



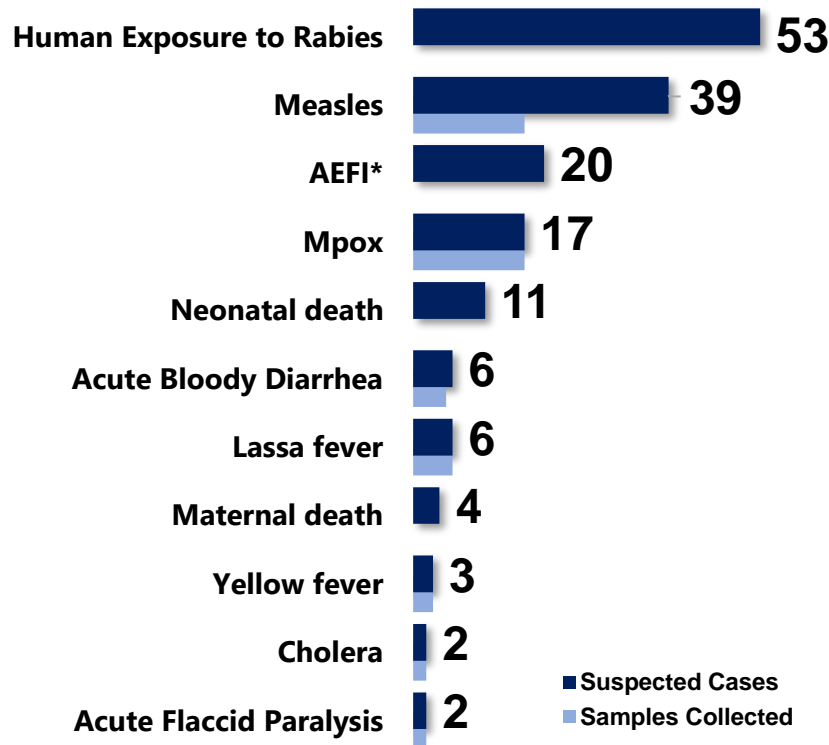
# Liberia IDSR Epidemiology Bulletin

2024 Epi-week 46 (November 11 – 17, 2024)

Country Population: 5,406,374 | Volume 21 Issue 46 | November 11 – 17, 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 163 events of public health importance, including 16 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 Poliovirus type 2 outbreak
- ◆ Ongoing Mpox outbreak in nine counties

## Reporting Coverage

Table 1. Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 46, 2024

County	Expected Reports from Health Facility	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	368	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
<b>Liberia</b>	<b>943</b>	<b>943</b>	<b>940</b>	<b>100</b>	<b>99</b>

943(100%)  
Health facilities reported IDSR data

98(100%)  
Health districts reported IDSR data

940(99%)  
Health facilities reported timely IDSR data

Legend: ≥80 <80

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

## Vaccine-Preventable Diseases

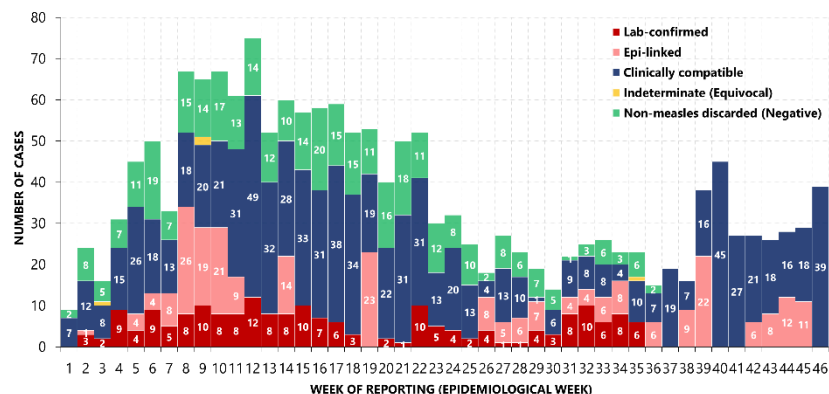
### Measles

- ☞ Thirty-nine (39) suspected cases were reported from Nimba (24), Grand Cape Mount (4), Lofa (3), Montserrado (3), Gbarpolu (2), Bomi (1), Grand Gedeh (1), and Grand Kru (1) Counties
  - Seventeen (17) specimens were collected and received at the lab pending testing
  - Sixty-nine percent (27/39) of the suspected cases were vaccinated for measles (see Table 2)

- ☞ Cumulatively, 1,692 suspected cases have been reported since Epi-week 1 (see Table 3)
  - Of the total reported, 1335 confirmed cases
    - 53% were reported to have previously been vaccinated
    - 36% were unvaccinated
    - 11% had unknown vaccination status
  - Fifty-one percent (684/1335) of the confirmed cases are below 5 years
  - Proportion of suspected cases with sample collected 46% (773/1692)
  - Proportion of suspected cases with sample tested 72% (552/773) [negative – 353, positive – 195, indeterminate-4]
  - Proportion of negative Measles cases tested for Rubella 90% (320/353)
- ☞ Liberia’s annualized non-measles febrile rash illness rate now stands at **7.4 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 46, 2024**

County	Reported		Number of Doses Received		
	cases	Vaccinated	One Dose	Two Doses	Doses Not Indicated
Bomi	1	1	0	1	0
Gbarpolu	2	1	1	0	0
Grand Cape Mount	4	4	3	1	0
Grand Gedeh	1	1	1	0	0
Grand Kru	1	1	1	0	0
Lofa	3	3	1	1	1
Montserrado	3	1	0	1	0
Nimba	24	15	9	2	4
<b>Total</b>	<b>39</b>	<b>27</b>	<b>16</b>	<b>6</b>	<b>5</b>

