



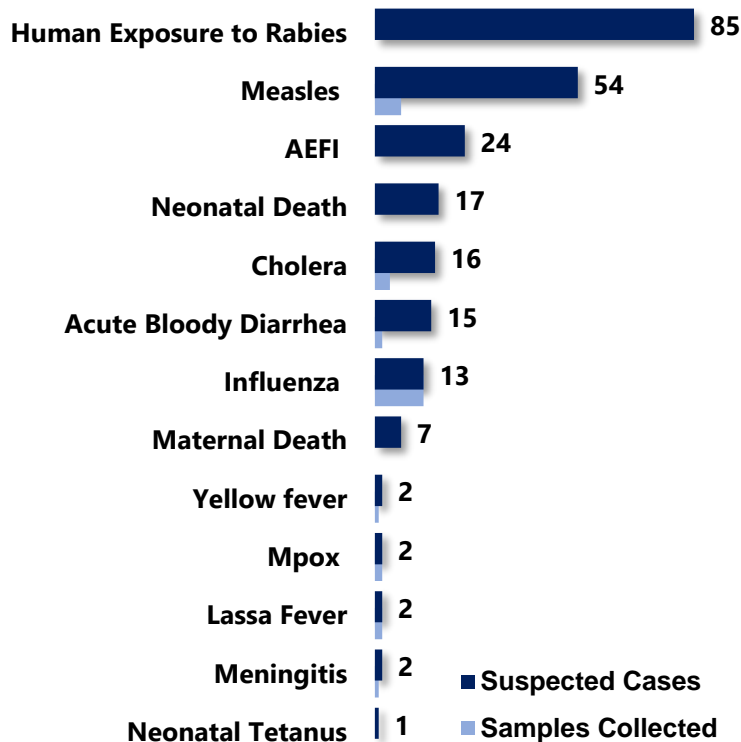
Liberia IDSR Epidemiology Bulletin

Epi-week 32 (August 7-13, 2023)

Country Population: 5,104,413 | Volume 32 Issue 18 | August 7-13, 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 **240 events** of public health importance including **24 deaths** reported
- ◆ **Completeness and timeliness** of health facility reports were **98% & 97%**
- ◆ **Ongoing Lassa fever** outbreak in 3 Counties
- ◆ **Ongoing Measles outbreak** in 9 Counties

Adverse Events Following Immunization/Adverse Drug Reaction (AEFI)

Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 32, 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	396	393	95	93
Nimba	92	92	92	100	100
Rivercess	21	21	21	100	100
River Gee	20	20	20	100	100
Sinoe	41	41	41	100	100
Liberia	978	956	953	98	97

956(98%)
Health facilities reported IDSR data

98(100%)
Health districts reported IDSR data

953 (97%)
Health facilities reported timely IDSR

- ◆ 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:



Vaccine-Preventable Diseases

Measles

☞ Fifty-four (54) suspected cases were reported from 8 Counties (see distribution in Table 2)

☞ Seven (7) specimens collected and pending testing

☞ Twenty (20) were vaccinated (see distribution in Table 3)

Table 2: Distribution of Measles cases per county and epi-classification, Liberia, Epi week 32, 2023

COUNTY	Cases Week 32	Lab confirmed Epi Week 32	CLASSIFICATION OF CONFIRMED CASES, EPI WEEK 1-32			Deaths	CFR (%)	CUMULATIVE # SUSPECTED CASES, EPI WEEK 1-32	CUMULATIVE # CONFIRMED CASES, EPI WEEK 1-32
			Lab confirmed	Epi Linked	Clinically Compatible				
Bomi	0	0	2	13	51	0	0.0	75	66
Bong	2	0	2	6	185	1	0.5	192	192
Gbarpolu	0	0	0	0	34	0	0.0	35	34
Grand Bassa	0	0	0	0	165	0	0.0	167	165
Grand Cape Mount	0	0	1	2	59	0	0.0	67	62
Grand Gedeh	7	0	4	26	275	0	0.0	348	305
Grand Kru	4	0	6	72	643	2	0.3	723	721
Lofa	1	0	0	0	111	0	0.0	119	111
Margibi	0	0	1	8	189	0	0.0	200	198
Maryland	18	0	0	0	650	0	0.0	652	650
Montserrado	12	0	4	53	986	2	0.2	1051	1043
Nimba	9	0	2	33	285	3	0.9	322	320
River Gee	1	0	0	0	109	0	0.0	129	109
Rivercess	0	0	1	0	27	0	0.0	33	28
Sinoe	0	0	4	11	91	0	0.0	120	106
Grand Total	54	0	27	224	3,860	8	1.9	4,233	4,110

