



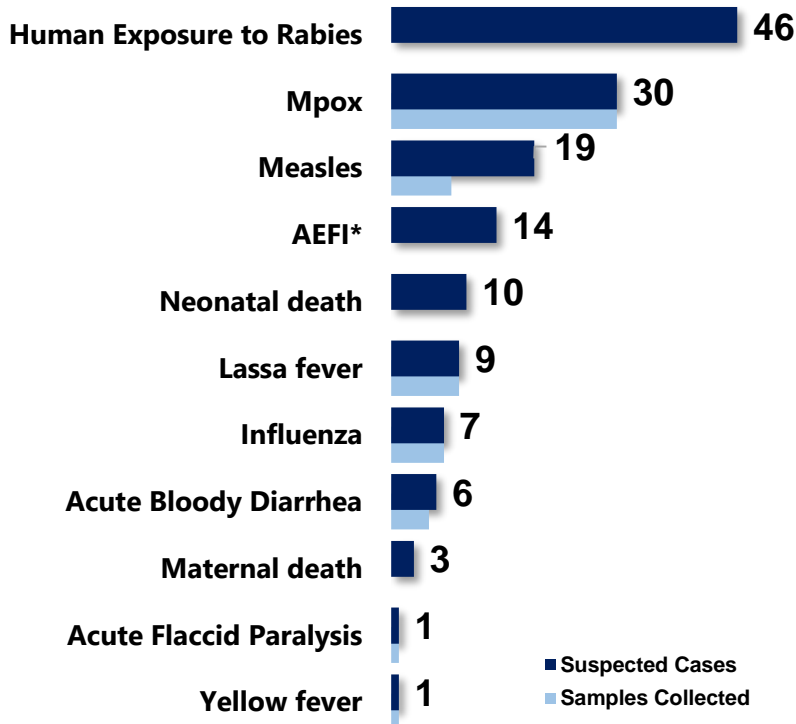
Liberia IDSR Epidemiology Bulletin

2024 Epi-week 37 (September 9 – 15, 2024)

Country Population: 5,406,374 || Volume 20 Issue 37 || September 9 – 15, 2024 || Data Source: CSOs from 15 Counties and Laboratory

Highlights

Figure 1. Public Health Events Reported



*Adverse Event Following Immunization

Keynotes and Events of Public Health Significance

- ◆ A total of 146 events of public health importance, including 15 deaths reported
- ◆ Completeness and Timeliness of health facility reports were 100% and 99%, respectively
- ◆ Ongoing Lassa fever outbreak in three counties
- ◆ Ongoing Measles outbreak in one county
- ◆ Ongoing circulating vaccine derived Polio virus type 2 outbreak
- ◆ Ongoing Mpox outbreak in three counties

Reporting Coverage

Table 1. Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 37, 2024

County	Expected Reports from HF*	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	29	29	29	100	100
Bong	64	64	64	100	100
Gbarpolu	18	18	18	100	100
Grand Bassa	38	38	38	100	100
Grand Cape Mount	36	36	36	100	100
Grand Gedeh	24	24	24	100	100
Grand Kru	25	25	25	100	100
Lofa	61	61	61	100	100
Margibi	64	64	64	100	100
Maryland	28	28	28	100	100
Montserrado	371	371	367	100	99
Nimba	102	102	102	100	100
Rivercess	21	21	21	100	100
River Gee	21	21	21	100	100
Sinoe	41	41	41	100	100
Liberia	943	943	939	100	99

943(100%)
Health facilities reported IDSR data

98(100%)
Health districts reported IDSR data

939(99%)
Health facilities reported timely IDSR data

Legend: ≥80 <80

◆ The national target for weekly IDSR reporting is 80%. All counties reported on time except for River Gee County reported late. Health facility timeliness is monitored at the health district level.

Vaccine-Preventable Diseases

Measles

- Nineteen (19) suspected cases were reported from Nimba (10), Grand Bassa (3), Grand Gedeh (2), Bomi (1), River Gee (1), Sinoe (1), and Montserrado (1) Counties
 - Eight (8) specimens were collected, 7 pending testing, and 1 pending arrival at NRL
 - Twenty-six percent (5/19) of the suspected cases were vaccinated for measles (see Table 2)

- Cumulatively, 1417 suspected cases have been reported since Epi-week 1 (see Table 3)
 - Of the total reported 1,060 confirmed cases,
 - 51% were reported to have previously been vaccinated,
 - 39% were unvaccinated
 - 10% had unknown vaccination status

- Fifty-one percent (545/1060) of the confirmed cases are below 5 years
- Proportion of suspected cases with sample collected 47% (668/1417)
- Proportion of suspected cases with sample tested 83% (551/668) [negative – 354, positive – 194, indeterminate-4]
- Proportion of negative Measles cases tested for Rubella 90% (320/354) [negative – 292, positive – 28]

- Liberia’s annualized non-measles febrile rash illness rate now stands at **9.2 per 100,000**. Montserrado and Margibi Counties are below the target (see Table 3)

Table 2. Distribution and Vaccination Status of Measles Cases, Liberia, Epi-week 37, 2024

County	Reported cases	Vaccinated	Number of Doses Received		
			One Dose	Two Doses	Doses Not Indicated
Bomi	1	1	0	1	0
Grand Bassa	3	1	0	0	1
Grand Gedeh	2	1	0	0	1
Montserrado	1	0	0	0	0
Nimba	10	1	1	0	0
River Gee	1	1	0	0	1
Sinoe	1	0	0	0	0
Total	19	5	1	1	3

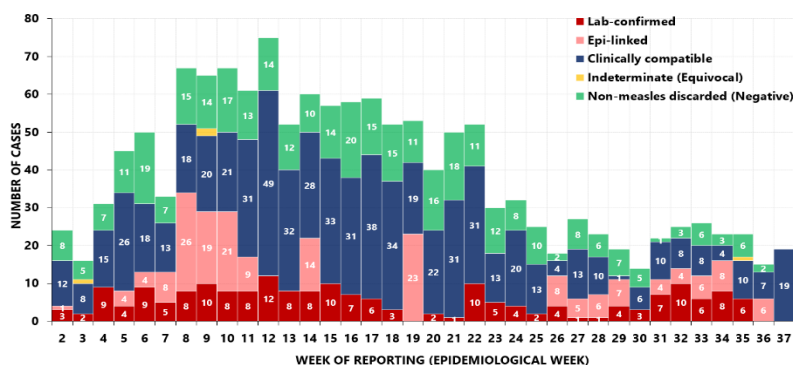


Figure 2. Distribution of Measles Cases by Reporting Week and Epi-classification, Liberia, Epi-week 1 – 37, 2024