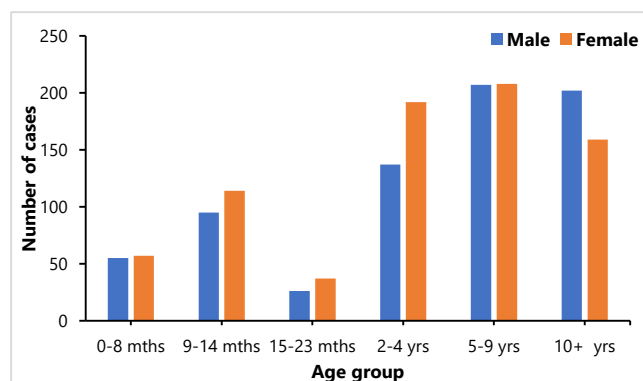


**Figure 2. Distribution of Measles Cases by Reporting Week and Epi-classification, Liberia, Epi-week 1 – 46, 2024**

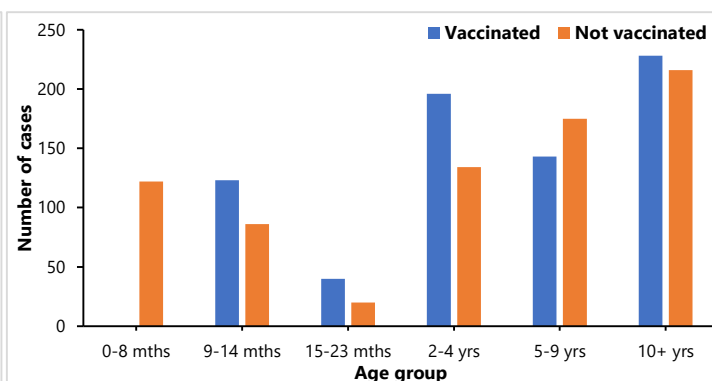
**Table 3. Classification of measles, reporting rate, and annualized non-measles rash illness rate per 100,000 population by County, Liberia, Epi-week 1 – 46, 2024**

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	13	0	9	26	7.4
Bong	2	0	27	0	9	38	2.1
Gbarpolu	7	0	20	1	26	54	30.3
Grand Bassa	3	0	42	0	16	61	6.0
Grand Cape Mount	7	0	19	0	28	54	17.3
Grand Gedeh	37	28	79	0	39	183	19.6
Grand Kru	31	35	50	0	44	160	43.5
Lofa	5	0	32	0	15	52	4.5
Margibi	0	0	9	0	4	13	1.4
Maryland	21	13	169	0	8	211	5.2
Montserrado	4	0	41	0	21	66	1.2
Nimba	36	161	294	1	27	519	4.8
River Gee	23	13	60	1	39	136	34.8
Rivercess	1	0	4	0	6	11	7.1
Sinoe	14	1	30	1	62	108	45.3
<b>Liberia</b>	<b>195</b>	<b>251</b>	<b>889</b>	<b>4</b>	<b>353</b>	<b>1692</b>	<b>7.4</b>

Target Achieved >=2 Below Target <2



**Figure 3. Suspected Measles Cases by Age-group and Sex, Liberia, Epi-week 1 – 46, 2024**



**Figure 4. Vaccination status of Suspected Measles Cases by Age Group, Liberia, Epi-week 1 – 46, 2024**

**Table 4. Measles Outbreak by County and Case Status, Liberia, December 13, 2021 – November 20, 2024**

County	Total Cases	Active	Recovery	Deaths	No. of Districts
Montserrado	5,373	0	5,304	69	0/7
<b>Nimba</b>	<b>1461</b>	<b>24</b>	<b>1381</b>	<b>4</b>	<b>5/11</b>
Grand Bassa	950	0	917	7	1/8
Margibi	803	0	802	1	0/4
Bong	578	0	575	3	0/9
Maryland	1,320	0	1320	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	148	0	143	5	0/4
Rivercess	84	0	83	1	0/6
Gbarpolu	64	0	64	0	0/5
Grand Gedeh	604	0	604	0	0/6
River Gee	134	0	134	0	0/6
Sinoe	247	0	247	0	0/10
<b>Total</b>	<b>13,334</b>	<b>24</b>	<b>13,148</b>	<b>95</b>	<b>6/98</b>

**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.
- IMS meetings are being held for coordination and mobilization of resources in Nimba County.

**II. Epidemiological Surveillance**

- Active case search ongoing in affected communities

**III. Case management**

- Case management ongoing in Nimba County

**IV. Immunization**

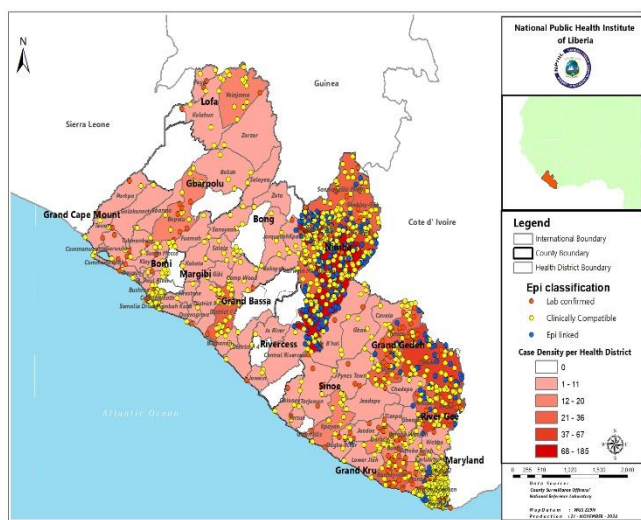
- Routine immunization ongoing across the country
- Planned nationwide campaign for measles November 25 – December 1, 2024 (9-59 months)

**V. Laboratory**

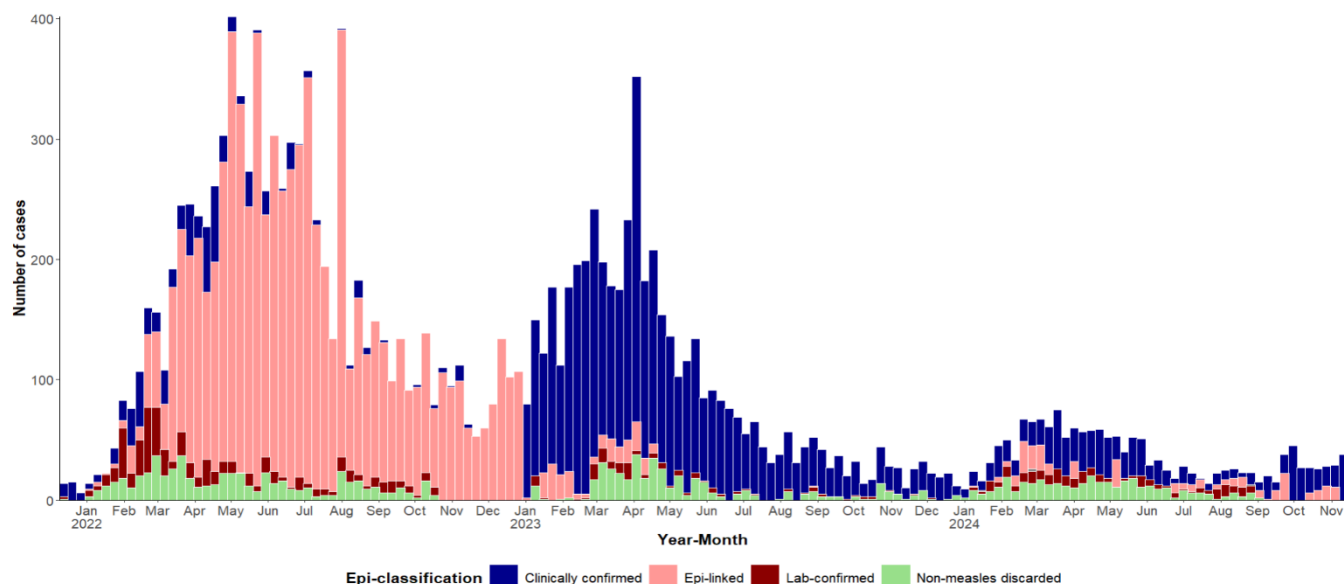
- The National Public Health Reference Laboratory (NPHRL) continues testing of Measles samples

