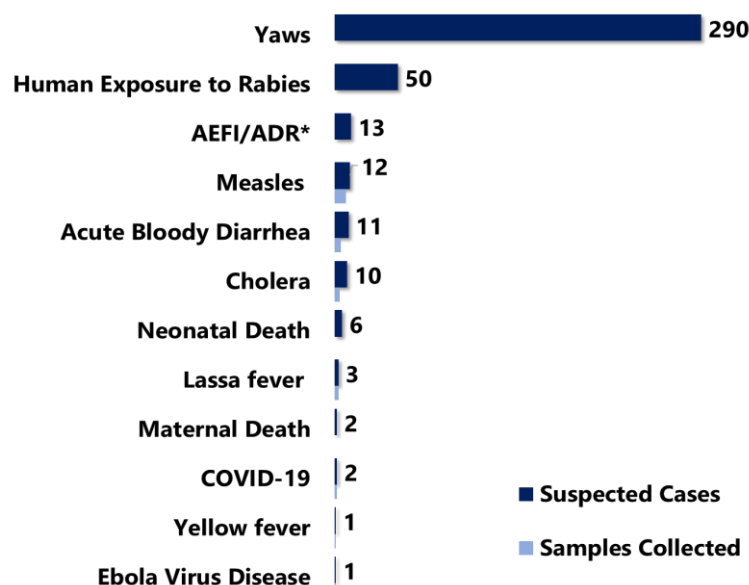


Highlights

Figure 1: Public Health Events Reported during this week



*Adverse Event Following Immunization/Adverse Drug Reaction

Keynotes and Events of Public Health Significance

- ♦ A total of **401** events of public health importance including **9** deaths were reported
- ♦ Completeness and timeliness of health facility reports were both **100% respectively**
- ♦ **Adverse Events Following Immunization** surveillance heightened at all levels
- ♦ **Ongoing Lassa fever** outbreaks in Bong, Nimba, and Grand Bassa Counties
- ♦ **Ongoing Suspected Yaws outbreak** in Lofa County
- ♦ **Two new confirmed COVID-19** cases recorded from Montserrado County

Reporting Coverage

Table 1: Health Facility Weekly DSR Reporting Coverage, Liberia, Epi week 48, 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	19	19	19	100	100
Lofa	61	61	61	100	100
Margibi	55	55	55	100	100
Maryland	27	27	27	100	100
Montserrado	367	367	367	100	100
Nimba	87	87	87	100	100
Rivercess	20	20	20	100	100
River Gee	20	20	20	100	100
Sinoe	37	37	37	100	100
Liberia	885	885	885	100	100

885(100%)
Health facilities reported IDSR data

93(100%)
Health districts reported IDSR data

885(100%)
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 time **except Montserrado, Nimba, and Gbarpolu Counties.**

Legend: ≥80 <80

Vaccine Preventable Diseases

Measles

Twelve (12) suspected cases were reported from Grand Gedeh (4), Bomli (2), Bong (2) Grand Bassa (1), Lofa (1), Montserrado (1) and Rivercess (1) Counties

- Nine specimens were collected and pending laboratory testing

Vaccination status among suspected cases

- Vaccinated: 4 (33%)
- Not Vaccinated: 3 (25%)
- Unknown: 5 (42%)

Vaccination status among lab-confirmed cases

- Vaccinated: 0 (0%)
- Not Vaccinated: 0 (0%)
- Unknown: 0 (0%)

Age distribution among suspected cases

- ≥ 5 years: 5 (42%)
- < 5 years: 7 (58%)

Cumulatively, since Epi week one, four hundred fifty-seven (457) cases have been reported and classified as follows (see Figure 3):

Proportion of samples tested: 86% (304/355)

- Laboratory confirmed: 57, clinically compatible: 142, epidemiologically linked: 10, non-measles discarded cases: 248 (negative laboratory test)
- One hundred forty-two (142) non-measles discarded cases were tested negative for rubella and eleven were positive representing 7% of the total tested for rubella

Figure 2: Epidemiological classification of Measles cases by Geographical Distribution (Health Districts), Liberia, Epi week 1 – 48, 2021