Table 3. Classification of measles, reporting rate, and annualized non-measles rash illness rate per 100,000 population by County, Liberia, Epi-week 1 – 37, 2024

Reporting County	Epi-classification					Cumulative	Annualized Non Measles Febrile Rash Illness Rate
	Lab confirmed	Epi-linked	Clinically compatible	Indeterminate (Equivocal)	Discarded (Negative)		
Bomi	4	0	6	0	9	19	9.2
Bong	2	0	24	0	9	35	2.6
Gbarpolu	7	0	15	1	26	49	37.7
Grand Bassa	3	0	13	0	16	32	7.5
Grand Cape Mount	7	0	7	0	28	42	21.5
Grand Gedeh	37	28	66	0	39	170	24.3
Grand Kru	31	35	44	0	44	154	54.1
Lofa	4	0	21	0	15	40	5.6
Margibi	0	0	2	0	4	6	1.8
Maryland	21	13	165	0	8	207	6.4
Montserrado	4	0	29	0	21	54	1.5
Nimba	36	93	223	1	27	380	6.0
River Gee	23	13	46	1	39	122	43.2
Rivercess	1	0	4	0	6	11	8.9
Sinoe	14	1	18	1	62	96	56.4
Liberia	194	183	683	4	353	1417	9.2

Target Achieved >=2 Below Target <2

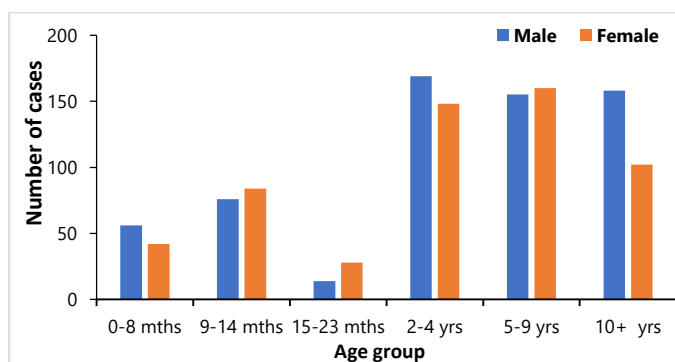


Figure 3. Suspected Measles Cases by Age-group and Sex, Liberia, Epi-week 1 – 37, 2024

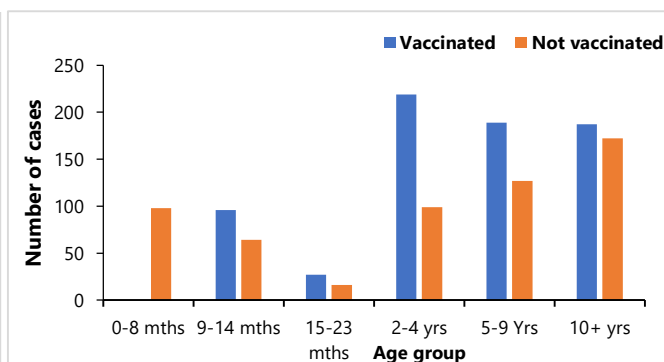


Figure 4. Vaccination status of Suspected Measles Cases by Age Group, Liberia, Epi-week 1 – 37, 2024

Table 4. Measles outbreak by County, and Case Status, Liberia, December 13, 2021 – September 18, 2024

County	Total Cases	Active	Recovery	Deaths	No. of Districts
Montserrado	5,373	0	5,304	69	0/7
Nimba	1360	10	1362	4	5/11
Grand Bassa	924	0	917	7	0/8
Margibi	803	0	802	1	0/4
Bong	578	0	575	3	0/9
Maryland	1,316	0	1316	0	0/6
Lofa	292	0	292	0	0/6
Grand Kru	1,100	0	1,098	2	0/5
Grand Cape Mount	187	0	184	3	0/5
Bomi	147	0	142	5	0/4
Rivercess	84	0	83	1	0/6
Gbarpolu	64	0	64	0	0/5
Grand Gedeh	602	0	602	0	0/6
River Gee	134	0	134	0	0/6
Sinoe	247	0	247	0	0/10
Total	13,221	10	13,122	95	5/98

PUBLIC HEALTH RESPONSE

I. Coordination

- The response has been led by the County Health Teams with technical support from the National Public Health Institute of Liberia (NPHIL), the Ministry of Health (MoH), and partners (Maryland PIH)
- IMS meetings are being held for coordination and mobilization of resources in affected counties

II. Epidemiological Surveillance

- Active case search in affected and surrounding communities ongoing in Nimba counties

III. Case management

- Case management ongoing in affected counties

IV. Immunization

- Routine immunization ongoing across the country

V. Laboratory

- The National Public Health Reference Laboratory (NPHRL) continues testing of Measles samples

VI. Risk Communication & Community Engagement

- Awareness and health education on the spread and prevention of Measles in health facilities and communities ongoing in Maryland County

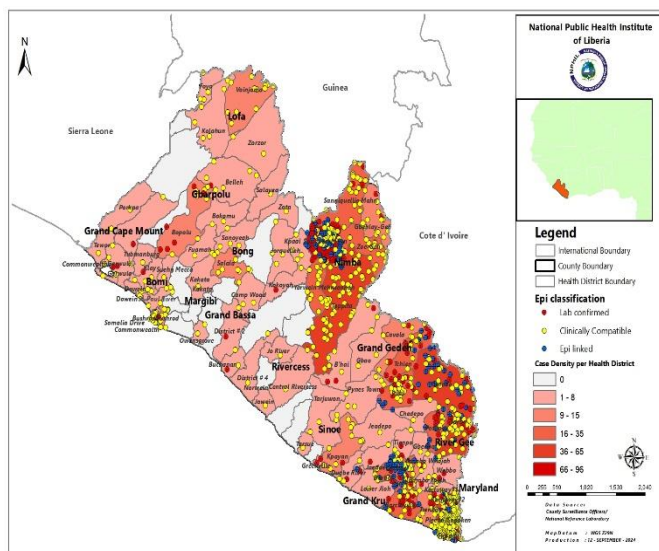


Figure 5. Measles outbreak by County and Case Status, Liberia, December 13, 2021 – September 18, 2024