**VI. Risk Communication & Community Engagement**

- Awareness and health education on the upcoming measles Supplemental Immunization Activities (SIA) ongoing nationwide.



**Figure 5. Measles outbreak by County and Case Status, Liberia, December 13, 2021 – November 20, 2024**



**Figure 6: Epi-curve of Measles Cases by monthly classification, Liberia, December 13, 2021 - November 20, 2024**

## Acute Flaccid Paralysis (AFP)

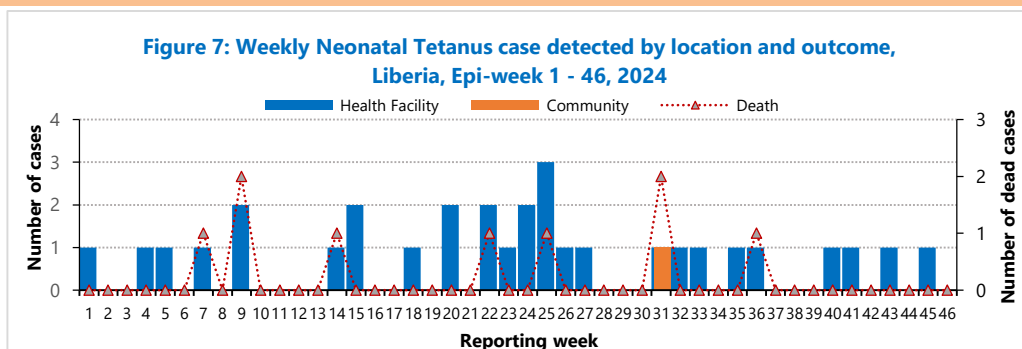
- ☞ Two (2) cases were reported from Montserrado County
  - Specimens were collected and shipped
- ☞ Cumulatively, 99 cases have been reported since Epi-week 1. One (1) cVDPV2<sup>1</sup>, 1 Poliovirus-2, 70 negative, 12 NPENT, and 15 AFP specimens pending testing at the laboratory
- ☞ As of week 46, the annualized non-polio AFP rate is at **4.6 per 100,000** populations under 15 years of age.

**Table 5. Non-Polio AFP Rate 3/100,000 <15 years by County, Liberia, Epi-week 1 – 46, 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	5	3	9.1	5	100%	0	0%
Bong	215425	1	1	0.5	1	100%	0	0%
Gbarpolu	43630	4	4	10.4	4	100%	0	0%
Grand Bassa	134743	3	3	2.5	3	100%	0	0%
Grand Cape Mount	82471	8	7	11.0	8	100%	1	13%
Grand Gedeh	101412	6	6	6.7	6	100%	1	17%
Grand Kru	51467	3	3	6.6	3	100%	1	33%
Lofa	168626	10	9	6.7	10	100%	1	10%
Margibi	140931	1	1	0.8	1	100%	0	0%
Maryland	78808	3	3	4.3	3	100%	0	0%
Montserrado	898124	25	18	3.1	25	100%	4	16%
Nimba	285705	22	20	8.7	22	100%	4	18%
Rivercess	42729	2	2	5.3	2	100%	0	0%
River Gee	57047	1	1	2.0	1	100%	0	0%
Sinoe	69556	5	5	8.1	5	100%	0	0%
<b>Liberia</b>	<b>2432868</b>	<b>99</b>	<b>86</b>	<b>4.6</b>	<b>99</b>	<b>100%</b>	<b>12</b>	<b>12%</b>
<b>Non-Polio AFP Rate</b>	<b>&lt;3</b>	<b>Stool adequacy</b>		<b>&lt;80%</b>	<b>Non-Polio Enterovirus</b>	<b>&lt;10%</b>	<b>Silent</b>	
	<b>≥3</b>			<b>≥80%</b>		<b>≥10%</b>		

## Neonatal Tetanus

- ☞ Zero suspected cases were reported.
- ☞ Cumulatively, 32 cases have been reported, including 10 deaths since Epi-week 1. Case Fatality Rate is 31% and community detection is at 3%.



## 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

- ☞ Zero cases were reported
- ☞ Cumulatively, 118 suspected cases reported since Epi-week 1.
  - One hundred eighteen (118) specimens were collected: 110 tested negative, 4 specimens were discarded, and 4 positive

<sup>1</sup> circulating Vaccine-Derived Poliovirus type 2

## Viral Haemorrhagic Fever

### Lassa fever

- ☞ Six (6) suspected cases were reported from Bong (2), Nimba (2), Maryland (1), and Lofa (1) Counties
  - Specimens were collected, 2 tested negative, 1 positive, 1 indeterminate, and 2 pending testing
- ☞ Cumulatively, 221 suspected cases have been reported since Epi-week 1.
  - Proportion of suspected cases with sample collected (221/221) 100%. Seven of the collected samples were discarded
  - Proportion of suspected cases with sample tested (209/221) 95%
    - Thirty-nine (39) positive, including 11 deaths, 2 indeterminate, and 168 negative
  - Case Fatality Rate: (11/39) 28%
  - Nimba County accounts for 39% of the total confirmed case