Table 3: Vaccination Status of Measles Cases, Liberia, Epi-week 32, 2023

County	Vaccinated	Number of Doses Received		
		One Dose	Two Doses	Doses Not Indicated
Bomi	0	0	0	0
Bong	0	0	0	0
Gbarpolu	0	0	0	0
Grand Bassa	1	0	1	0
Grand Cape Mount	0	0	0	0
Grand Gedeh	1	1	0	0
Grand Kru	1	0	1	0
Lofa	7	5	1	1
Margibi	0	0	0	0
Maryland	0	0	0	0
Montserrado	7	7	0	0
Nimba	3	3	0	0
River Gee	0	0	0	0
Rivercess	0	0	0	0
Sinoe	0	0	0	0
National	20	16	3	1

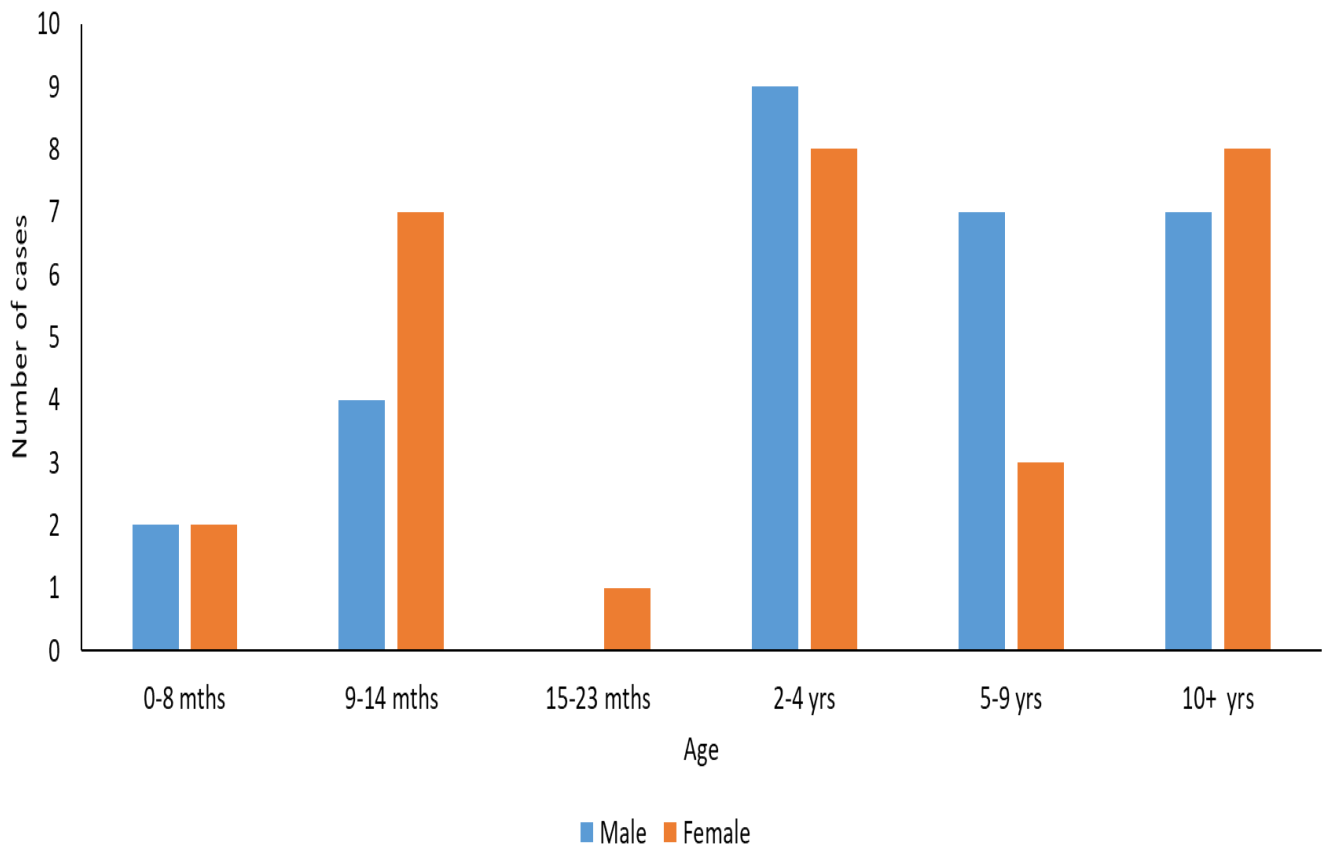


Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 32, 2023

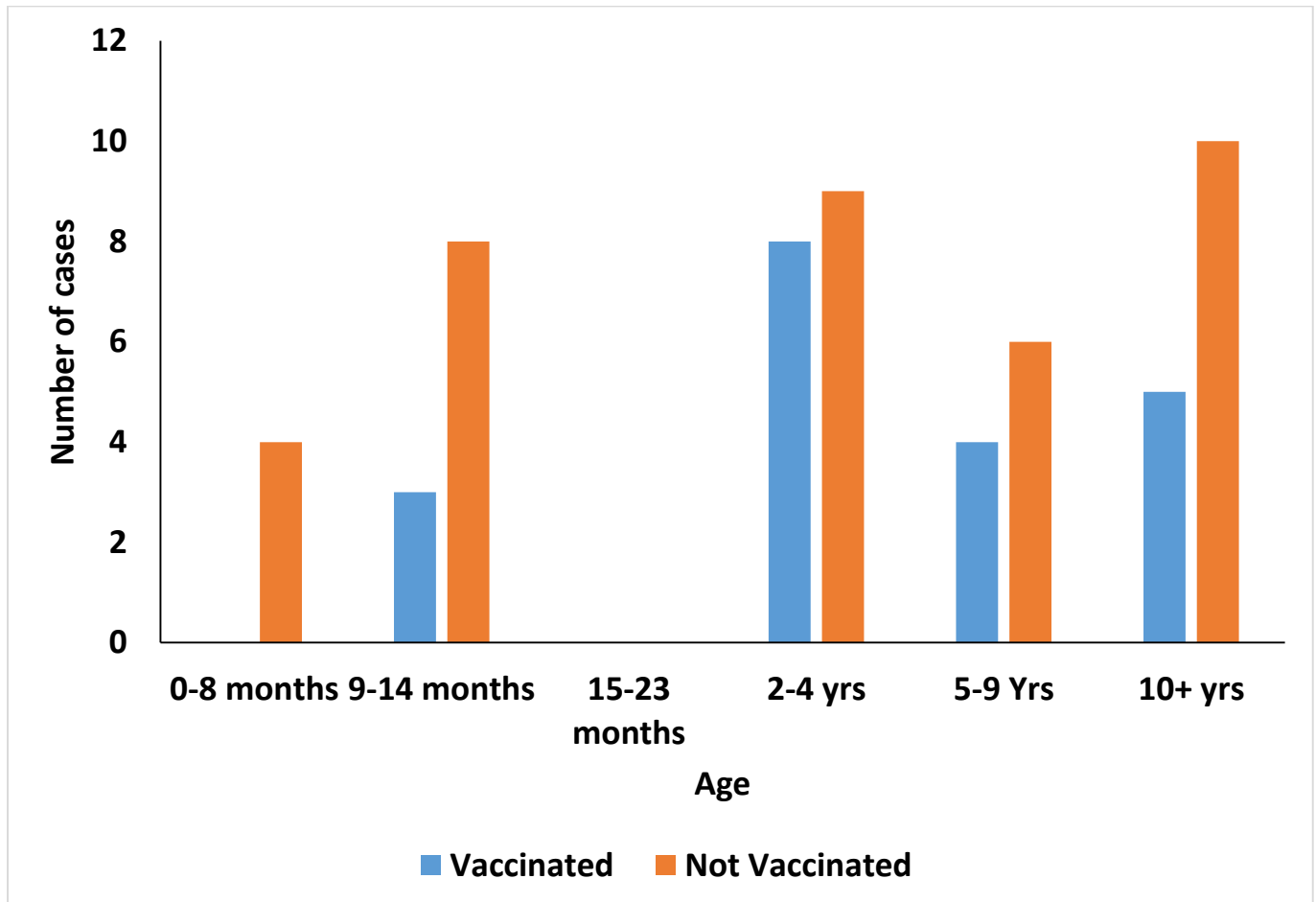


Figure 3: Vaccination Status of Suspected Measles Cases by Age Group, Liberia, Epi-Week 32, 2023