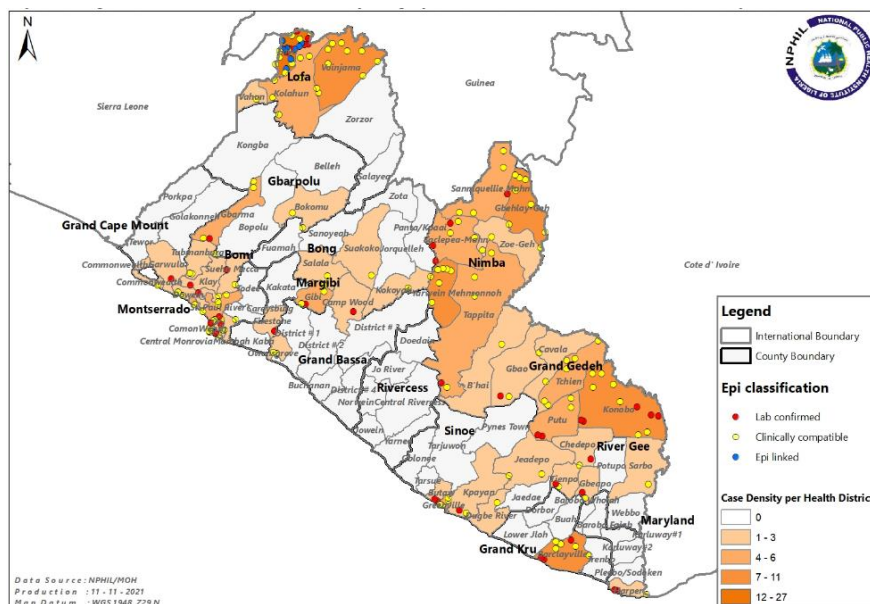
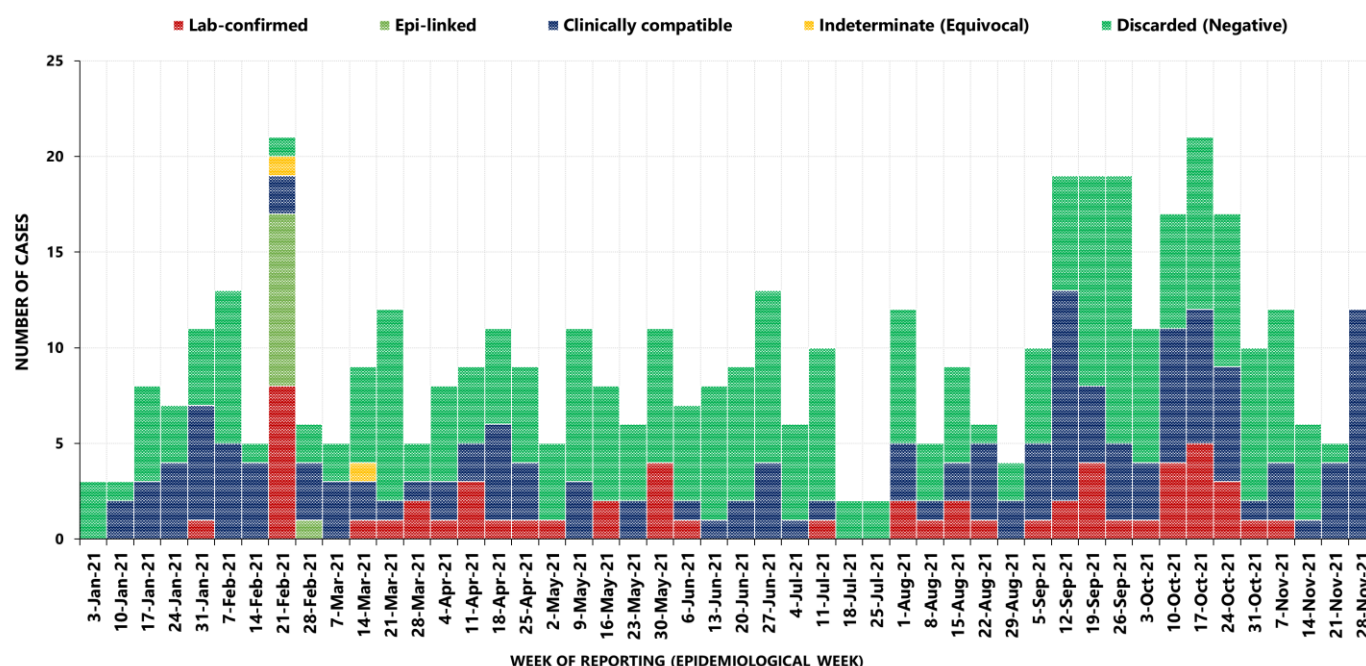