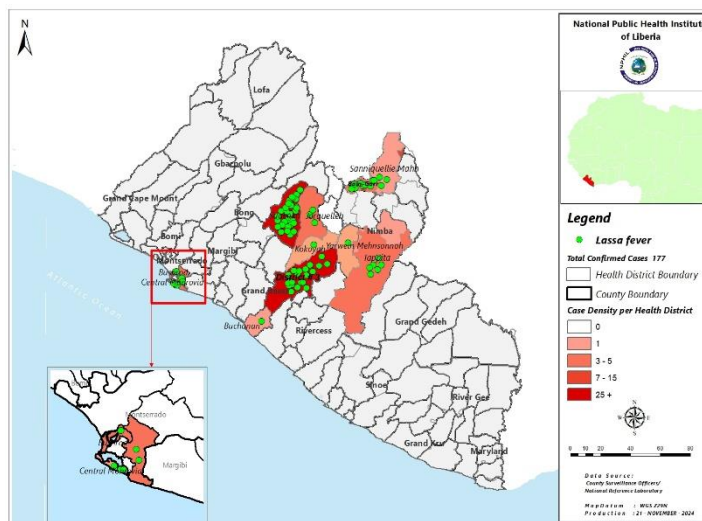
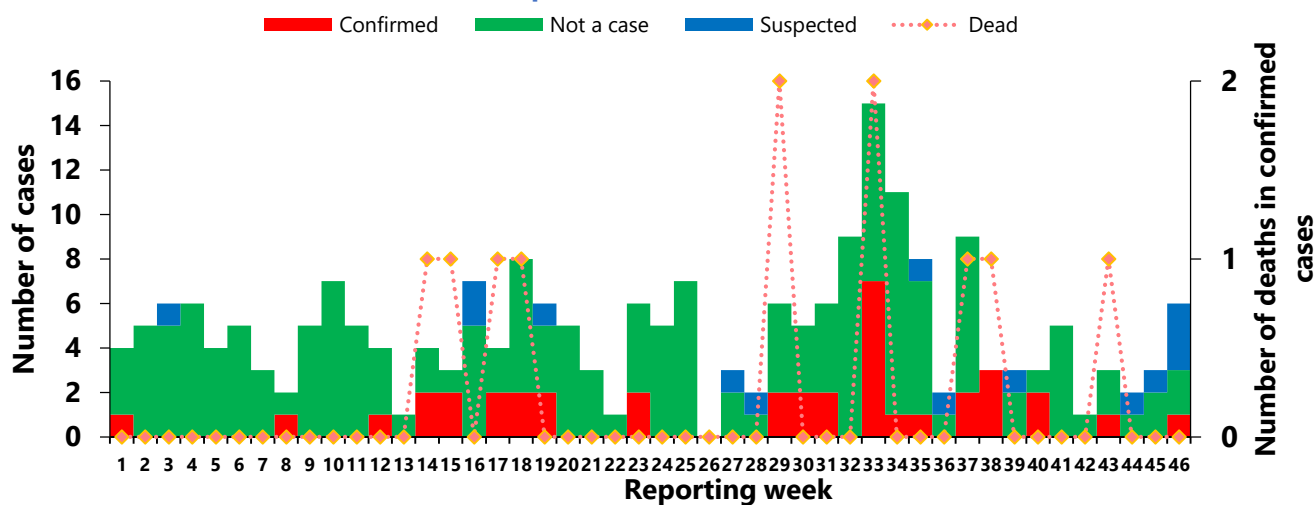


Figure 8. Geospatial distribution of confirmed Lassa fever by Health District, Liberia, Epi-week 1 – 46, 2024

Figure 9: Weekly distribution of Lassa fever cases by Epi-classification, Liberia, Epi-week 1 – 46, 2024



### Outbreak Section (January 6, 2022 – November 20, 2024)

- ☞ One new confirmed case was reported from Suakoko District, Bong County
- ☞ Eight (8) contacts, including four (4) healthcare workers (HCWs) line listed and undergoing 21 days of follow-up
- ☞ Ten (10) contacts, including 7 HCWs, completed 21 days follow
- ☞ A total of 177 confirmed cases, including 55 deaths reported
- ☞ Cumulative Case Fatality Rate (CFR): 31% (55/177)
- ☞ Three (3) counties are currently in outbreak (two in countdown)

### 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
- Eight (8) contacts, including 4 HCWs line-listed and undergoing 21 days' follow-up
- Ten (10) contacts, including 7 HCWs, completed 21 days' follow-up

- Three counties (Bong, Nimba, and Grand Bassa) are currently in outbreak, with Grand Bassa and Nimba in countdown phase
- Weekly sit-reps developed and disseminated to stakeholders

### III. Case management

- Ribavirin distributed to affected counties
- No confirmed case in isolation

### IV. Risk Communication and Community Engagement

- Risk communication and community engagement ongoing in affected communities

### V. Dead Body Management

- Safe and dignified burial conducted for the deceased cases

### VI. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- A total of 177 Lassa fever cases have been confirmed since this outbreak

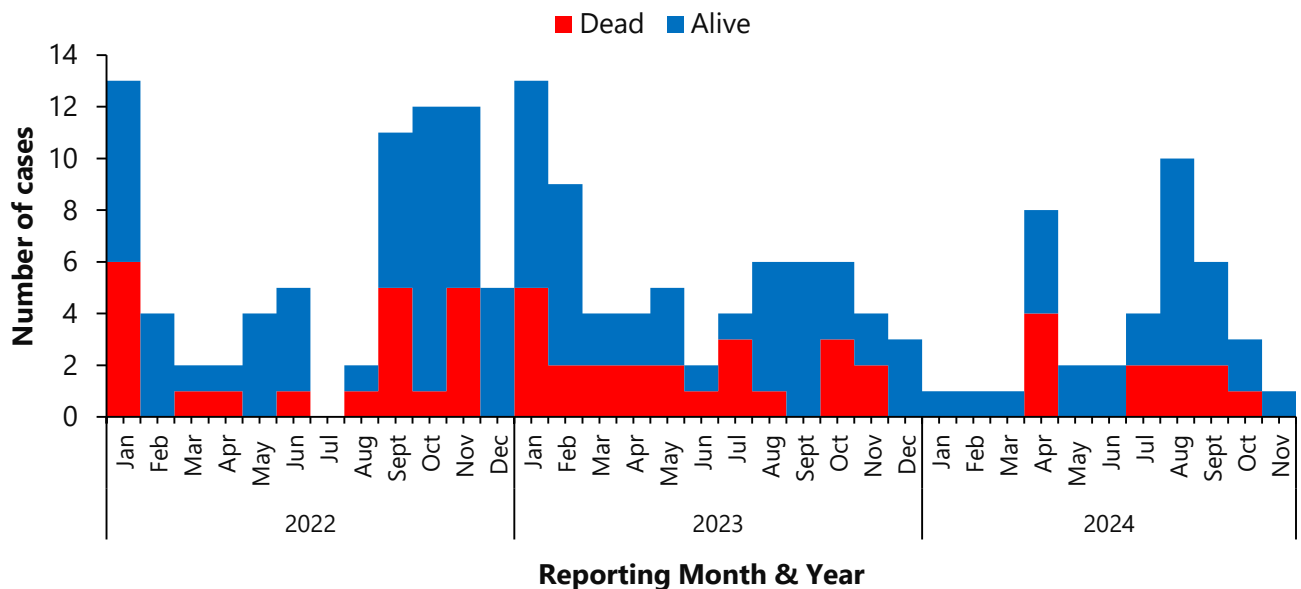
**Table 6. Summary of Lassa fever Outbreak, Liberia, January 6, 2022 – November 20, 2024**

