022. On 15th January 2022, she sought care at Phebe Hospital, suspected of Lassa fever, and specimen was collected on January 16, 2022. Result released positive on 20th January 2022. Total of 13 contacts generated, including 5 HCWs.

Public Health Actions

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

Yellow fever

- ☛ Three (3) suspected cases were reported from River Gee (2) and Grand Kru (1) Counties
 - Specimens were collected and pending testing
- ☛ Cumulatively, five (5) suspected cases have been reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- ☛ Nineteen (19) suspected cases were reported from Sinoe (10), Rivercess (4), Lofa (1), Grand Gedeh (1), Grand Kru (1), Gbarpolu (1), Bong (1) Counties
 - Four specimens were collected and pending testing
- ☛ Cumulatively, forty-eight (48) suspected shigellosis cases have been reported including 1 confirmed case from Grand Gedeh County with 8 specimens collected and 5 pending testing

Severe Acute Watery Diarrhea (Suspected Cholera)

- Thirteen (13) suspected cases were reported from Maryland (5), Grand Kru (3), Sinoe (3), Bomi (1), River Gee (1) Counties
 - Seven specimens were collected and pending testing
- Cumulatively, twenty-three (23) suspected cholera cases have been reported with twelve (12) specimens collected

Other Reportable Diseases

Human Exposure to Rabies (Suspected Human Rabies)

- Fifty-three (53) animal bite cases were reported from Montserrado (14), Nimba (5), Maryland (5), Cape Mount (5), Grand Bassa (5), Sinoe (4), Bomi (3), Lofa (3), Margibi (3), Rivercess (2), Grand Kru (2), Grand Gedeh (1) and Bong (1) Counties
- All cases reported were dog bites
- Cumulatively, one hundred-thirty-three (133) animal bite cases have been reported

Public Health Actions

- 1-4 doses of prophylaxis were administered to about 20% (26/133) patients

Meningitis

- Zero cases were reported
- Cumulatively, one case has been reported

Monkey pox

- One case was reported from Gbarpolu County
- Specimen was and pending testing
- Cumulatively, one case has been reported

Events of Public Health Importance

Maternal Mortality

- One death was reported from Sinoe Counties
 - Cause of death: Eclampsia
- The death occurred within the community
- Cumulatively, fifteen (15) deaths have been reported with the Maternal Mortality Ratio of 156 deaths by 100,000 livebirths¹

Neonatal Mortality

- Nine (9) deaths were reported from Montserrado (4), Lofa (2), Grand Kru (1), Margibi (1) and Bong (1) Counties
- Causes of deaths: birth asphyxia (6), sepsis (2), and neonatal tetanus (1)
- Eight deaths occurred at the health facility and one in the community
- Cumulatively, thirty-six (36) deaths have been reported

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

- Nine (9) cases were reported from Bomi (5), Montserrado (2), Sinoe (1) and Lofa (1 dead) Counties
- Cumulatively, thirty (30) events have been reported and 93% (28) is related to COVID-19

Public Health Actions

- All events were investigated, categorized as *non-serious AEFI and symptomatically treated*
- Active case search and community engagement ongoing

¹ The estimated maternal mortality ratio for 2019-20 LDHS is 742 maternal deaths per 100,000 live births. 4.3% of the overall population

Cross Border Surveillance Update

- ✚ A total of 9,468 travelers recorded for the week with incoming travelers accounting for 48%
- ✚ Fifteen travelers were reactive for COVID-19

Table 2: Cross border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 3, 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 for COVID-19
Airport	James S. Paynes	34	22	39	0	0	0	0	0	0	13
	Robert Int'l Airport	3643	1462	2181	28	25	0	3	0	0	3550
Seaport	Freeport of Monrovia	76	38	38	0	0	0	0	0	0	38
	Harper	0	0	0	0	0	0	0	0	0	
	Buchanan Port	124	62	62	0	0	0	0	0	0	60
Land Crossing	Bo Water Side	114	17	97	5	0	0	5	0	0	
	Ganta	266	39	227	20	20	0	0	0	0	
	Yekepa	146	77	69	28	28	0	0	0	0	
	Loguatu	209	94	106	7	7	0	0	0	0	
	Yeala	899	444	455	0	0	0	0	0	0	
	Kpasagizia	333	83	250	0	0	0	0	0	0	
	Safedu	235	118	117	0	0	0	0	0	0	
	Konadu	720	406	314	0	0	0	0	0	0	
	Bolinquidu	595	323	272	0	0	0	0	0	0	
	Lawalazu	415	224	191	0	0	0	0	0	0	
	Foya Tengia	486	386	100	0	0	0	0	0	0	
	Sorlumba	549	363	186	0	0	0	0	0	0	
	Mendicoma	329	207	122	0	0	0	0	0	0	
	Worsonga	295	170	125	0	0	0	0	0	0	
Total travelers		9,468	4,535	4,951	88	80	0	8	0	0	3,661

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

Public Health Measures

National level

- ✚ Providing technical, logistical, and financial support to counties
 - Publication of situational reports
 - Conducting IDSR training in Montserrado County
 - Distribution of phones to 8 designated PoEs
 - Orientation of reporting template on the use of Kobo collect
- ✚ Operational
 - Provision of financial assistance to enhance operational activities

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 seven 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	9	5	8	5	6	5	6	4	6	7	6	6	6	10	93		
No. of Health District Reported			4	8	5	8	5	6	5	6	4	5	7	6	6	6	10	91		
Vaccine Preventable Diseases	Acute Flaccid Paralysis (Suspected Polio)	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	1	2	1	0	1	1	1	2	1	1	7	4	1	2	0	25	59	20
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Neonatal Tetanus	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0
		D	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0
	Yellow fever	A	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	3	5	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	2	0	4	0	0	0	0	0	0	0	1	0	0	0	7	13	6
		D	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	3	5	3
Influenza-Like Illnesses	COVID-19	A	0	0	0	2	0	7	0	0	1	8	28	0	0	0	0	46	435	435
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Diarrheal Diseases	Acute Bloody Diarrhoea (Shigellosis)	A	0	1	1	0	0	1	1	1	0	0	0	0	4	0	10	19	48	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	1	0	0	0	0	0	3	0	0	5	0	0	0	1	3	13	23	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	0	0	0	0	0	0	0	0	0	1	1	15	
	Neonatal Mortality	D	0	1	0	0	0	0	1	2	1	0	4	0	0	0	0	9	36	
	Adverse Events Following Immunization (AEFI)	A	5	0	0	0	0	0	0	0	0	0	2	0	0	0	1	8	29	0
		D	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	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
		D	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	1	0	0	0	0	0	0	0	0	0	0	0	0	1	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	3	1	0	5	5	1	2	3	3	5	14	5	2	0	4	53	133	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	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
	Unexplained Cluster of deaths	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
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			10	7	3	11	6	10	10	9	6	19	57	12	7	6	19	192	813	466

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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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.