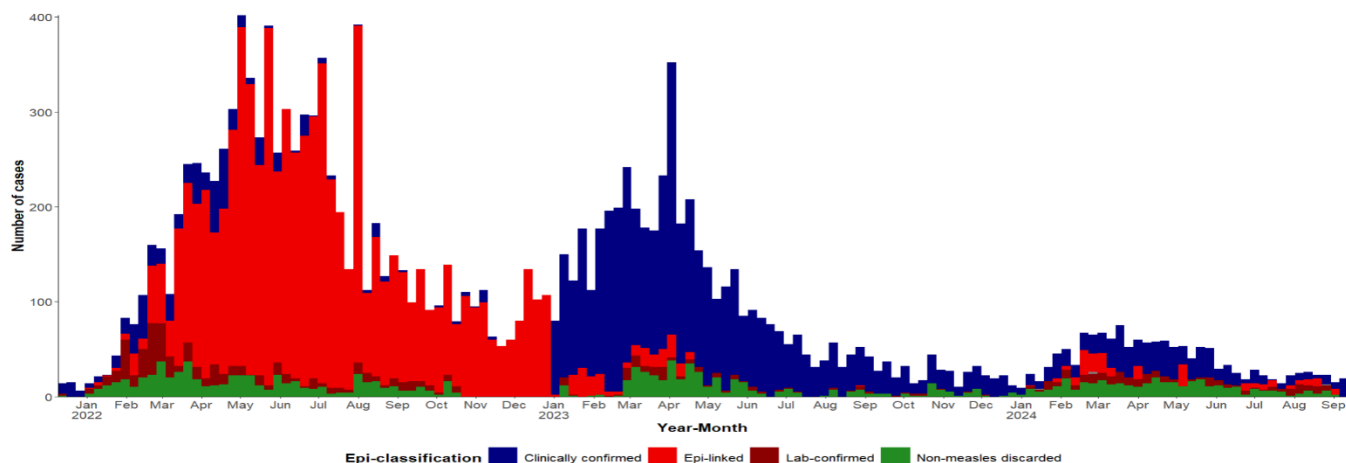


Figure 6. Epi-curve of Measles Cases by monthly Epi-classification, Liberia, December 13, 2021 – September 18, 2024

Acute Flaccid Paralysis (AFP)

- ☞ One (1) case was reported from Grand Kru
 - Specimen was collected and pending shipment
- ☞ Cumulatively, seventy-two (72) cases have been reported since Epi-week 1. One (1) cVDPV², 59 negative, 11 NPENT, and 2 AFP specimens pending testing at the laboratory
- ☞ As of week 37, the annualized non-polio AFP rate is at **4.2 per 100,000** population under 15 years of age.

Table 5. Non-Polio AFP Rate 3/100,000 <15 years by County, Liberia, Epi-week 1 – 37, 2024

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	62196	2	2	4.5	2	100%	0	0%
Bong	215425	1	1	0.7	1	100%	0	0%
Gbarpolu	43630	2	2	6.4	2	100%	0	0%
Grand Bassa	134743	3	3	3.1	3	100%	0	0%
Grand Cape Mount	82471	5	5	8.5	5	100%	1	20%
Grand Gedeh	101412	5	5	6.9	5	100%	1	20%
Grand Kru	51467	3	2	8.2	3	100%	1	33%
Lofa	168626	8	6	6.7	8	100%	1	13%
Margibi	140931	1	1	1.0	1	100%	0	0%
Maryland	78808	3	3	5.3	3	100%	0	0%
Montserrado	898124	13	13	2.0	12	92%	2	15%
Nimba	285705	19	18	9.3	19	100%	4	21%
Rivercess	42729	1	1	3.3	1	100%	0	0%
River Gee	57047	1	1	2.5	1	100%	0	0%
Sinoe	69556	5	5	10.1	5	100%	1	20%
Liberia	2432868	72	68	4.2	71	99%	11	15%
Non-Polio AFP Rate	<3	Stool adequacy		<80%	Non-Polio Enterovirus	<10%	Silent	
	≥3			≥80%		≥10%		

Outbreak Section (February 23 – September 20, 2024)²

⇒ The outbreak of circulating type 2 poliovirus variant (cVDPV2) is currently ongoing

- February 23, 2024: 1st laboratory notification of cVDPV2 confirmation from an environmental surveillance (ES) site of Fiamah Treatment Plant (FTP)
- As of week 34, there are:
 - **17 cVDPV2s** isolations from **ES sites** in **Monrovia** with latest collected 07-MAY-24; nine (9) from Redemption Street Bridge (RSB), latest **ENV-LIB-MON-MON-RSB-24-012**; eight (8) from **FTP**, latest **ENV-LIB-MON-MON-FTP- 24-011**.
 - **12 cVDPV2s** from healthy community children/contacts in **Monrovia**, latest reported **LIB-MON-MON-24-CC068 on 20-MAR-24**.
 - **1 cVDPV2** from an AFP case: **LIB-SIN-KPA-24-059**, a 1y7mo old boy from Kpanyan Town, **Sinoe County**; Date of Onset 8-JUN-24; cVDPV2 report on 07- AUG-2024; closest match ENV-LIB-MON-MON-FTP-24-005.

PUBLIC HEALTH RESPONSE

I. Coordination

- The GPEI coordination mechanism is operational with partner representations from WHO, UNICEF, CDC/US, BMGF, Gavi, Rotary Group, USAID, as well as Africa CDC, AFENET, MSF, and more
- Weekly sit-reps developed and disseminated to stakeholders

II. Epidemiological Surveillance

- Active case search ongoing in affected community
- Detailed investigation and risk analysis
- RI intensification activities ongoing

III. Laboratory

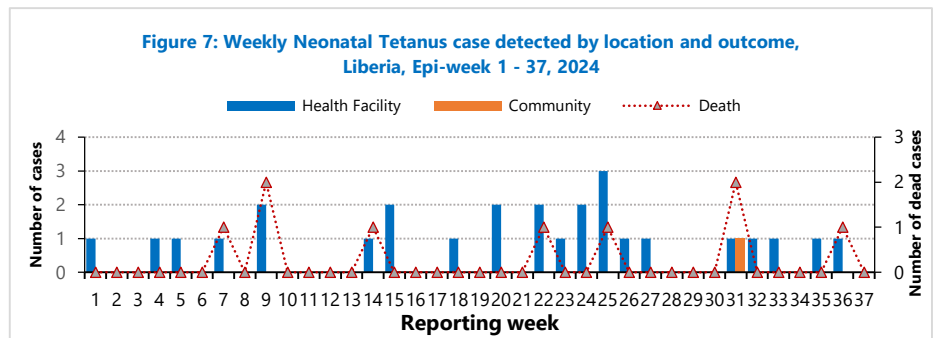
- ES sample is collected twice a month and tested by the Institute Pasteur Lab in Cote D'Ivoire

¹ circulating Vaccine-Derived Poliovirus type 2

² Liberia Polio Outbreak Response Situation Report as of September 20, 2024

Neonatal Tetanus

- Zero clinically confirmed cases were reported
- Cumulatively, twenty-eight (28) cases have been reported, including 9 deaths since Epi-week 1. Case Fatality Rate is 30%, and community detection is at 4%.