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

COUNTY	CUMULATIVE SUSPECTED CASES	CUMULATIVE CONFIRMED CASES	CLASSIFICATION OF CONFIRMED CASES			CLASSIFICATION OF CONFIRMED DEATHS			CUMULATIVE DEATHS	CFR (%)	# CONFIRMED CASES WEEK 31	# CONFIRMED CASES WEEK 32	% CHANGE	Outbreak Status
			Lab confirmed	Epi Linked	Clinically Compatible	Lab confirmed	Epi Linked	Clinically Compatible						
Montserrat	5,409	5,322	145	1657	3,520	3	61	5	69	1.3	10	12	20	Ongoing
Nimba	1,089	1,058	37	187	834	0	1	3	4	0.4	6	9	50	Ongoing
Margibi	827	803	34	136	633	0	0	1	1	0.1	0	0	-	Ongoing
Grand Bassa	943	905	40	212	653	1	0	6	7	0.9	0	0	-	Ongoing
Lofa	353	284	32	66	186	0	0	0	0	0	4	0	-	Ongoing
Bong	599	574	22	21	531	0	1	2	3	0.5	0	0	-	Ongoing
Maryland	1044	1024	24	308	697	0	0	0	0	0	5	18	260	Ongoing
Grand Gedeh	590	430	34	48	348	0	0	0	0	0	1	8	-700	Ongoing
Sinoe	284	231	36	84	111	0	0	0	0	0	0	0	-	Ended
Bomi	183	147	34	27	86	1	2	2	5	3	0	0	-	Ended
Grd Cape Mt	215	187	17	18	152	0	2	1	3	1.6	0	0	-	Ended
Grand Kru	978	949	22	106	821	0	0	2	2	0.2	4	2	-50	Ongoing
Gbarpolu	67	46	4	2	40	0	0	0	0	0	0	0	-	Ended
Rivercess	112	84	23	54	7	0	1	0	1	1.1	0	0	-	Ended
River Gee	103	79	0	0	79	0	0	0	0	0	0	0	-	Ended
Total	12,796	12,206	504	2,926	8,698	5	68	22	95	7.8	30	49		

Public Health Response

I. Coordination

- o IMS meeting is held weekly for coordination and mobilization of resources in response counties

II. Epidemiological Surveillance

- o Active case search ongoing in affected counties

III. Case management

- o All reported cases were treated and send for home isolation in Nimba County

IV. Immunization

- o Routine immunization ongoing in affected counties

V. Laboratory

- o Specimens were collected from 4 districts in 4 counties (Grand Kru-Barclayville, Lofa-Foya, Nimba-Zoe-Geh, and Grand Gedeh-Trehn)
- o Five hundred nine (509) cases have been confirmed by laboratory from December 13, 2021 –August 13, 2023.

VI. Risk Communication and Community Engagement

- o Community engagement ongoing in affected counties

VII. Challenges

- o DSO in Bong Grand Gedeh, and Montserrado Counties are constrained in submitting report due to lack of computers
- o Limited functional laptop computers for DSOs (Gbarpolu, Bomi, Bong, Montserrado, Rivercess, and Margibi)
- o Limited specimen collection kits for priority diseases in Montserrado County

Acute Flaccid Paralysis (AFP)

- ☞ Zero suspected cases were reported
- ☞ Cumulatively, thirty-two (32) cases were reported
 - Ten (10) tested negative
 - Twenty-one (21) pending

Neonatal Tetanus

- ☞ One (1) case (dead) was reported from Nimba County
- ☞ Cumulatively, forty-two (42) cases including 6 deaths reported

Influenza-Like Illnesses

Influenza

- ☞ Thirteen (13) cases were reported from Montserrado (10), and Maryland (3) Counties
- ☞ Cumulatively, eighty-two (82) suspected cases reported

Viral Hemorrhagic Diseases

Lassa fever

- ☞ Two (2) suspected case were reported from Montserrado and Grand Bassa (dead) Counties
- ☞ Specimens were collected: one positive and one negative
- ☞ Cumulatively, one hundred fifty-five (155) suspected cases reported
 - Proportion of suspected cases with a sample collected (142/155) 92%
 - Proportion of suspected cases with sample tested (140/142) 99%