Figure 3: Epi-classification of Measles Cases by Reporting Weeks, Liberia, Epi-week 1 - 48, 2021



Acute Flaccid Paralysis (AFP)

- Zero case was reported
- Cumulatively, since Epi week one, one hundred thirty-four (134) AFP cases have been reported
 - Of the total cases, 125 specimens have reached the national level and onward shipment process completed (*see Table 2*) with 108 tested and result available
- As of this week, non-polio AFP rate is at 6.5 per 100,000 population in less than 15 years of age

Note: Further investigation of 9 AFP cases of the cumulative cases is ongoing to ascertain the status of these cases.

Table 2: Non-polio Acute Flaccid Paralysis Rate per 100,000 <15yrs, Liberia, Epi week 1 - 48, 2021

County	< 15 years pop	# of AFP Cases Reported	# of Cases with Lab Result	Non-Polio AFP Rate	# of cases <14 days specimen collected	% of stool <14days	# of NPENTs	% of NPENT
Bomi	49595	3	3	6.6	3	100%	1	33.3%
Bong	204820	19	15	10.0	19	100%	7	36.8%
Gbarpolu	49162	7	6	15.4	7	100%	2	28.6%
Grand Bassa	130703	7	7	5.8	7	100%	1	14.3%
Grand Cape Mount	74927	2	2	2.9	2	100%	0	0.0%
Grand Gedeh	73848	11	9	16.1	11	100%	2	18.2%
Grand Kru	34151	4	4	12.7	4	100%	0	0.0%
Lofa	162671	11	10	7.3	11	100%	1	9.1%
Margibi	123772	7	6	6.1	7	100%	0	0.0%
Maryland	80145	1	1	1.4	1	100%	0	0.0%
Montserrado	681600	18	17	2.9	18	100%	4	22.2%
Nimba	272406	26	21	10.3	26	100%	4	15.4%
Rivercess	42160	4	2	10.3	3	75%	1	25.0%
River Gee	39381	2	2	5.5	2	100%	0	0.0%
Sinoe	60373	3	3	5.4	3	100%	1	33.3%
Liberia	2079713	125	108	6.5	124	99%	24	19.2%
Non-Polio AFP Rate		<2		<80%		Non-Polio Enterovirus		<10%
		≥ 2		≥80%				≥10%
								Silent

Neonatal Tetanus

- Zero case was reported
- Cumulatively, since Epi week one, forty (40) clinically diagnosed cases have been reported

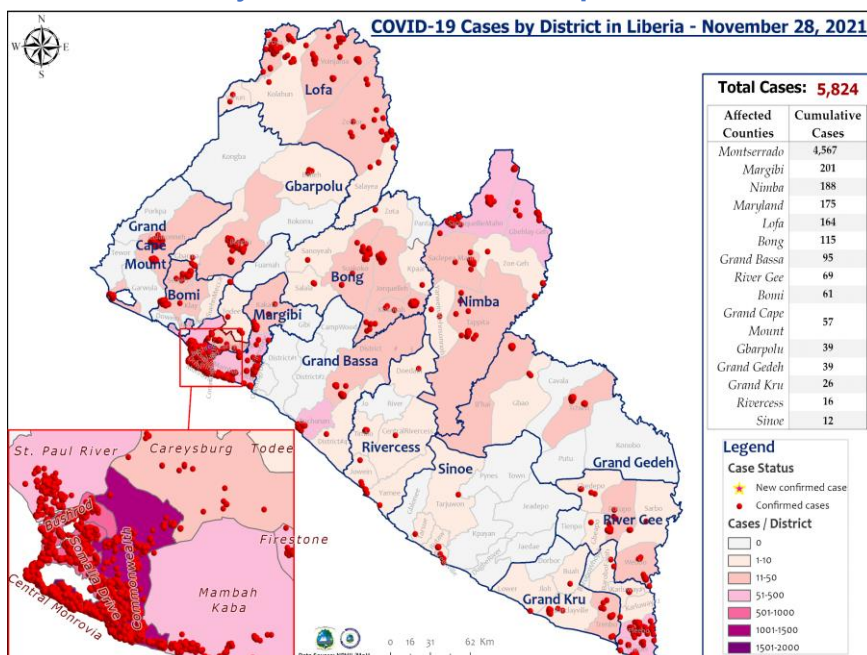
Influenza-Like Illnesses

Coronavirus Disease (COVID-19)