Influenza-Like Illnesses

Coronavirus Disease (COVID-19)

- Zero suspected cases were reported
- Cumulatively, three (3) cases have been reported since Epi-week 1, with two positive and one negative

Influenza

- Seven suspected cases were reported from Montserrado County
 - Specimens were collected, 3 tested positive, and 4 tested negative
- Cumulatively, seventy-eight (78) suspected cases reported since Epi-week 1.
 - Seventy-eight (78) specimens were collected: 69 tested negative, 5 specimens were discarded, and 4 positive

Viral Hemorrhagic Fever

Lassa fever

- Nine (9) suspected cases were reported from Bong (6), Grand Bassa (1), Montserrado (1) and Nimba (1) Counties
 - Specimens were collected, 2 tested positive and 7 tested negative
- Cumulatively, one hundred ninety-two (192) suspected cases have been reported since Epi-week 1.
 - Proportion of suspected cases with sample collected (192/192) 100%. Six of the collected samples were discarded
 - Proportion of suspected cases with sample tested (184/192) 96%
 - Thirty-two (32) positive, including 9 deaths, and 152 negative
 - Case fatality rate: (9/32) 28%Bong
 - County accounts for 41% of the total confirmed cases.

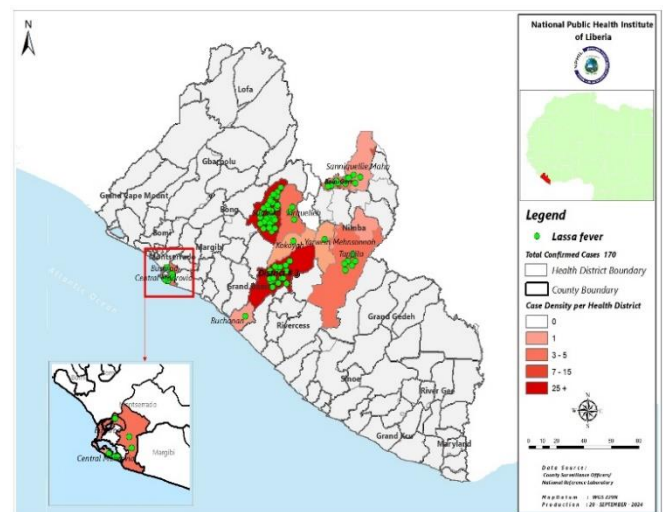
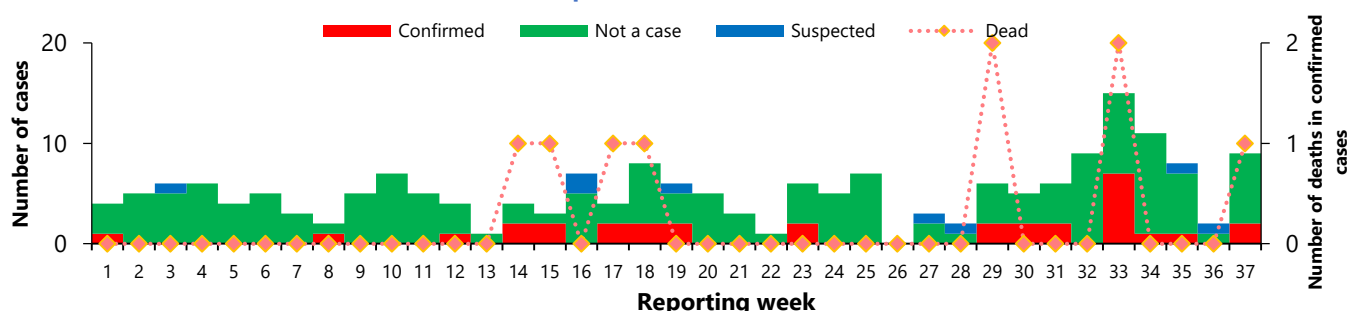


Figure 8. Geospatial distribution of confirmed Lassa fever by Health District, Liberia, Epi-week 1 - 37, 2024

Figure 9: Weekly distribution of Lassa fever cases by Epi-classification, Liberia, Epi-week 1 - 37, 2024



Outbreak Section (January 6, 2022 – September 18, 2024)

- ☞ Two (2) new confirmed cases reported from Grand Bassa and Nimba (dead) Counties
- ☞ Seventeen (17) contacts, including 4 healthcare workers (HCWs), were line-listed
- ☞ Total of 30 contacts, including 4 HCWs undergoing 21 days of follow-up
- ☞ A total of 170 confirmed cases, including 50 deaths reported
- ☞ Cumulative Case Fatality Rate (CFR): 29% (50/170)
- ☞ Three counties currently in outbreak

- Seventeen (17) contacts, including 4 HCWs, were line-listed
- Total of 30 contacts, including 4 HCWs undergoing 21 days of follow-up
- Weekly sit-reps developed and disseminated to stakeholders

III. Case management

- Ribavirin distributed to affected counties
- Cases treated with ribavirin and discharged
- One (1) confirmed case in isolation undergoing ribavirin treatment (Grand Bassa)

IV. Dead Body Management

- Safe and dignified burial conducted for the deceased cases

V. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- A total of 170 Lassa fever cases have been confirmed since this outbreak

PUBLIC HEALTH RESPONSE

I. Coordination

- The National Public Health Institute of Liberia (NPHIL) and the Ministry of Health (MoH) are providing technical support to the affected counties with support from partners

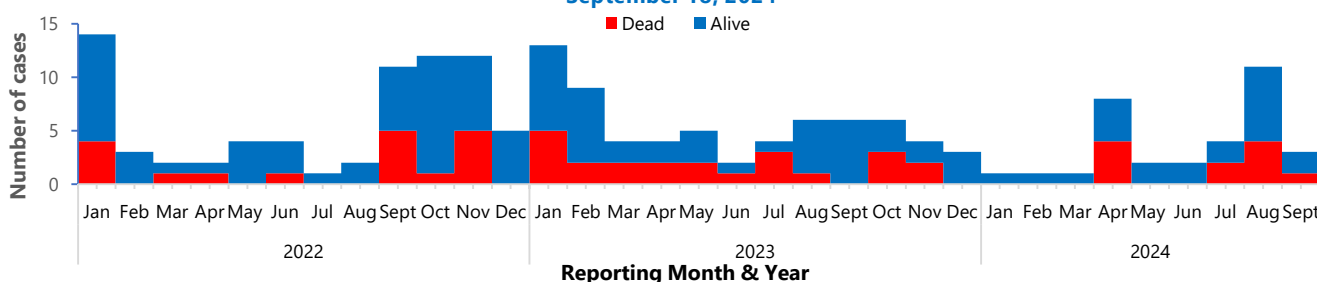
II. Epidemiological Surveillance

- Active case search ongoing in affected communities

Table 6. Summary of Lassa fever Outbreak, Liberia, January 6, 2022 – September 18, 2024