Current Outbreak

Lassa fever disease

- ☞ One new confirmed case was reported from Grand Bassa County
- ☞ Cumulatively, eighty-four (84) laboratory-confirmed cases including 26 deaths reported (CFR=31%)

Table 5: Summary of confirmed case reported in epi week 32, 2023

Age (Yrs)	Sex	Outcome	Occupation	Community of resident	District of outbreak	Reporting County	Date of Onset	Date of Admission	Hospital	Signs & symptoms	Date specimen collected	Date specimen sent to Lab.	Date specimen received Lab	Date ribavirin initiated	Date case confirmed	Total contacts generated	Total HCWs contacts	Epi Link
29 Months	Female	Dead	Child	Crop Farm	Buchanan	Grand Bassa	3-Aug-23	3-Aug-23	LGH	high fever ($\geq 38.5^{\circ}\text{C}$), chill, malaise, cough, nausea, decrease appetite, fast breathing and anorexia	8-Aug-23	8-Aug-23	8-Aug-23	Not administered	10-Aug-23	4	2	No

Table 6: Summary of Lassa fever Outbreak, Liberia, Sept 9, 2022, to present

County	Outbreak Districts	Outbreak Start Date	Total suspected cases	Total confirmed cases	Deaths in HCWs	Total Deaths	CFR %	Total Contacts	# HCW contacts	Contacts became cases	HCW became confirmed case	Contacts under follow up	Contacts completed	Days in countdown	Outbreak Status
Montserrado	Bushrod	13-Feb-23	5	2	0	1	50%	29	21	0	0	0	29	Completed	Over
	Central Monrovia	3-Mar-23	13	1	0	1	100%	28	27	0	0	0	28	Completed	Over
Bong	Suakoko	21-Apr-23	125	36	2	8	21%	320	154	6	4	15	313	Active	Ongoing
	Sanoyea	5-Apr-22	1	1	0	1	100%	31	15	0	0	0	31	Completed	Over
	Jorquelleh	6-Jan-22	11	8	1	2	25%	115	75	3	3	0	107	Completed	Over
Grand Bassa	District 3A&B	9-Sep-22	63	30	0	9	30%	159	30	2	0	0	159	Completed	Over
	Buchanan	11-Aug-23	1	1	0	1	100%	4	2	0	0	4	0	Active	Ongoing
Nimba	Mah	6-Feb-23	2	2	0	0	0%	43	35	8	0	0	43	Completed	Over
	Tappita	13-Mar-23	5	1	0	1	100%	36	17	4	0	0	36	Completed	Over
	Bain-Garr	1-Jun-23	12	2	0	2	100%	30	25	0	0	0	30	Active	Ongoing
Total	8		238	84	3	26	31%	795	401	23	7	19	776		

Public Health Measures

- NPHIL continues to provide technical support to the affected counties

I. Surveillance:

- 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
- Health workers and visitors are encouraged to enhance IPC practices by regular washing of hands

III. Case Management

- The case was isolated and ribavirin treatment was administered but later expired

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

- 📋 Two (2) suspected cases were reported from Rivercess and River Gee Counties
- 📋 One sample was collected and pending testing
- 📋 Cumulatively seventy-one (71) suspected cases were reported
 - Three (3) samples (3/58) 5% not transported (Epi week 5 from Grand Gedeh, River Gee, and Grand Kru Counties)
 - The proportion of samples tested is (40/58) 69%
 - The proportion of samples pending testing is (15/58) 26%

Dengue Fever

- 📋 Zero cases were reported

Ebola Virus Disease

- 📋 Zero cases were reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- 📋 Fifteen (15) cases were reported Nimba (6), Sinoe (3), Lofa (2), Maryland (1), Margibi (1), Montserrado (1), and Grand Kru (1) Counties
- 📋 Two (2) specimens were collected and pending testing
- 📋 Cumulatively, four hundred thirty-three (433) cases were reported
 - One hundred fifty-two (152) specimens were collected
 - 75 tested negative
 - 7 specimens rejected
 - 70 specimens were not transported

Severe Acute Watery Diarrhea (Suspected Cholera)

