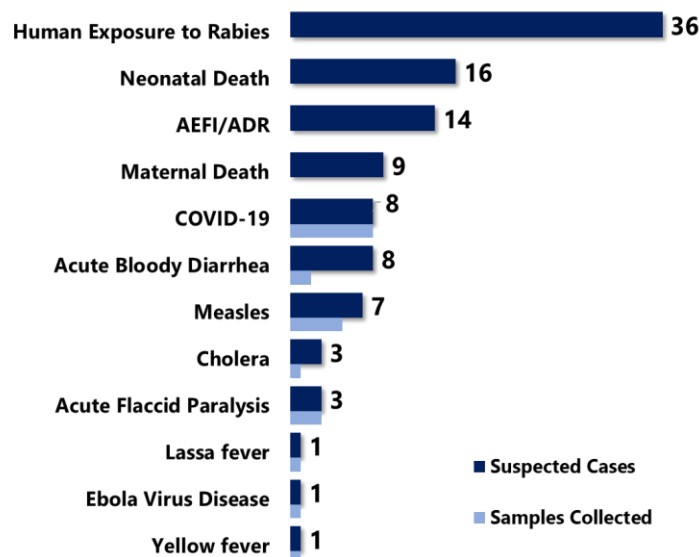


Highlights

Figure 1: Public Health Events Reported during this week



Keynotes and Events of Public Health Significance

- ♦ A total of **107** events of public health importance including **25** deaths reported
- ♦ Completeness and timeliness of health facility reports were both **99%**
- ♦ **Adverse Events Following Immunization** surveillance heightened following the introduction of new vaccine (nOPV2, TCV, COVID-19)
- ♦ **Ongoing Lassa fever** outbreak in Grand Bassa County
- ♦ **Ongoing EVD preparedness engagement** initiated at all level
- ♦ **Eight** new confirmed COVID-19 cases recorded from two counties

Reporting Coverage

Table 1: Health Facility Weekly DSR Reporting Coverage, Liberia, Epi week 15, 2021

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	15	15	15	100	100
Grand Bassa	36	36	36	100	100
Grand Cape Mount	34	34	34	100	100
Grand Gedeh	24	24	24	100	100
Grand Kru	22	22	22	100	100
Lofa	61	61	61	100	100
Margibi	55	55	55	100	100
Maryland	27	25	25	100	100
Montserrado	367	367	367	100	100
Nimba	91	87	87	96	96
Rivercess	20	20	20	100	100
River Gee	20	20	20	100	100
Sinoe	37	37	37	100	100
Liberia	891	886	886	99	99

886(99%)
Health facilities reported IDSR data

92(99%)
Health districts reported IDSR data

886(99%)
Health facilities reported timely IDSR data

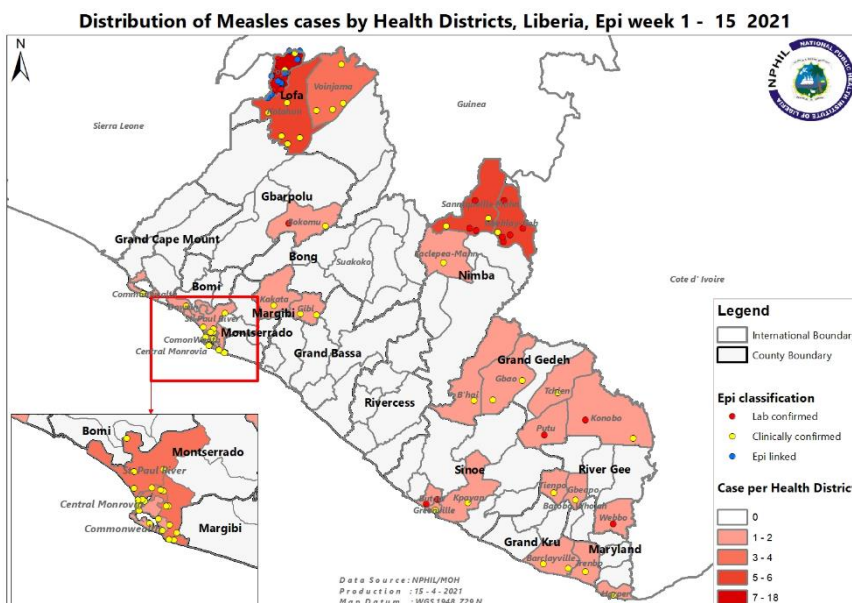
- ♦ The national target for weekly IDSR reporting is 80%. Health facility timeliness is monitored at health district level
- ♦ Bomi county submitted weekly IDSR report late to the national level and Grand Kru added three additional health facilities.