County	Outbreak Districts	Outbreak Start Date	Total suspected	Total confirmed	HCWs confirmed	Total Deaths	Deaths in HCWs	CFR %	Total Contacts	# HCW Contacts	Contacts became cases	Contacts under follow-up	Contacts completed	Days in countdown	Outbreak Status
Montserrat	Bushrod	13-Feb-23	17	1	0	0	0	0%	29	21	0	0	29	Completed	Ended
	Central Monrovia	27-Nov-23	1	2	0	1	0	50%	49	0	0	0	49	Completed	Ended
	Central Monrovia	3-Mar-23	38	2	0	1	0	50%	28	27	0	0	28	Completed	Ended
	Bushrod	30-Apr-24	2	1	0	0	0	0%	14	6	0	0	14	Completed	Ended
Bong	Suakoko	21-Apr-23	192	54	18	13	2	24%	496	114	6	0	417	Completed	Ended
	Jorquelleh	15-Oct-23	14	6	3	1	1	17%	121	86	3	0	169	Completed	Ended
	Kokoyah	6-Jun-24	3	1	0	0	0	0%	8	0	0	0	8	Completed	Ended
	Suakoko	29-Jul-24	11	5	1	0	0	0%	37	14	0	13	24	Active	Ongoing
	Suakoko	23-Feb-24	31	3	0	0	0	0%	29	14	0	0	29	Completed	Ended
	Salala	8-Mar-24	2	2	0	1	0	50%	21	0	0	0	21	Completed	Ended
Grand Bassa	Jorquelleh	11-Apr-24	3	2	0	1	0	0%	41	30	0	0	41	Completed	Ended
	District 3A&B	21-Aug-23	87	44	0	10	0	23%	177	40	40	0	159	Completed	Ended
	Buchanan	11-Aug-23	2	1	0	1	0	100%	4	2	0	0	4	Completed	Ended
	District 3A&B	30-Apr-24	7	3	0	1	0	33%	12	3	0	0	12	Completed	Ended
	District 3A&B	1-Sep-24	2	2	0	0	0%	7	3	0	3	4	Active	Ongoing	
Nimba	Saclepea-Mah	21-Nov-23	4	2	0	1	0	50%	5	0	0	0	5	Completed	Ended
	Sanniquellie-Mah	6-Feb-23	43	15	0	6	0	40%	43	35	8	0	43	Completed	Ended
	Tappita	29-Jul-24	5	2	0	1	0	50%	27	24	0	0	27	15	Countdown
	Tappita	20-Nov-23	12	5	0	3	0	60%	88	39	4	0	77	Completed	Ended
	Bain-Garr	1-Jun-23	25	6	0	3	0	50%	61	25	0	0	31	Completed	Ended
	Bain-Garr	15-Apr-24	5	2	0	1	0	50%	25	7	0	0	25	Completed	Ended
Bain-Garr	18-Jul-24	18	8	0	4	0	50%	148	83	1	14	134	Active	Ongoing	
River Gee	Putupo	25-Nov-22	2	1	0	1	0	100%	14	0	0	0	14	Completed	Ended
Total			526	170	22	50	3	29%	1484	573	62	30	1364		

Figure 10. Epi-curve of Confirmed Lassa Fever Cases by Outcome, Liberia, January 6, 2022 – September 18, 2024



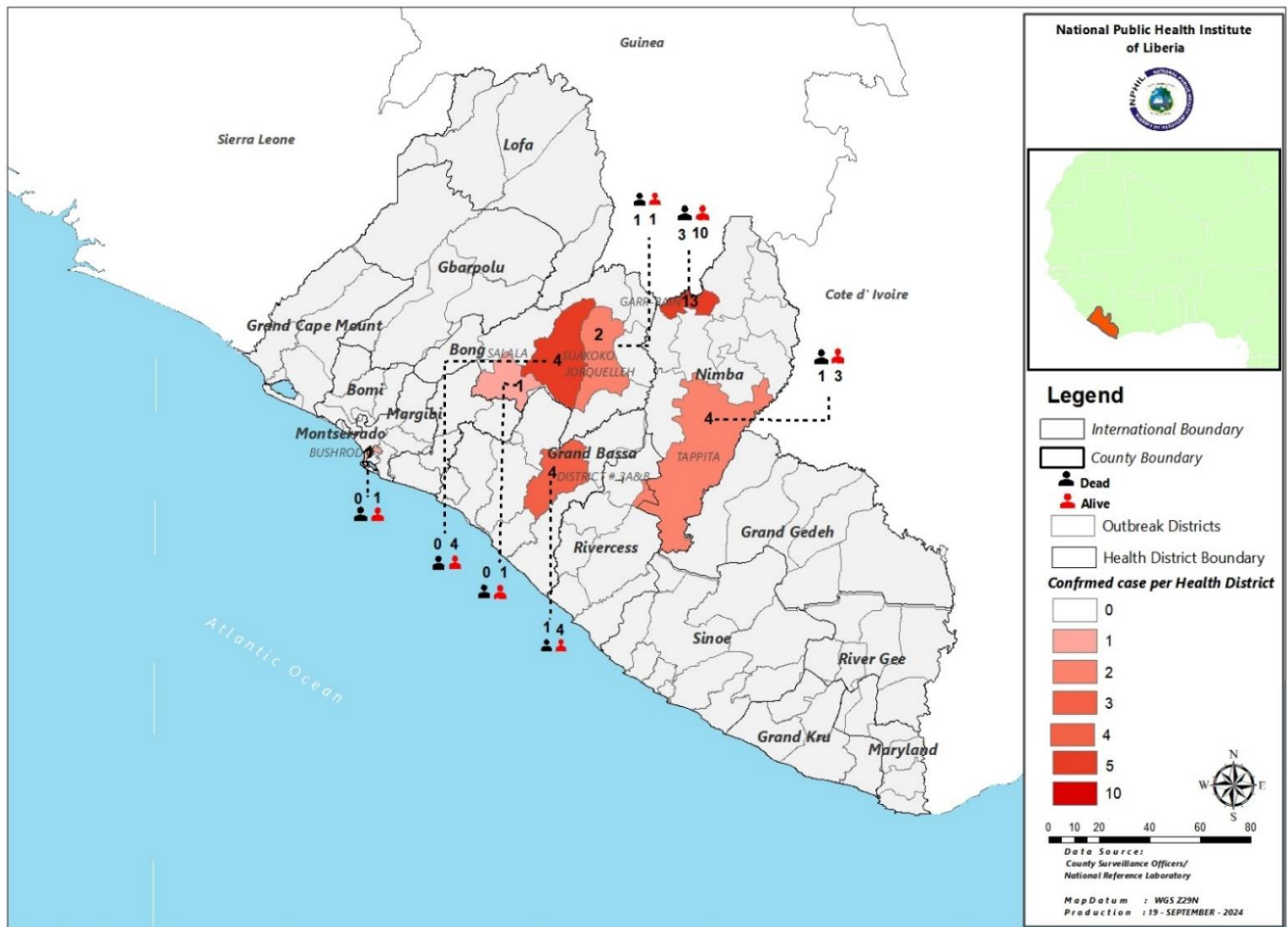


Figure 11. Geospatial distribution of outbreak district with number of confirmed Lassa fever cases, Liberia, Epi-week 1 – 37, 2024