- 📋 Sixteen (16) suspected cases were reported: Nimba (5), Grand Kru (4), Lofa (3), Margibi (2), Maryland (1), and River Gee (1) Counties
- 📋 Four (4) specimens were collected and pending testing
- 📋 Cumulatively, five hundred seventy-nine (579) cases reported
 - One hundred eighty-four (184) specimens collected
 - 66 tested negative
 - 7 specimens rejected
 - 111 specimens were not transported

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

Eighty-five (85) animal bites reported

Table 6: Distribution of Animal Bite Cases and PEP Administration per County, Liberia, Epi week 32, 2023

Counties	Cases	Person receiving PEP	PEP doses administered	Cumulative cases (Wk 1-32)	Cumulative PEP administered (Wk 1-32)
Bomi	1	1	1	47	28
Bong	0	0	0	150	66
Gbarpolu	0	0	0	19	0
Grand Bassa	12	1	2	191	16
Grand Cape Mount	3	1	1	54	34
Grand Gedeh	1	0	0	73	9
Grand Kru	4	0	0	173	15
Lofa	4	0	0	161	60
Margibi	2	1	1	122	59
Maryland	2	0	0	121	42
Montserrado	34	3	3	641	165
Nimba	19	13	5	311	130
Rivercess	1	1	1	87	51
River Gee	1	0	0	40	0
Sinoe	1	0	0	81	6
Total	85	21	14	2,271	681

Public Health Actions

Ongoing monitoring and follow-up of cases

Meningitis

- Two (2) cases were reported from Grand Kru and River Gee Counties
- One specimen was collected and pending testing
- Cumulatively, twenty-nine (29) suspected cases reported
 - Proportion of suspected cases with samples collected (25/29) 86%
 - Proportion of sample tested (20/25) 80%
 - 16 negative and 4 positive (Streptococcal-3 & Hemophilus Influenzae)

Mpox

- Two (2) cases were reported from Nimba and River Gee Counties
- Two specimens collected and pending testing
- Cumulatively, one hundred-six (106) suspected cases were reported
 - Seven (7) confirmed

Unexplained cluster of deaths

Zero cases reported

Events of Public Health Importance

Maternal Mortality

- Seven (7) deaths were reported: Montserrado (3), Grand Cape Mount (2), Nimba (1), and Grand Bassa (1) Counties
- Reported causes: Sepsis (3), Eclampsia (2), and postpartum hemorrhage (2)
- Reporting Site:
 - Health facility (7/7) 100%

- ☞ Cumulatively, two hundred seven (207) deaths reported
 - Proportion of death reviewed (42/207) 20%
 - Proportion of community death (27/207)13%

Neonatal Mortality

- ☞ Seventeen (17) deaths were reported: Montserrado (11), Grand Kru (2), Rivercess (1), Lofa (1), Maryland (1), and Nimba (1) Counties
- ☞ Reported causes: birth asphyxia (9), prematurity (6), and neonatal sepsis (2)
- ☞ Reporting sites:
 - Health facility (17/17) 100%
- ☞ Cumulatively, five hundred nine (509) deaths reported

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

- ☞ Twenty-four (24) cases were reported from Sinoe (17), Grand Bassa (3), Maryland (2), Lofa (1), and Bomi (1) Counties
- ☞ All reported cases were non-serious
- ☞ Related vaccine:
 - Penta (8/24) 33%
 - Measles (6/24) 25%
 - Others (10/24) 42%
- ☞ Cumulatively, four hundred fifteen (415) events were reported and COVID-19 accounted for (159/415) 38%

Neglected Tropical Diseases

YAWS

- ☞ Zero cases were reported
- ☞ No specimen collected
- ☞ Cumulatively, one hundred eighty-four (184) cases have been reported

Buruli Ulcer

- ☞ Zero suspected cases reported
- ☞ Cumulatively, one hundred nineteen (119) cases have been reported

Border Surveillance Update

- ☞ A total of 4,561 travelers were recorded for the week with incoming travelers accounting for (2,020/4,561) 44%

Table 7: Border activity at the PoE for incoming and outgoing travelers, Liberia, Epi week 32, 2023