Legend: ≥80 <80

Vaccine Preventable Diseases

Measles

- ☞ Seven (7) suspected cases were reported from Gbarpolu (3), Nimba (2), RiverGee (1) and, Grand Cape Mount (1) Counties
 - Five (5) specimens were collected and pending laboratory confirmation
- ☞ Vaccination status among suspected cases
 - Vaccinated: 7 (100%)
- ☞ Age distribution among suspected cases
 - <5 years: 4 (57%)
 - ≥5 years: 3 (43%)
- ☞ Cumulatively, since Epi week one, one hundred and fourteen (114) suspected cases have been reported
- ☞ Epi-classification is as follows: 79 confirmed (10 lab-confirmed, 57 clinically confirmed, 12 epi-linked) and 35 negatives



Acute Flaccid Paralysis

- ☞ Three (3) cases were reported from Lofa (1), Grand Cape Mount (1), and Gbarpolu (1) Counties
- ☞ Three specimens were collected, shipped and pending testing
- ☞ Cumulatively, since Epi week one, thirty-nine (39) cases have been reported

Neonatal Tetanus

- ☞ Zero cases were reported
- ☞ Cumulatively, since Epi week one, five (5) cases have been reported

Influenza-Like Illnesses

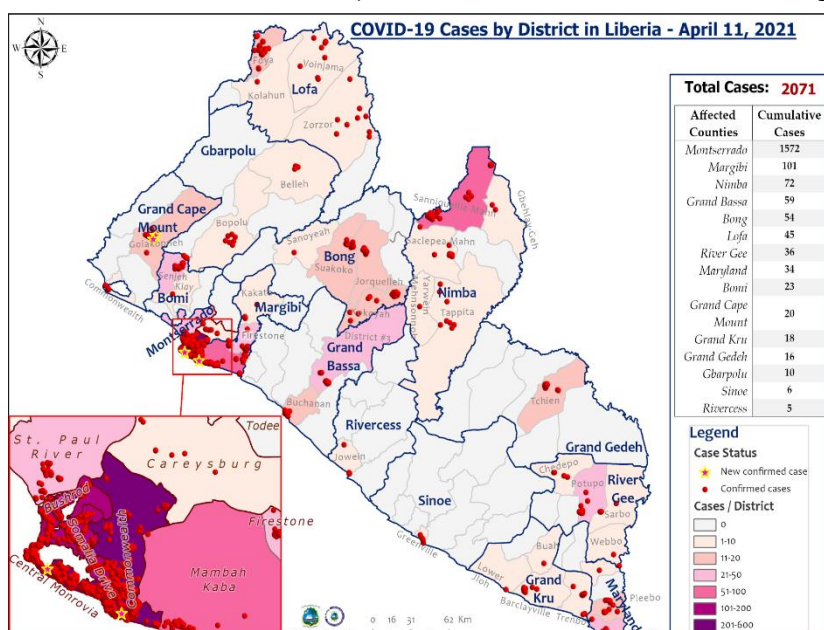
Coronavirus Disease (COVID-19)

Outbreak

- ☞ Eight (8) new confirmed cases were reported from Montserrado (6), and Grand Cape Mount (2) Counties with male accounting for 62.5%
- ☞ Since Epi week one, a total of two hundred fifty-three (253) confirmed cases have been reported
- ☞ Cumulatively, two thousand seventy-one (2,071) confirmed cases recorded including 85 deaths

Public Health Actions

- ☞ Daily 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

- 📁 One suspected case was reported from Grand Bassa County
- 📁 Specimen was collected and pending testing
- 📁 Cumulatively, since Epi week one, thirty (30*) suspected cases have been reported including six (6) deaths
 - 2 positive, 21 negative and 6 specimens not collected
 - Proportion of suspected cases with sample collected 80% (24/30)
 - Proportion of suspected cases with sample tested 76% (23/30)

* Six suspected cases have been delisted due to lack of specimen collection: Bong (5) and Grand Bassa (1) Counties

Outbreak

District 3A&B, Grand Bassa County

- 📁 No new confirmed case reported this week
- 📁 The confirmed case, a 38-year-old female and a resident of MIE Field, Compound # 3, presented with symptoms of red eyes, weakness, poor appetite, sore throat, vomiting, coughing on 1st March 2021 and was unresponsive to treatment. Based on the suspicion for Lassa, the case patient was admitted and isolated at LAC hospital on 4th March. Specimen was collected on 6th March 2021 and tested positive on 8th March 2021. The case patient expired on 7th March while awaiting the lab results
- 📁 All 14 contacts were line listed have completed 21 days follow-up