Yellow Fever

- ☞ One (1) suspected case was reported from Nimba County
 - Specimen was collected and tested negative
- ☞ Cumulatively, eighty-one (81) cases have been reported since Epi-week 1.
 - Proportion of suspected cases with samples collected (78/81) 96%; however, 1 was rejected
 - Proportion of suspected cases with samples tested (76/78) 97% [presumptive positive – 3, negative – 72, indeterminate – 1]

Dengue

- ☞ Zero suspected cases were reported
- ☞ Cumulatively, five (5) suspected cases were reported

Diarrheal Diseases

Acute Bloody Diarrhoea (Shigellosis)

- ☞ Six (6) cases were reported from Lofa (2), Nimba (2), Rivercess (1), and Sinoe (1) Counties
 - Five (5) specimens were collected and pending testing
- ☞ Cumulatively, two hundred eighty-three (283) cases have been reported since Epi-week 1.
 - 166 specimens were collected, with 125 received at the Lab. Of the 125 specimens, 106 tested negative, 8 confirmed (*S. flexneri*-2 & *S. sonnei*-6), 7 rejected, and 6 pending testing

Severe Acute Watery Diarrhoea (Cholera)

- ☞ Zero suspected cases were reported
- ☞ Cumulatively, one hundred ninety-three (193) cases have been reported since Epi-week 1.
 - 123 specimens collected, 93 received at the Lab
 - 69 tested negative, 12 rejected, and 1 pending testing.

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

- ☞ Forty-six (46) dog bite cases were reported from Montserrado (15), Nimba (9), Maryland (5), Margibi (4), Grand Gedeh (3), Lofa (3), Bomi (2), Bong (2), Grand Bassa (1), Grand Kru (1), and Grand Cape Mount (1) Counties
- ☞ Proportion of cases investigated: 21/43 (49%)
- ☞ PEP was administered to two (2) persons (5%) in Montserrado County
- ☞ Cumulatively, 2,145 cases have been reported, including 2 deaths (*suspected human rabies*) since Epi-week 1.

Figure 12. Geospatial distribution of Human Exposure to Animal Bites Cases by County, Liberia, Epi-week 1 – 37, 2024

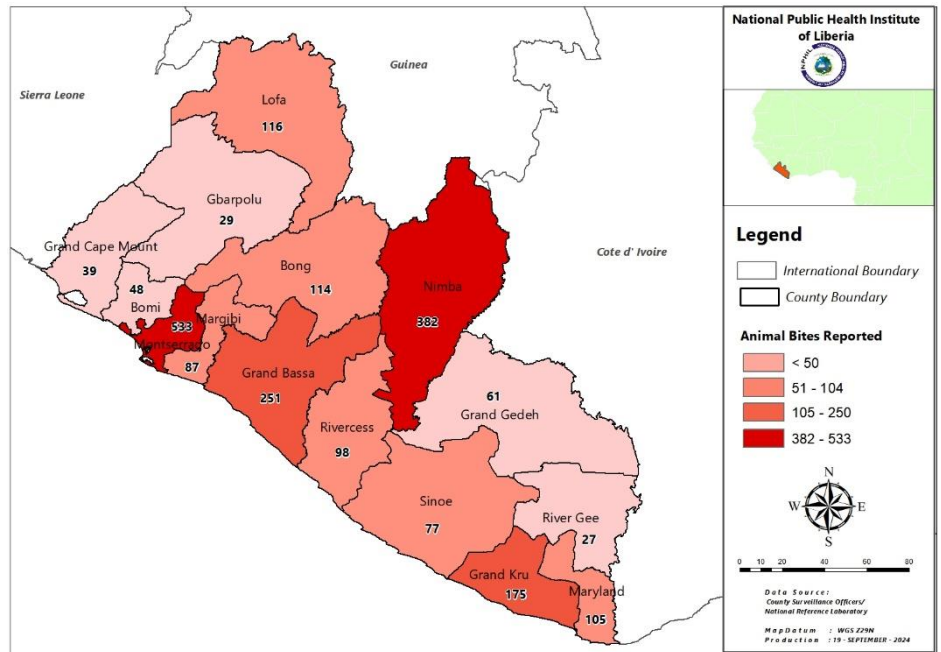


Figure 14. Human Exposure to Animal Bites by County & PEP Administration, Liberia Epi-week 37, 2024

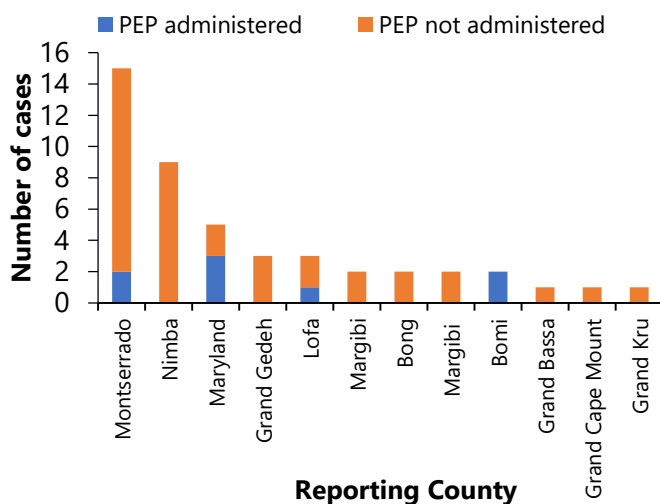
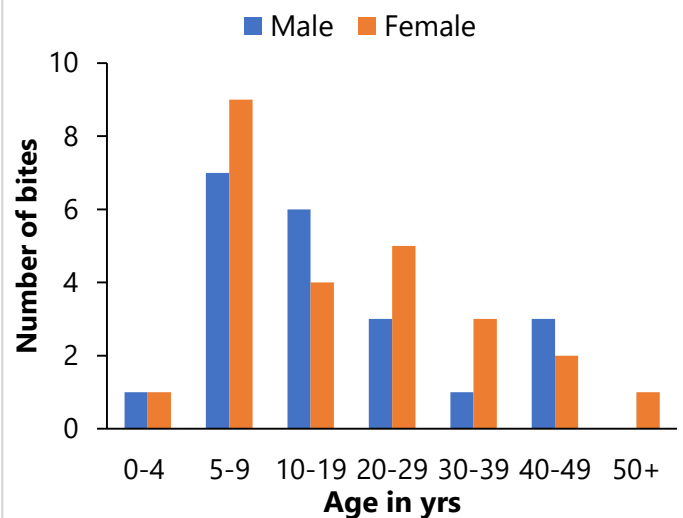