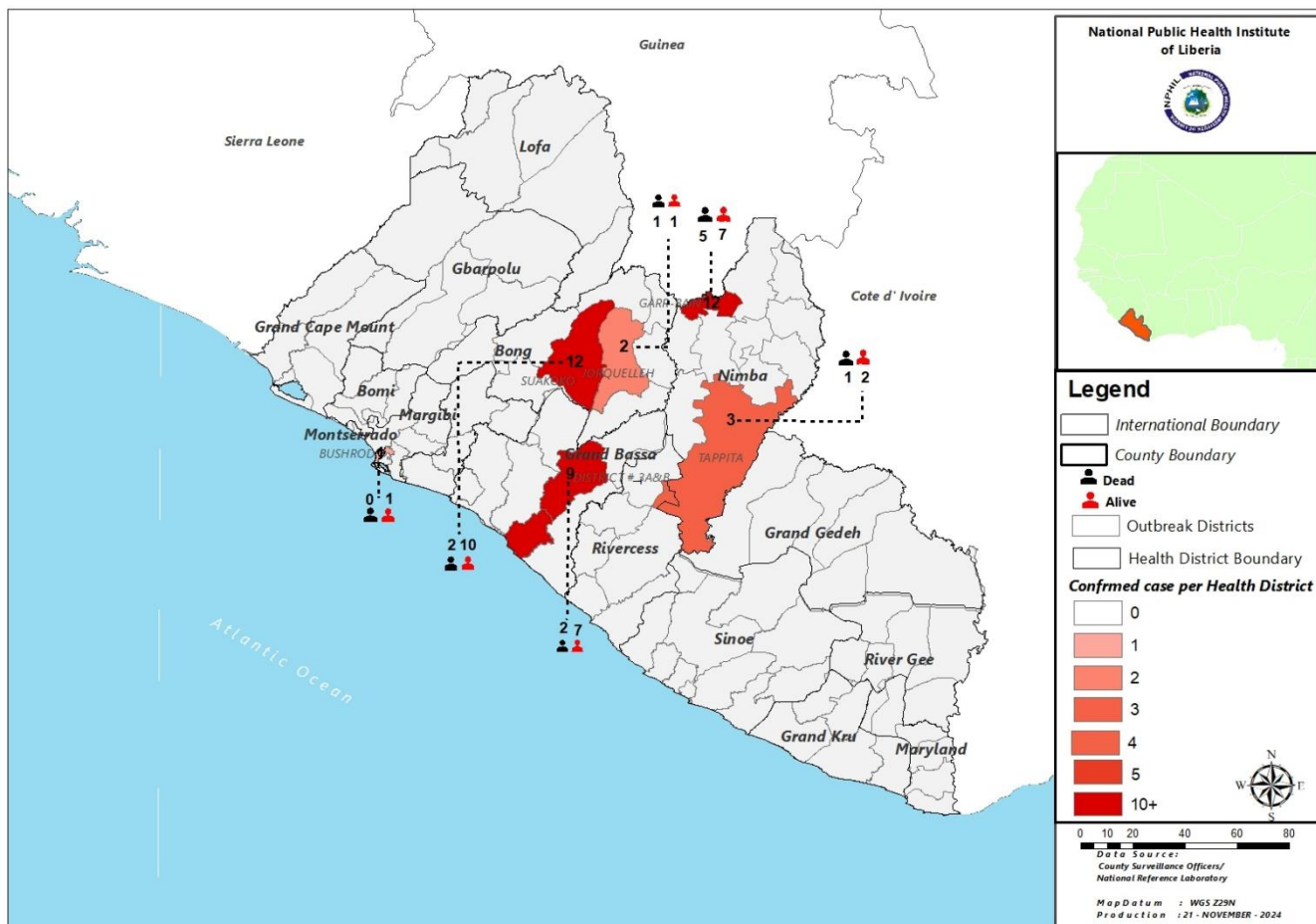
County	Outbreak Districts	Outbreak Start Date	Total suspected	Total confirmed	HCWs confirmed	Total Deaths	Deaths in HCWs	CFR %	Total Contacts	# HCW contacts	Contacts, be came cases	Contacts under follow up	Contacts completed	Days in countdown	Outbreak Status
Montserrado	Bushrod	13-Feb-23	17	1	0	0	0	0%	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	0	37	Completed	Ended
	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
	Jorquelleh	11-Apr-24	3	2	0	1	0	0%	41	30	0	0	41	Completed	Ended
	Suakoko	19-Nov-24	2	1	0	0	0	0%	8	4	0	8	0	Active	Ongoing
Grand Bassa	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	3-Sep-24	7	6	0	1	0	17%	27	10	0	0	27	29	Countdown
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	9	0	60%	43	35	8	0	43	Completed	Ended
	Tappita	29-Jul-24	5	2	0	1	0	50%	27	24	0	0	27	Completed	Ended
	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	20	10	0	5	0	50%	173	98	1	0	173	3	Countdown
River Gee	Putupo	25-Nov-22	2	1	0	1	0	100%	14	0	0	0	14	Completed	Ended
<b>Total</b>			<b>535</b>	<b>177</b>	<b>22</b>	<b>55</b>	<b>3</b>	<b>31%</b>	<b>1537</b>	<b>599</b>	<b>62</b>	<b>8</b>	<b>1439</b>		

**Legend:**  Outbreaks in countdown stage in reporting districts

Active/ ongoing outbreaks not in countdown stage with active response interventions in reporting districts

**Figure 10: Epi-curve of confirmed Lassa fever Cases by Outcome, Liberia, January 6, 2022 - November 20, 2024**





**Figure 11. Geospatial distribution of outbreak district with number of confirmed Lassa fever cases, Liberia, Epi-week 1 – 46, 2024**