Public Health Actions

- 📁 IPC assessment conducted to reinforce IPC practices
- 📁 Active case search and community engagement ongoing

Yellow fever

- 📁 One suspected case was reported from Grand Cape Mount County
- 📁 Specimen was collected and pending testing
- 📁 Cumulatively since Epi week one, twenty-eight (28*) suspected cases have been reported with 17 negative, 9 pending testing and 2 specimens were not collected
 - Proportion of suspected case with sample collected 93% (26/28)
 - Proportion of suspected case with sample tested 61% (17/28)

* Two suspected cases have been delisted due to lack of specimen collection:

Monkeypox

- 📁 Zero suspected case was reported
- 📁 Cumulatively since Epi week one, one (1) suspected case reported

Ebola Virus Disease

- 📁 One alert was reported from Lofa County
- 📁 Specimen was collected and tested negative
- 📁 Cumulatively since Epi week one, sixteen (16) alerts have been reported: 15 tested negative and 1 specimen not collected
 - Proportion of suspected case with sample collected 94% (15/16)
 - Proportion of suspected case with sample tested 94% (15/16)

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- 📁 Eight (8) cases were reported from Sinoe (4), Margibi (3), and Grand Gedeh (1) Counties
 - Two specimens were collected and pending testing
- 📁 Cumulatively, since Epi week one, one hundred and sixteen (116) suspected shigellosis cases have been reported with 50 specimens collected, 12 tested negative and thirty-five (35) pending laboratory testing

Severe Acute Watery Diarrhea (Suspected Cholera)

- 📁 Three (3) suspected cases were reported from Rivercess (1), Grand Gedeh (1), and Nimba (1) Counties
- 📁 One specimen was collected and pending testing
- 📁 Cumulatively, since Epi week one, forty (40) suspected cholera cases have been reported

Other Reportable Diseases

Animal Bites (Human Exposure to Rabies)

- 👉 Thirty-six (36) animal bite cases were reported from: Montserrado (11), Grand Bassa (6), Nimba (3), Bong (3), Grand Gedeh (2), Lofa (2), Maryland (2), Rivercess (2), Grand Kru (2), River Gee (1), Sinoe (1), and Margibi (1) Counties
 - No prophylaxes were administered at health facility
- 👉 Cumulatively, since Epi week one, five hundred and one (501) animal bite cases have been reported

Meningitis

- 👉 Zero suspected case was reported
- 👉 Cumulatively, since Epi week one, sixteen (16) suspected cases have been reported

Events of Public Health Importance

Maternal Mortality

- 👉 Nine (9) deaths were reported from Montserrado (6*), Bong (2), and Nimba (1) Counties
- 👉 Causes of death: Postpartum hemorrhage (2), Intrapartum hemorrhage (1), Antepartum hemorrhage (1), Retained placenta (1), Rupture uterus (1), Sepsis (1), Multiple organ failure (1) and Dead on arrival (1)
- 👉 Health facility accounted for 100% (9) of the death reported
- 👉 Cumulatively, since Epi week one, sixty-eight (68*) deaths have been reported

* Five deaths from Montserrado were detected in week 14 and reported in week 15

Neonatal Mortality

- 👉 Sixteen (16) deaths were reported from Montserrado (11), Maryland (2), Nimba (2), and Bong (1) Counties
- 👉 Causes of deaths: birth asphyxia (7), neonatal sepsis (6), pending review (3)
- 👉 Health facility accounted for 100% (16) of the death reported
- 👉 Cumulatively, since Epi week one, two hundred and five (214*) deaths have been reported

*Nine deaths from Montserrado were detected in week 13 and 14 and reported in week 15

Unexplained Death

- 👉 Zero (0) deaths were reported
- 👉 Cumulatively, since Epi week one, one (1) death has been reported

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

- 👉 Fourteen (14) cases were reported from Grand Kru (7), Lofa (4), Montserrado (2) and Nimba (1) Counties
- 👉 Cumulatively, since Epi week one, twenty-six (26) events has been reported with Lofa County accounting for 54%

Public Health Actions

- 👉 All events were investigated, categorized as non-serious AEFI (*refer to the note below*) and symptomatically treated
- 👉 All reporting tools are currently being distributed across the 15 counties
- 👉 Active case search and community engagement ongoing