Figure 13. Distribution of Animal Bite Cases by Sex, Liberia, Epi week 37, 2024



Meningitis

- ☞ Zero cases were reported
- ☞ Cumulatively, twenty-one (21) suspected cases have been reported
 - Proportion of specimen collected (18/21) 86%, 3 specimens not collected
 - Proportion of specimens tested (17/18) 94% (15 negative, 2 positive)

Mpox

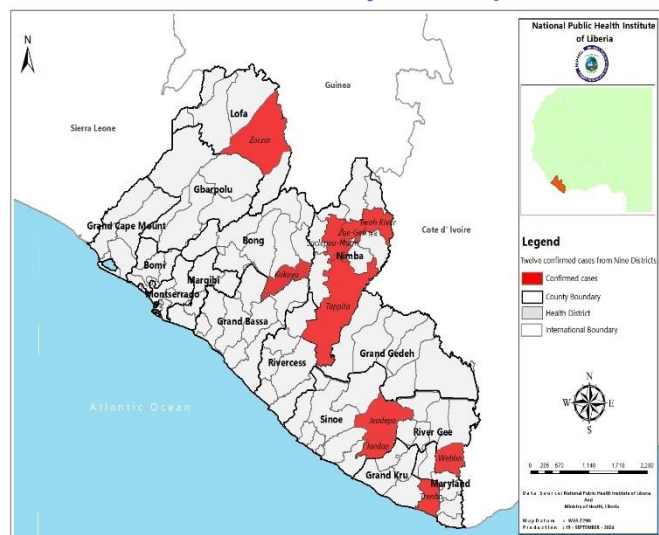
- ☞ Thirty (30) suspected cases were reported from Bong (6), Lofa (6), Montserrado (4), River Gee (3), Grand Kru (3), Nimba (2), Sinoe (2), Grand Gedeh (2), and Maryland (2) Counties
 - Specimens were collected, 1 tested positive, 23 negative, and 6 pending testing
- ☞ Cumulatively, one hundred forty-seven (147) suspected cases have been reported, with 147 samples collected with 1 rejected
 - One hundred forty (140) tested, of which 12 positive and 112 negative

- ☞ One (1) confirmed case reported from Bong County
- ☞ **Bong:** A 20-year-old male resident of Dorbor Town, Kokoyah Health District, Bong County
 - presented with fever, headache, and swollen lymph nodes on Sep 11, 2024
 - Symptoms onset was Sep 3, 2024
 - Tested positive on Sep 13, 2024, by NRL
 - Case is currently in home-based care
- ☞ Sixteen (16) contacts, including two healthcare workers, line-listed under follow up

Table 7. Mpox case indicators, Liberia, January 1 – September 18, 2024

Cases indicators	Total
Total suspected cases reported	147
Total samples collected	140
Total samples tested	119
Total Laboratory confirmed	12
Total confirmed cases alive	12
Total confirmed among HCWs	0
Total deaths among confirmed cases	0
Overall case fatality rate (CFR)	0%
Total suspected cases currently in isolation	0
Total confirmed cases currently in isolation	4
Total confirmed cases currently in HBC	2

Figure 15. Distribution of Lab-confirmed Mpox cases by Health District, Liberia, January 1 – 18 September 2024



PUBLIC HEALTH RESPONSE

I. Coordination

- Ongoing coordination meetings at national and daily at sub-national levels in affected counties
- Resources (financial & logistical) are being mobilized to support the counties

II. Epidemiological Surveillance

- Surveillance training ongoing for community health workers in Sinoe and Lofa counties to enhance active case detection in affected and adjacent districts-supported by AFENET
- Contacts to all confirmed cases under follow-up
- Active media scanning and community case finding continue

III. Case management

- Six cases currently in isolation (1 River Gee, 2 Sinoe and 1 Lofa counties, 1 Home-based Care in Lofa and 1 in Bong County), as well as assessment of Redemption isolation

IV. Laboratory

- Ongoing prepositioning of laboratory supplies (sample collection kits) and virtual orientation of diagnostic officers in all 15 counties ongoing as well as continual testing of Mpox samples

V. Risk Communication & Community Engagement

- Consolidated plan and budget, concluded with ECOWAS Radio and InterNews for free appearance and airing of jingles and ongoing coordination with CHF persons

VI. Points of Entry

- Ongoing cross-border information sharing with neighboring countries
- Ongoing entry screening for travellers from high-risk countries

NEXT STEPS

- Review and update the national IAP and contingency plans for alert counties
- Conduct refresher training for clinicians and surveillance officers at official POEs and major health facilities
- Conduct training of surveillance officer, IPC and case management staff in 15 counties
- Print and distribute additional RCCE materials, including surveillance, IPC and Case Management tools

Other Events of Public Health Importance

Maternal Mortality

- ☞ Three (3) deaths were reported from Montserrado County
- ☞ Primary causes of death were postpartum hemorrhage (1), eclampsia (1), and unknown (1)
- ☞ All of the deaths occurred in public health facility
- ☞ Cumulatively, two hundred thirty (230) deaths have been reported since Epi-week 1, of which (211) 92% were reported from health facilities and (19) 8% from communities.

Table 8. Cumulative Maternal Mortality reporting rate and Annualized Maternal Mortality per 100,000 live births by County, Liberia, Week 1 – 37, 2024

County	Estimated Annual Live birth (4.3%)	Current week	Cumulative	% of Cumulative Maternal deaths	Annualized Maternal Mortality Ratio/100,000
Grand Bassa	12875	0	18	7.8	196
Montserrado	85821	3	120	52.2	197
Margibi	13467	0	16	7.0	167
Nimba	27301	0	29	12.6	149
Grand Cape Mount	7881	0	8	3.5	143
Maryland	7531	0	7	3.0	131
Bomi	5943	0	5	2.2	118
Lofa	16113	0	9	3.9	78
Grand Gedeh	9690	0	5	2.2	73
Rivercess	4083	0	2	0.9	69
Grand Kru	4918	0	2	0.9	57
River Gee	5451	0	2	0.9	52
Bong	20585	0	6	2.6	41
Sinoe	6646	0	1	0.4	21
Gbarpolu	4169	0	0	0.0	0
Liberia	232474	3	230	100.0	139

- Proportion of deaths reviewed (116/230) 51%.