### Yellow Fever

- ☞ Three suspected cases were reported from River Gee (2) and Maryland (1) Counties
  - Specimens were collected, 1 tested negative and 2 pending testing
- ☞ Cumulatively, 96 cases have been reported since Epi-week 1.
  - Proportion of suspected cases with samples collected (93/96) 97%; however, 1 was rejected
  - Proportion of suspected cases with samples tested (90/93) 97% [presumptive positive – 4, negative – 85, indeterminate – 1]

### Dengue

- ☞ Zero suspected cases were reported
- ☞ Cumulatively, 6 suspected cases were reported

### Diarrheal Diseases

#### Acute Bloody Diarrhoea (Shigellosis)

- ☞ Six (6) cases were reported from Lofa (2), Rivercess (1), Sinoe (1), Gbarpolu (1), and Montserrado (1) Counties
  - Five (5) specimens were collected and pending testing
- ☞ Cumulatively, 379 cases have been reported since Epi-week 1.
  - 221 specimens were collected, with 170 received at the Lab. Of the 170 specimens, 135 tested negative, 24 confirmed (*S. flexneri*-4, *S. sonnei*-9, others-11), 8 rejected, and 3 pending testing

#### Severe Acute Watery Diarrhoea (Cholera)

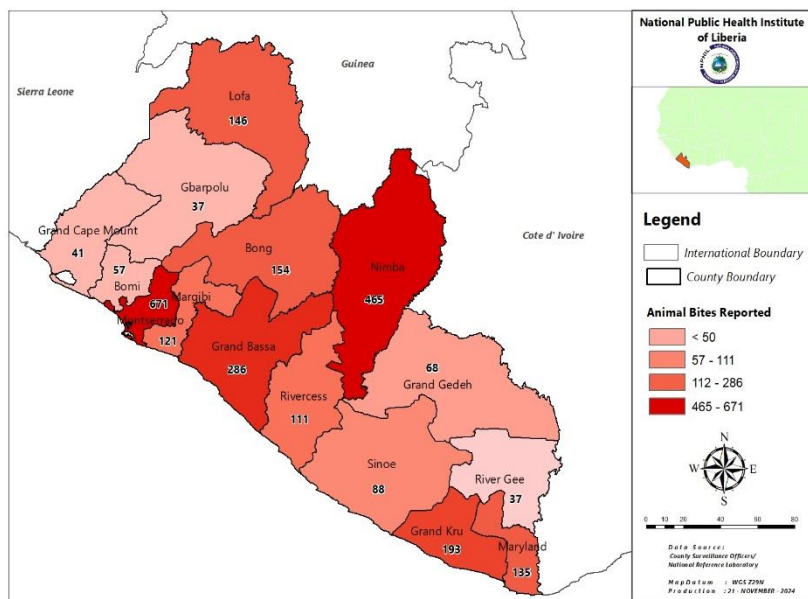
- ☞ Two (2) suspected cases were reported from Margibi County
  - Specimens were collected and pending testing
- ☞ Cumulatively, 277 cases have been reported since Epi-week 1.
  - 144 specimens collected, 109 received at the Laboratory
  - 86 tested negative, 12 rejected, and 11 pending testing.

## Other Reportable Diseases

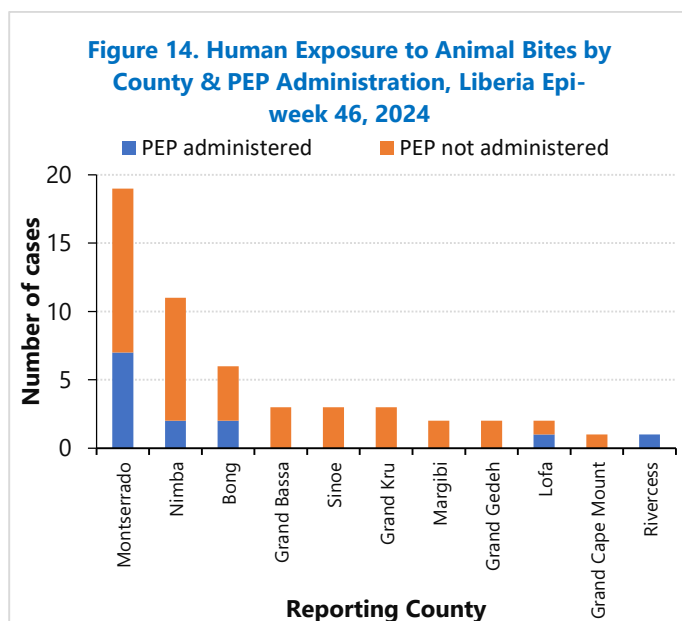
### Animal bite (Human Exposure to Rabies)

- ☛ Fifty-three (53) dog bite cases were reported from Montserrado (19), Nimba (11), Bong (6), Sinoe (3), Grand Kru (3), Grand Bassa (3), Margibi (2), Grand Gedeh (2 including 1 death), Lofa (2), Grand Cape Mount (1), and Rivercess (1) Counties
- ☛ Proportion of cases investigated is 42% (22/53)
- ☛ PEP was administered to thirteen (13) persons in Montserrado (7), Nimba (2), Bong (2), Lofa (1), and Rivercess (1) Counties
- ☛ Cumulatively, 2,693 cases have been reported, including 5 deaths (*suspected human rabies*) since Epi-week 1.

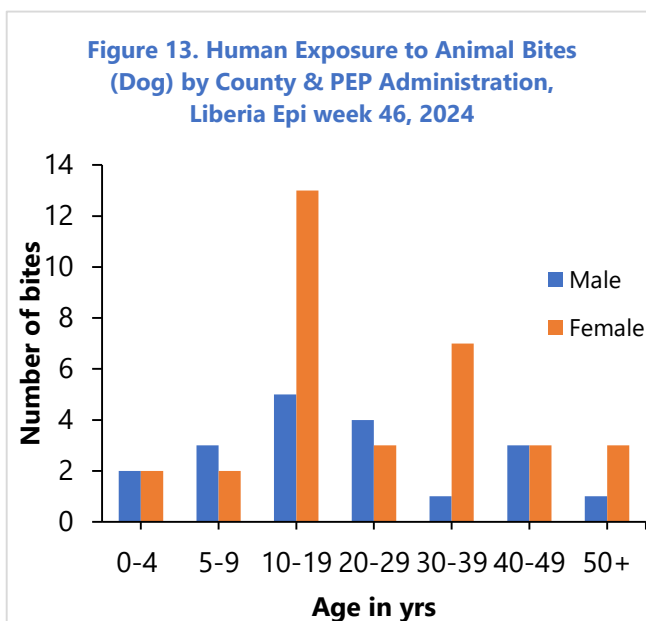
**Figure 12. Geospatial distribution of Human Exposure to Animal Bites Cases by County, Liberia, Epi-week 1 – 46, 2024**