Table 2: Distribution of AEFI/ADR Cases Detected and Reported by County, Liberia, Epi week 1 – 15, 2021

Reporting County	ADR	AEFI			TOTAL
		TCV	nOPV2	COVID-19	
Grand Cape Mount	0	0	2	0	2
Grand Kru	1	6	0	0	7
Lofa	3	0	11	0	14
Montserrado	0	0	2	0	2
Nimba	0	1	0	0	1
TOTAL	4	7	15	0	26

Cross Border Surveillance Update

- ✎ A total of 4,886 travelers recorded for the week with incoming travelers accounting for 51% and outgoing travelers 49%
- ✎ None of the travelers were reactive for COVID-19
- ✎ The airport accounted for the highest number of travelers for the week

Table 3: Cross border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 15, 2021

Type of PoE	Point of Entry	Weekly Total	Arrival	Departure	Yellow Book Issued	Yellow Book Damaged	Card Replaced	Travelers Vaccinated	Alerts Verified	COVID-19 Reactive
Airport	James S. Paynes	46	24	22	0	0	0	0	0	0
	Robert International Airport	2758	1296	1462	21	21	0	0	0	0
Seaport	Freeport of Monrovia	244	122	122	0	0	0	0	0	0
	Harper	0	0	0	0	0	0	0	0	0
	Buchanan Port	42	21	21	0	0	0	0	0	0
Land Crossing	Bo Water Side	1355	781	574	5	5	0	0	0	0
	Ganta	247	128	119	12	12	0	0	0	0
	Yekepa	120	79	41	10	10	0	0	0	0
	Longuatu	74	54	20	4	1	3	0	0	0
Total travelers		4,886	2,505	2,381	52	49	3	0	0	0

Public Health Measures

National level

- ✎ Providing technical, logistical and financial support to counties
- ✎ Heighten surveillance in affected and surrounding communities
- ✎ Publishing situational reports to inform stakeholders

County level

- ✎ Publication of situational reports to inform stakeholders
- ✎ Active case search ongoing in affected and surrounding communities
- ✎ Contact tracing, health education, and community engagement ongoing in affected communities
- ✎ Case management ongoing for isolated cases

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	6	6	4	4	7	6	6	6	10	92		
No. of Health District Reported			4	9	5	8	5	6	6	6	4	4	7	6	6	6	10	92		
Vaccine Preventable Diseases	Acute Flaccid Paralysis (Suspected Polio)	A	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	3	39	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	0	0	3	0	1	0	0	0	0	0	0	2	0	1	0	7	114	10
		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	0	0	0	4	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Yellow fever	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	28	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	1	0	0	0	0	0	0	0	1	16	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lassa fever	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	30	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2
Influenza-Like Illnesses	COVID-19	A	0	0	0	0	2	0	0	0	0	0	6	0	0	0	0	8	253	2071
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diarrheal Diseases	Acute Bloody Diarrhoea (Shigellosis)	A	0	0	0	0	0	1	0	0	3	0	0	0	0	0	4	8	116	0
		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	0	0	0	1	0	0	0	0	0	1	1	0	0	3	40	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	2	0	0	0	0	0	0	0	0	6	1	0	0	0	9	68	
	Neonatal Mortality	D	0	1	0	0	0	0	0	0	0	2	11	2	0	0	0	16	214	
	Adverse Events Following Immunization (AEFI)	A	0	0	0	0	0	0	7	4	0	0	2	1	0	0	0	14	26	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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
	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 Animal bites (Suspected Rabies)	A	0	3	0	6	0	2	2	2	1	2	11	3	2	1	1	36	501	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Meningitis	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	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			0	6	4	7	5	4	9	8	4	4	36	10	3	2	5	107	1464	0

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
- 👉 **Non-serious AEFI** refers to an event that is not 'serious' and does not pose a potential risk to the health of the recipient and should be carefully monitored because they may signal a potentially larger problem with the vaccine or immunization or have an impact on the acceptability of immunization in general.

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For comments or questions, please contact

Thomas K. Nagbe, MPH

Director,

Infectious Disease and Epidemiology Division

National IHR Focal Person

National Public Health Institute of Liberia

Republic of Liberia

Email: tnknue31112@gmail.com

Phone: +231 886 937386/777442444

Website: www.nphil.gov.lr

Ralph W. Jetoh, MD, MPH

Deputy 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

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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.