Outbreak

- Two new confirmed cases were reported from Montserrado County
 - Eighteen contacts are being followed up in Nimba (16) and Montserrado (2) Counties
- Since Epi week one, a total of three thousand seven hundred seventy-eight (3,778) confirmed cases have been reported
- Cumulatively, five thousand eight hundred twenty-four (5,824) confirmed cases recorded including 287 deaths with 15,270 contacts

Figure 3: Geographical Distribution of Laboratory Confirmed COVID-19 Cases by Health Districts, Liberia, Epi week 1 – 48, 2021



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

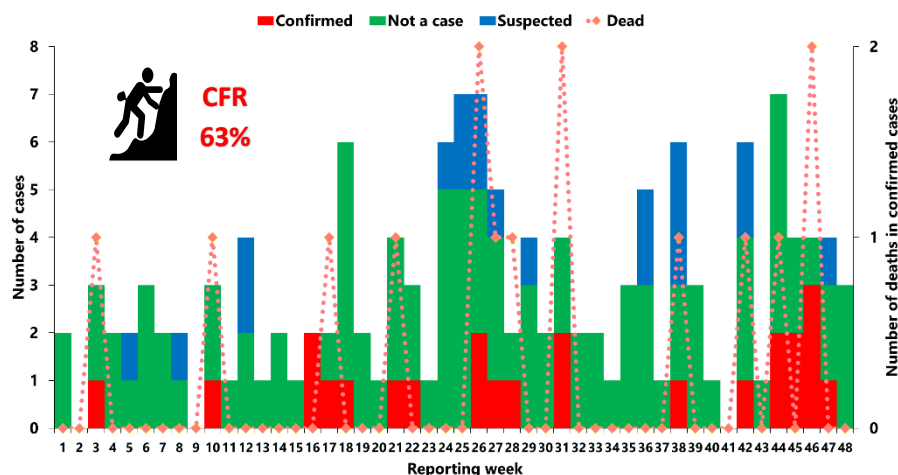
Viral Hemorrhagic Diseases

Lassa fever

- Three (3) suspected cases were reported from Nimba (2) and Grand Bassa (1) Counties
 - Specimens were collected and tested negative
- Cumulatively, since Epi week one, one hundred thirty-nine (139) suspected cases have been reported including twenty-nine (29) deaths
 - 24 positive and 92 negatives
 - Proportion of suspected cases with sample collected 96% (134/139)
 - Proportion of suspected cases with sample tested 90% (120/134)

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

Figure 4: Epi-classification of Lassa fever cases and confirmed deaths by reporting weeks, Liberia, Epi-week 1 - 48, 2021



Outbreak

Grand Bassa: District #3A

A 15-year-old female resident of Christian community, District #3A, with date of symptom onset November 9, 2021. The case was seen and admitted at the LAC Hospital on November 19, 2021, with symptoms of high fever ($>38.5^{\circ}\text{C}$), eye turning, coughing and weakness. Patient was tested negative for Malaria on the date of admission. Based on the prevailing Lassa fever outbreak in the district and the case was suspected of Lassa fever; and immediately isolated and blood specimen collected and sent to the National Reference lab. A positive result was received on November 23, 2021. Ribavirin was initiated on November 19, 2021. The case generated four contacts and have gone 13 days' follow-up

Bong: Jorquelleh & Suakoko Districts

A 16-year-old male resident of Golf farm community, Suakoko District, with date of symptom onset October 31, 2021. He initiated self-treatment and was later taken to the Phebe Hospital on November 4, 2021, with symptoms fever and body pains. He was admitted, diagnosed, and treated for malaria and later placed on Ribavirin on November 4, 2021, and his specimen was collected and sent to the National Reference Laboratory. On November 6, 2021, his results came back positive. Case expired on November 9, 2021, and safe and dignified burial was conducted by CHT. A total of 5 contacts were line listed completed follow-up November 24, 2021.