**Figure 14. Human Exposure to Animal Bites by County & PEP Administration, Liberia Epi-week 46, 2024**



**Figure 13. Human Exposure to Animal Bites (Dog) by County & PEP Administration, Liberia Epi week 46, 2024**



### Meningitis

- ☛ Zero cases were reported
- ☛ Cumulatively, 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

- ☛ Seventeen (17) suspected cases were reported from Nimba (4), Maryland (3), Rivercess (3), Montserrado (2), Margibi (2), Bong (1), Bomi (1), and Grand Cape Mount (1) Counties
  - Specimens were collected, 10 tested positive, 3 negative, and 4 pending testing
- ☛ Cumulatively, 332 suspected cases have been reported, 318 samples collected with 1 rejected
  - Two hundred eighty-four (284) tested: 51 positive, 231 negative and 2 indeterminate

- ☞ Ten (10) new confirmed cases were reported from Nimba (4), Bomi (1), Rivercess (3), Grand Cape Mount (1), and Bong (1)
- ☞ Total of 183 contacts under follow-up (58-Lofa, 45-Nimba, 18-Grand Cape Mount, 21-Sinoe, 15-Rivercess, 12-Margibi, 7-Bomi, 7-Grand Bassa)

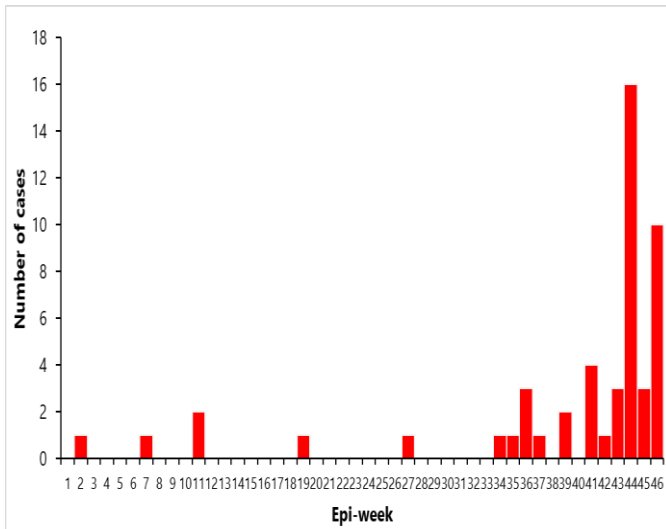


Figure 15. Weekly epi-curve of Mpox lab-confirmed cases detected in Liberia, Epi-week 1 - 46, 2024

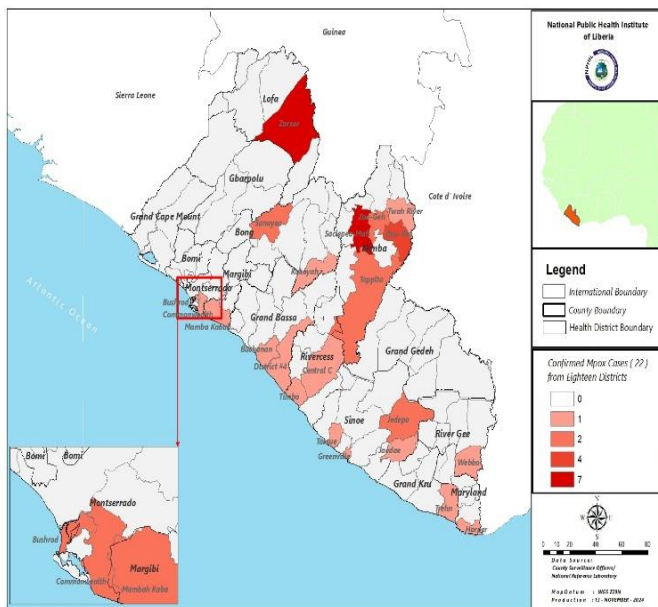


Figure 16. Distribution of Lab-confirmed Mpox cases by Health District, Liberia, January 1 – November 20, 2024

## PUBLIC HEALTH RESPONSE

### I. Coordination

- Conduct regular IMS meetings at national and subnational levels in affected counties to direct response efforts
- Production of regular Sitreps and dissemination

### II. Epidemiological Surveillance

- Active media scanning and community case finding continue through EIOS platform
- Continue to follow up with response counties to obtain updates on the status of the Mpox outbreak
- Total of 183 contacts under follow-up (58-Lofa, 45-Nimba, 18-Grand Cape Mount, 21-Sinoe, 15-Rivercess, 12-Margibi, 7-Bomi, 7-Grand Bassa)

### III. Case management

- Thirty-one (31) cases currently in isolation (Nimba-14, Lofa-5, Rivercess-5, Sinoe-2, Grand Bassa-1, Margibi-1, Bomi-1, Grand Cape Mount-1, Bong-1)

### IV. Laboratory

- Sequencing results showed Monkeypox virus Clade IIa and Clade IIb
- The National Public Health Reference Laboratory continues the testing of Mpox samples

### V. Risk Communication & Community Engagement

- Ongoing community engagement and awareness creation via a radio station in partnership between the RCCE team and affected County Health teams

### VI. Infection Prevention and Control (IPC)

- Ongoing distribution of IPC supplies to the 15 Counties; 10/15 received supplies

### NEXT STEPS

- Continue active case search in the affected communities

## Other Events of Public Health Importance

### Maternal Mortality

- Four (4) deaths were reported from Montserrado, Grand Bassa, Margibi, and Nimba Counties
- Primary causes of death were Postpartum hemorrhage (3) and Eclampsia (1)
- Three deaths occurred in health facility, while one occurred in the community
- Cumulatively, 270 deaths have been reported since Epi-week 1, of which (246) 91% were reported from health facilities and (24) 9% from communities.
  - Proportion of deaths reviewed (132/270) 49%.