Type of Ports	Point of Entry	Weekly total	Arrival	Departure	Total travelers with YB	Yellow Book Damage	Card Replaced	Travelers Vaccinated against YF & Issued book	Alerts detected/ Verified	COVID-19 Reactive	Evidence of COVID-19 vaccination card/certificate
Airport	James S. Paynes	87	55	32	15	0	0	0	0	0	15
	Robert Int'l Airport	3499	1587	1912	3412	79	79	0	0	0	3427
Seaport	Freeport of Monrovia	120	60	60	120	0	0	0	0	0	120
	Buchanan Port	0	0	0	0	0	0	0	0	0	0
Land Crossing	Bo Water Side	502	159	343	496	6	6	0	0	0	491
	Ganta	206	103	103	97	0	0	0	0	0	57
	Yekepa	61	26	35	30	0	0	0	0	0	36
	Loguatu	86	30	56	70	0	0	0	0	0	44
Total		4,561	2,020	2,541	4,240	85	85	0	0	0	4,190

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

Public Health Measures

National level

- ☞ Conducted EBS Stakeholders engagement meetings in Bong and Nimba Counties to create awareness and inform stakeholders about their roles and responsibilities and to have their support on EBS implementation
- ☞ Community engagement and border meeting airing messages on Lassa fever, Mpox, COVID-19, and Measles in Nimba, Grand Cape Mount, and Grand Bassa Counties
- ☞ Providing remote technical and operational support to counties
- ☞ Produced and disseminated situation reports (Lassa fever, Measles, and Mpox outbreaks)

County-level

☞ **Coordination**

- Partner coordination and resource mapping

☞ **Surveillance**

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

☞ **Case Management**

- Administration of PEP
- Management of measles cases ongoing

Appendix

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

		Bomi	Bong	Gbarpolu	Grand Bassa	Grand Cape Mount	Grand Gedeh	Grand Kru	Lofa	Margibi	Maryland	Montserrado	Nimba	Rivercess	River Gee	Sierra Leone	Total Weekly	Cumulative Reported	Cumulative Lab-confirmed	
No. of Expected Health District		4	9	5	0	5	6	5	6	4	6	0	6	6	6	10	93			
No. of Health District Reported		4	9	5	0	5	6	5	6	4	6	0	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	32	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	0	2	0	0	0	7	4	1	0	18	12	9	0	1	0	54	4,233	27
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2
	Neonatal Tetanus	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0
		D	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	6	0
	Yellow fever	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	71	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Viral Hemorrhagic Fe	Dengue fever	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	124	25
		D	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	31	16
Influenza-Like	COVID-19	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
	Influenza Like Illnesses	A	0	0	0	0	0	0	0	0	3	10	0	0	0	0	0	13	82	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diarrheal Disease	Acute Bloody Diarrhoea (Shigellosis)	A	0	0	0	0	0	1	2	1	1	1	6	0	0	3	15	433	0	
		D	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	4	3	2	1	0	5	0	1	0	16	579	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Events of Public Health	Maternal Mortality	D	0	0	0	1	2	0	0	0	0	3	1	0	0	0	7	207		
	Neonatal Mortality	D	0	0	0	0	0	2	1	0	1	11	1	1	0	0	17	509		
	AEFI	A	1	0	0	3	0	0	1	0	2	0	0	0	0	17	24	415	0	
		D	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	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Reportable Diseases	Mpox	A	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	106	7	
		D	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	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Human Exposure to Rabies (Suspected Human)	A	1	0	0	12	3	1	4	4	2	2	34	19	1	1	1	85	2,271	0
		D	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	1	0	0	0	0	0	1	0	2	29	0	
		D	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		
	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
Neglected Tr	Buruli Ulcer	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	0	
		D	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	184	4	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL		2	2	0	17	0	8	0	12	0	28	0	43	0	6	21	240	9478	52	

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: $\geq 80\%$). 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: $\geq 2/100,000$)
- ☞ **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 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

Ralph W. Jetoh, MD, MPH
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
J. S. Kokro
M.G. Jeuronlon
E. Dwalu
A.B. Corvah
G. B. Williams
S. K. Zayzay
L. W. Colee
M. Tegli
T. L. Hall
S. L. Flomo
M. S. Quiah
J. O. Abel
P. J. Thomas
H. M. Sherman
M.D. Vaye
N. K. Dovillie
A. Coker
S. Nuwolo
B. Gbelee
Ministry of Health
WHO Liberia Office
US CDC Liberia Office
AFENET

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.