A 76-year-old male resident of Phebe Airstrip community, Suakoko District, with symptoms fever, weakness, and body pains and onset November 4, 2021, was admitted at the ER of Phebe Hospital on November 8, 2021, where he was diagnosed, and treated for malaria. Later that day he was placed on Ribavirin treatment.

On that same day, specimen was collected and sent to the National Reference Laboratory with, positive result received November 9, 2021. Case was later transferred from ER to isolation unit where he expired on November 9, 2021. Safe and dignified burial was conducted by the CHT. A total of 13 contacts including one health worker were line listed. The contacts 21 days ended November 30, 2021.

Nimba: Sanniquelleh-Mah District

On November 7, 2021, a 32-years old OB, resident of Gleyilue community, Sanniquelleh Mah District, underwent a surgery due to obstructed labor at the E & J hospital. On the 8th of November 2021 the next day while admitted the case presented with increase fever $> 38.7^{\circ}\text{C}$, profuse bleeding from IV sites and other orifices at which specimen was collected on the 8th and sent for testing. The case later expired on the 9th of November 2021 in the isolation unit. No ribavirin was administered. On November 11, 2021, the county received positive result. The baby is alive and being monitored. Fifteen contacts were line listed (10-HW & 5 family member). Contacts 21 days of follow-up ended November 30, 2021.

On October 27, 2021, a 19-year-old female resident of Royal community, Ganta city, Sanniquelleh Mah district, reported at the E & J Hospital with symptom stomach pains, headache, vomiting, generalized body pains and weakness. The case was admitted on November 2, 2021, with Initial diagnosis of chronic UTIs and Typhoid fever. One week later while admitted, she started presenting with increased fever $> 38.6^{\circ}\text{C}$, vomiting, diarrhea, and joint pains where she was suspected of Lassa fever and specimen was

collected on the 13th of November 2021 and sent to NRL for testing. The patient was isolated, and ribavirin was initiated November 17, 2021. On November 18, 2021, positive lab result was received by the County Health Team. The case has been discharged and is well. Fourteen (14) contacts have been generated (10 HW & 4 family members) contacts 21 days monitoring ended November 30, 2021.

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

- ☞ One suspected case reported from Grand Gedeh County
 - Specimen was collected and pending laboratory testing
- ☞ Cumulatively, since Epi week one, one hundred-one (101) suspected cases have been reported with 77 negative, 17 pending testing, 1 positive and 6 specimens were not collected
 - Proportion of suspected cases with sample collected 95% (96/101) and with sample tested 82% (78/95)

Note: Further investigation for the 16 cases pending laboratory testing is ongoing to ascertain the status of these cases.

Monkey pox

- ☞ Zero suspected case was reported
- ☞ Cumulatively since Epi week one, six (6) suspected cases reported

Ebola/Marburg Virus Disease

- ☞ One alert was reported from Bomi County
 - Specimen was collected and pending testing
- ☞ Cumulatively since Epi week one, eighty-three (83) alerts including 12 deaths have been reported

Dengue fever

- ☞ Zero suspected case was reported
- ☞ Cumulatively since Epi week one, one (1) suspected case has been reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- ☞ Eleven (11) cases were reported from Grand Gedeh (2), Bong (1), Maryland (1), Margibi (1), Montserrado (1), Lofa (1), Grand Kru (1), Rivercess (1), Nimba (1) and Sinoe (1) Counties
 - Five specimens were collected and pending laboratory testing
- ☞ Cumulatively, since Epi week one, four hundred thirty (430) suspected shigellosis cases have been reported with 203 specimens collected: 81 tested negative

Severe Acute Watery Diarrhea (Suspected Cholera)

- ☞ Ten (10) suspected cases were reported from Nimba (5), Bomi (3), Margibi (1), Grand Bassa (1) Counties
 - Four specimens were collected and pending laboratory testing
- ☞ Cumulatively, since Epi week one, two hundred ninety-two (292) suspected cholera cases have been reported with 29 tested negative

Other Reportable Diseases

Human Exposure to Rabies (Suspected Human Rabies)