**Table 8. Cumulative Maternal Mortality reporting rate and Annualized Maternal Mortality per 100,000 live births by County, Liberia, Week 1 – 46, 2024**

County	Estimated Annual Live birth (4.3%)	Current week	Cumulative	% of Cumulative Maternal deaths	Annualized Maternal Mortality
Grand Bassa	12875	1	22	8.1	193
Montserrado	85821	1	135	50.0	178
Nimba	27301	1	36	13.3	149
Margibi	13467	1	18	6.7	151
Maryland	7531	0	9	3.3	135
Grand Cape Mount	7881	0	9	3.3	129
Bomi	5943	0	5	1.9	95
Rivercess	4083	0	3	1.1	83
Lofa	16113	0	11	4.1	77
Grand Gedeh	9690	0	6	2.2	70
Grand Kru	4918	0	3	1.1	69
Bong	20585	0	10	3.7	55
River Gee	5451	0	2	0.7	41
Sinoe	6646	0	1	0.4	17
Gbarpolu	4169	0	0	0.0	0
<b>Liberia</b>	<b>232474</b>	<b>4</b>	<b>270</b>	<b>100.0</b>	<b>131</b>

- Annualized maternal mortality ratio is at **131 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

- Eleven (11) deaths were reported from Montserrado (7), Rivercess (2), and Nimba (2) Counties
- Primary causes of death were Birth asphyxia (6), sepsis (4), and pending review (1).
- All the deaths occurred in public health facility
- Cumulatively, 712 deaths have been reported since Epi-week 1.
  - Proportion of deaths reviewed (332/712) 47%
- Annualized neonatal mortality rate is at **4.2 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 – 46, 2024**

County	Estimated Annual Live birth (4.3%)	Current Week	Cumulative	% of Cumulative Neonatal deaths	Annualized Neonatal Mortality Rate/1,000
Maryland	7347	0	86	12.1	13.2
Grand Kru	3130	0	27	3.8	9.8
Montserrado	62479	7	430	60.4	7.8
Rivercess	3865	2	14	2.0	4.1
Sinoe	5534	0	17	2.4	3.5
Gbarpolu	4507	0	13	1.8	3.3
River Gee	3610	0	10	1.4	3.1
Grand Gedeh	6770	0	13	1.8	2.2
Margibi	11345	0	17	2.4	1.7
Lofa	14911	0	21	2.9	1.6
Bong	18775	0	25	3.5	1.5
Nimba	24970	2	31	4.4	1.4
Bomi	4546	0	2	0.3	0.5
Grand Bassa	11981	0	5	0.7	0.5
Grand Cape Mount	6868	0	1	0.1	0.2
<b>Liberia</b>	<b>190636</b>	<b>11</b>	<b>712</b>	<b>100.0</b>	<b>4.2</b>

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

- Twenty (20) events were reported from Sinoe (5), Grand Gedeh (5), Lofa (4), Grand Cape Mount (3), Bomi (2), and Grand Bassa (1) Counties
- All reported cases were investigated and classified as non-serious. Related vaccines included Penta (10), OPV (4), TD (2), Measles (1), BCG (1), Pneumo (1), and Yellow fever (1)
- Cumulatively, 1002 events were reported since Epi-week 1.

## Neglected Tropical Diseases

### Buruli Ulcer

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

## Border Surveillance Update

A total of 5,948 travelers' were screened from eight (8) designated out of Forty-five (45) official Points of Entry, with incoming travelers accounting for 54% (3184/5948) (*Table 10*).

**Table 10. Cross-border activity at the POE for incoming and outgoing travelers, Liberia, Epi-week 46, 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	50	20	30	0	0	0	0	0
	Robert Int'l Airport	4261	2209	2052	4216	0	56	0	0
Seaport	Freeport of Monrovia	284	142	142	284	0	0	0	0
	Buchanan Port	126	63	63	126	0	0	0	0
Ground Crossing	Bo Water Side	491	285	206	464	0	27	0	0
	Ganta	82	38	44	13	0	4	0	0
	Yekepa	331	252	79	43	0	0	0	0
	Loguatu	323	175	148	0	0	0	0	0
<b>Total</b>		<b>5,948</b>	<b>3184</b>	<b>2764</b>	<b>5146</b>	<b>0</b>	<b>83</b>	<b>0</b>	<b>0</b>

*Note: Yellow book (YB) issue for both arrival and departure; Vaccination coverage for both arrival and departure*

## Public Health Measures

### National level

- ☞ Liberia Emergency Preparedness and Response – African Volunteer Health Corps Surge Training ongoing in Ganta, Nimba
- ☞ IDSR Supportive Supervision, sponsored by Global Fund through Plan Liberia, is currently ongoing across eight counties
- ☞ Ongoing IMS meeting for coordination and resource mobilization
- ☞ Produced and disseminated situation reports (Lassa fever, Measles, etc...)
- ☞ Produced and disseminated weekly bulletin
- ☞ Ongoing reclassification of suspected cases (Lassa fever, Mpox, AFP, and Measles) based on laboratory result

### County-level

#### ☞ Surveillance

- Ongoing active case search and investigation for Mpox in affected counties
- Production of situational reports
- Active case search ongoing in affected and surrounding communities
- Multiple awareness on Mpox surveillance ongoing the 15 counties
- Maternal and new-born 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	0	0	0	0	2	0	0	0	0	2	99	2	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	1	0	2	0	4	1	1	3	0	0	3	24	0	0	0	39	1692	195
		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	22	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
	Yellow fever	A	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3	95	3
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Viral Hemorrhagic Fever	Dengue fever	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
	Ebola Virus Disease	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
	Lassa fever	A	0	2	0	0	0	0	1	0	1	0	2	0	0	0	0	6	191	28
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	11
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
	Influenza	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118	4
		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	1	0	0	0	2	0	0	1	0	1	0	1	6	379	24	
		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	2	0	0	0	0	0	0	2	277	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	1	0	0	0	1	0	1	1	0	0	0	4	270		
	Neonatal Mortality	D	0	0	0	0	0	0	0	0	0	7	2	2	0	0	11	712		
	Adverse Events Following Immunization (AEFI)	A	2	0	0	1	3	5	0	4	0	0	0	0	0	5	20	1002	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	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Reportable Diseases	Mpox	A	1	1	0	0	1	0	0	2	3	2	4	3	0	0	17	332	51	
		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	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	0	6	0	3	1	1	3	2	2	0	19	11	1	0	3	52	2688	0
		D	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5	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
	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	123	2
		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
<b>TOTAL</b>		<b>4</b>	<b>9</b>	<b>3</b>	<b>5</b>	<b>9</b>	<b>8</b>	<b>4</b>	<b>12</b>	<b>7</b>	<b>5</b>	<b>35</b>	<b>44</b>	<b>7</b>	<b>2</b>	<b>9</b>	<b>163</b>	<b>8077</b>	<b>324</b>	

D = Dead A = Alive

- ☞ **Completeness** refers to the proportion of expected weekly IDSR reports received (target: ≥80%)
- ☞ **Timeliness** refers to the proportion of expected weekly IDSR reports received by the next level on time (target: ≥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: ≥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 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.