- ☞ Annualized maternal mortality ratio is at **139 per 100,000 live births** (Table 8). The expected MMR based on 2019-20 Demographic Health Survey (DHS) is 742 deaths per 100,000 live births.

Neonatal Mortality

- ☞ Ten (10) deaths were reported from Montserrado (5), River Gee (2), Rivercess (1), Maryland (1), and Nimba (1) Counties
- ☞ Primary causes of death were sepsis (4), prematurity (3), birth asphyxia (2), and metabolic acidosis (1)
- ☞ All of the deaths occurred in health facility
- ☞ Cumulatively, six hundred (600) deaths have been reported since Epi-week 1.
 - Proportion of deaths reviewed (278/600) 46%
- ☞ Annualized neonatal mortality rate is at **4.4 per 1,000 live births** (Table 9).

Table 9. Cumulative Neonatal Mortality reporting rate and Annualized Neonatal Mortality per 1,000 live births by County, Liberia, Week 1 – 37, 2024

County	Estimated Annual Live birth (4.3%)	Current Week	Cumulative	% of Cumulative Neonatal deaths	Annualized Neonatal Mortality Rate/1,000
Maryland	7347	1	77	12.8	14.7
Grand Kru	3130	0	22	3.7	9.9
Montserrado	62479	5	365	60.8	8.2
Sinoe	5534	0	16	2.7	4.1
Gbarpolu	4507	0	13	2.2	4.1
Rivercess	3865	1	10	1.7	3.6
Grand Gedeh	6770	0	12	2.0	2.5
Bong	18775	0	21	3.5	1.6
River Gee	3610	2	6	1.0	2.3
Lofa	14911	0	15	2.5	1.4
Margibi	11345	0	11	1.8	1.4
Nimba	24970	1	25	4.2	1.4
Bomi	4546	0	2	0.3	0.6
Grand Bassa	11981	0	4	0.7	0.5
Grand Cape Mount	6868	0	1	0.2	0.2
Liberia	190636	10	600	100.0	4.4

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

- ☞ Fourteen (14) events were reported from Sinoe (9), Montserrado (1), River Gee (1), Grand Gedeh (1), Grand Cape Mount (1), and Margibi (1) Counties
- ☞ All reported cases were investigated and classified as non-serious. Related vaccines included: Penta (6/14) 43%, Malaria (3/14) 21%, Measles (1/14) 7%, Pneumo (1/14) 7%, HPV (1/14) 7%, Yellow fever (1/14) 7%
- ☞ Cumulatively, seven hundred ninety-seven (797) events were reported since Epi-week 1.

Neglected Tropical Diseases

Buruli Ulcer

- ☞ Zero cases were reported
- ☞ Cumulatively, two confirmed cases have been reported since Epi-week 1.

Border Surveillance Update

- ☞ A total of 5,326 travelers' were screened from eight (8) designated out of forty-five (45) official Points of Entry, with incoming travellers accounting for 49% (2602/5326) ([Table 10](#)).

Table 10. Cross-border activity at the POE for incoming and outgoing travelers, Liberia, Epi-week 37, 2024

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
Airport	James S. Paynes	10	4	6	1	0	0	0	0
	Robert Int'l Airport	4169	2073	2096	4068	0	0	0	0
Seaport	Freeport of Monrovia	0	0	0	0	0	0	0	0
	Buchanan Port	110	55	55	110	0	0	0	0
Ground Crossing	Bo Water Side	437	258	179	431	0	6	0	0
	Ganta	23	7	16	2	0	0	0	0
	Yekepa	291	92	199	56	0	0	0	0
	Loguatu	286	113	173	264	0	0	0	0
Total		5326	2602	2724	4932	0	7	0	0

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

Public Health Measures

National level

- ☞ National PHEOC activated in response mode
- ☞ Ongoing awareness and community engagement at Points of Entry on Mpox
- ☞ NPHIL intensifies Media Engagement on Mpox Outbreak at the MICAT Press Briefing
- ☞ Produced and disseminated situation reports (Lassa fever, Measles, etc...)
- ☞ Produced and disseminated weekly bulletin
- ☞ Ongoing reclassification of suspected cases (Lassa fever, Yellow fever, AFP, and Measles) based on laboratory result

County-level

☞ Surveillance

- Production of situational reports
- Active case search ongoing in affected and surrounding communities
- Multiple awareness on Mpox surveillance ongoing in border counties (Lofa, Nimba, Grand Cape Mount, etc...)
- Maternal and newborn death review ongoing in Counties

☞ Case Management

- Administration of PEP
- Isolation, management, treatment, and active case search for Lassa fever and Measles cases ongoing in affected counties

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	11	6	6	10	98				
No. of Health District Reported		4	9	5	8	5	6	5	6	4	6	7	11	6	6	10	98				
Vaccine Preventable Diseases	Acute Flaccid Paralysis (Suspected Polio)	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	72	1	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	1	0	0	3	0	2	0	0	0	0	1	10	0	1	1	19	1417	194	
		D	0	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	0	19	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
	Yellow fever	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	81	3	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Viral Hemorrhagic Fever	Dengue fever	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	
		D	0	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	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lassa fever	A	0	6	0	1	0	0	0	0	0	0	1	1	0	0	0	9	166	23	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	9	
Influenza-Like Illnesses	COVID-19	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Influenza	A	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	78	4	
		D	0	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	0	2	0	0	0	2	1	0	1	6	283	8		
		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	0	0	0	0	0	0	0	0	0	0	0	193	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	3	0	0	0	0	3	230			
	Neonatal Mortality	D	0	0	0	0	0	0	0	0	1	5	1	1	2	0	10	600			
	Adverse Events Following Immunization (AEFI)	A	0	0	0	1	1	0	0	1	0	1	0	0	1	9	14	797	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	0		
Other Reportable Diseases	Mpox	A	0	6	0	0	0	2	3	6	0	2	4	2	0	3	2	30	147	12	
		D	0	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	0
		D	0	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	0	1	1	3	1	3	4	5	15	9	0	0	0	46	2143	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	
	Meningitis	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	2	
		D	0	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	123	2	
		D	0	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	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		3	14	0	5	2	8	5	11	5	8	37	26	2	7	13	146	6416	259		

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 2024 (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

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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.