- ☞ Fifty (50) animal bite cases were reported from Montserrado (12), Grand Kru (8), Nimba (7), Margibi (4), Maryland (3), Lofa (3), Grand Bassa (3), Bong (2), Bomi (2), Rivercess (2), Grand Gedeh (2), Grand Cape Mount (1), Gbarpolu (1) Counties
- ☞ Cumulatively, since Epi week one, one thousand six hundred nineteen (1,669) animal bite cases have been reported

Public Health Actions

- ☞ Prophylaxis was administered to seven persons

Meningitis

- Zero suspected case were reported
- Cumulatively, since Epi week one, thirty-two (32) suspected cases have been reported

Yaws

- Two hundred ninety (290) suspected cases were reported Lofa County
 - No specimen was collected and pending laboratory testing
- Cumulatively, since Epi week one, three hundred twenty-four (324) suspected cases have been reported

Outbreak (Suspected)

Lofa: Foya District

On October 28, 2021, the Ministry of Health (MoH) and the National Public Health Institute (NPHIL) was alerted by the Lofa County Health Team (CHT) of an unusual increment in the number of suspected Yaws cases occurring in Foya health district. A total of 23 communities affected with most of the cases equal to or above 15 years.

The investigation findings revealed that the age range of those affected is from 2 to 36 years with male accounting for 81% all recorded case and over 10 samples were collected by the DHT for laboratory testing at the National Reference Laboratory. Ten samples tested negative with 163 contacts line listed and under follow up.

Public Health Actions

- The MOH/NPHIL have alerted WHO County Office and requested for technical and logistical support
- Cases and contacts have been treated with azithromycin
- Active case search and community engagement are currently ongoing

Events of Public Health Importance

Maternal Mortality

- Two (2) deaths were reported from Nimba and Bong Counties
 - Causes of death: post-operative sepsis, and antepartum hemorrhage
- One death occurred at the health facility and one in the community
- Cumulatively, since Epi week one, two hundred fifteen (215) deaths have been reported with the Maternal Mortality Ratio of 117 deaths by 100,000 livebirths (see Table 3)

Table 3: Cumulative Maternal Deaths Reported and Annualized Maternal Mortality Ratio by Counties, Liberia, Epi week 1 - 48, 2021

Reporting Counties	Current Week	Cumulative Maternal Death	% of Cumulative Maternal Death	Annualized Maternal Mortality Ratio
Bomi	0	5	2	114
Bong	1	20	9	111
Gbarpolu	0	4	2	92
Grand Bassa	0	10	6	104
Grand Cape Mount	0	1	0	15
Grand Gedeh	0	3	1	46
Grand Kru	0	5	2	166
Lofa	0	13	6	91
Margibi	0	9	4	82
Maryland	0	7	3	99
Montserrado	0	80	39	140
Nimba	1	38	19	166
Rivercess	0	3	1	81
River Gee	0	1	0	29
Sinoe	0	8	4	150
Liberia	2	215	100	117

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

Neonatal Mortality

- Six (6) deaths were reported from Montserrado (3), Bong (1), Margibi (1) and Maryland (1) Counties
- Causes of deaths: birth asphyxia (4), sepsis (1) and anemia (1)
- One death occurred at the health facility and one in the community
- Cumulatively, since Epi week one, six hundred ninety-five (695) deaths have been reported

Unexplained Death

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

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

- Thirteen (13) cases were reported from Bomi (4), Sinoe (3), Montserrado (3), Grand Kru (2) and Rivercess (1) Counties
- Cumulatively, since Epi week one, six hundred sixty-five (665) events have been reported
 - 7% (45) of the events related to nOPV2
 - 2% (15) of the events related to TCV
 - 87% (579) of the events related to COVID-19
 - 2% (12) of the events related to ADR
 - 2% (14) of the events related to others (BCG, PENTA, Measles, Hepatitis B)

Public Health Actions

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

Cross Border Surveillance Update

- A total of 9,625 travelers recorded for the week with incoming travelers accounting for 55% and outgoing travelers 45%
- One traveler was reactive for COVID-19

Table 4: Cross border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 48, 2021

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
Airport	James S. Paynes	87	51	36	0	0	0	0	0	0
	Robert Int'l Airport	2397	1222	1175	26	20	0	6	0	1
Seaport	Freeport of Monrovia	220	110	110	0	0	0	0	0	0
	Harper	0	0	0	0	0	0	0	0	0
	Buchanan Port	90	45	45	0	0	0	0	0	0
Land Crossing	Bo Water Side	780	498	282	20	0	0	20	0	0
	Ganta	123	78	45	10	10	0	0	0	0
	Yekepa	111	51	60	0	0	0	0	0	0
	Loguatu	121	42	79	0	0	0	0	0	0
	Yeala	1205	650	555	0	0	0	0	0	0
	Kpasagizia	607	299	308	0	0	0	0	0	0
	Safedu	490	314	176	0	0	0	0	0	0
	Konadu	643	282	361	0	0	0	0	0	0
	Bolinquidu	492	262	230	0	0	0	0	0	0
	Lawalazu	741	363	378	0	0	0	0	0	0
	Foya Tengia	488	314	174	0	0	0	0	0	0
	Sorlumba	300	170	130	0	0	0	0	0	0
	Mendicoma	425	259	166	0	0	0	0	0	0
	Worsonga	305	250	55	0	0	0	0	0	0
Total travelers		9,625	5,260	4,365	56	30	0	26	0	1

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



Liberia IDSR Epidemiology Bulletin

2021 Epi-week 48 (November 22 – 28, 2021)



Public Health Measures

National level

- ✚ Providing technical, logistical, and financial support to counties
 - Mentorship on proper use of the standard case definition remotely
 - Mentorship on case detection and reporting remotely
 - Mentorship on specimen collection and packaging remotely
 - Mentorship on Infectious Prevention and Control practices including the use of appropriate PPE
 - Publication of situational reports and conduct of Intra-Action Review
 - Provision of financial assistance to enhance operational activities, medicines and medical supplies
- ✚ Heighten surveillance in affected and surrounding communities

County level

- ✚ **Surveillance**
 - Publication of situational reports
 - Active case search ongoing in affected and surrounding communities
 - Infectious Prevention and Control practices including distribution of appropriate PPE
- ✚ **Case Management**
 - Management of case in isolation is ongoing
 - Ensure the appropriate medical protocol in place
- ✚ **Risk Communication and Community Engagement**
 - Airing of preventive messages for the immediately reportable diseases, conditions, and events

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	9	5	8	5	6	5	6	4	6	7	6	6	6	10	93		
Vaccine Preventable Diseases	Acute Flaccid Paralysis (Suspected Polio)	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	2	2	0	1	0	4	0	1	0	0	1	0	1	0	0	12	457	57
		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	40	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
	Yellow fever	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	101	1
		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	1	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ebola Virus Disease	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	71	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
	Lassa fever	A	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	110	9
		D	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	29	15
Influenza-Like Illnesses	COVID-19	A	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	3778	3778
		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	1	0	0	0	2	1	1	1	1	1	1	1	0	1	11	430	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	3	0	0	1	0	0	0	0	1	0	0	5	0	0	0	10	292	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	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	215	
	Neonatal Mortality	D	0	1	0	0	0	0	0	0	1	1	3	0	0	0	0	6	695	
	Adverse Events Following Immunization (AEFI)	A	4	0	0	0	0	0	2	0	0	0	3	0	1	0	3	13	665	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	6	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	2	2	1	3	1	2	8	3	4	3	12	7	2	0	0	50	1669	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	32	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	290	0	0	0	0	0	0	0	290	324	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL			12	7	1	6	1	9	11	295	7	5	22	16	5	0	4	401	9072	3860

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

Epidemiological bulletin published with support of WHO and CDC

For comments or questions, please contact

Ralph W. Jetoh, MD, MPH

Acting 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

National Public Health Institute of Liberia (NPHIL)

MISSION

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

EDITORIAL TEAM

DIDE / NPHIL

A. N. Mianah
I. P. Pewu
T. O. Yeabah
E. Dwalu
G. B. Williams
S. K. Zayzay
L. W. Colee
T. L. Hall
S. L. Flomo
M. S. Quiah
C. T. Yeah
L. K. Seepoe
J. O. Abel
P. J. Thomas
H. M. Sherman
A. B. Corvah
M. G. Jeuronlon
M.D. Vaye
N. K. Dovillie
A. Coker
M. Gbayeah

**Ministry of Health
WHO Liberia Office
US CDC Liberia Office**

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.