



<b>SITUATION: LASSA FEVER OUTBREAK</b>	<b>LOCATION: LIBERIA</b>
<b>DATE OF REPORT: AUGUST 3, 2024</b>	<b>OUTBREAK START DATE: JAN 6, 2022</b>
<b>REPORTING PERIOD: JUL 27-AUG 2, 2024</b>	<b>SITREP NO: 112</b>

## HIGHLIGHTS

- **Two (2) new confirmed case reported from Bong and Nimba Counties**
- Sixteen (16) contacts including 8 healthcare workers (HCWs) line listed
- Total of 50 contacts including 26 HCWs under 21 days follow up
- A total of 157 confirmed cases including 46 deaths reported
- **Cumulative Case Fatality Rate (CFR): 29% (46/157)**
- Two counties are currently in outbreak

## SITUATIONAL CONTEXT

Lassa fever (LF) is an acute viral hemorrhagic illness that is endemic in West Africa, including Benin, Ghana, Guinea, Liberia, Mali, Sierra Leone, and Nigeria. The incubation period ranges from 2-21 days and transmitted to humans via contact with food or household items contaminated with infected rodent urine or feces. The signs and symptoms are usually gradual, but start with fever, general weakness, malaise, and later headache, sore throat, muscle pain, chest pain, nausea, vomiting, diarrhea, cough, and abdominal pain or facial swelling, and bleeding.

LF is a major public health concern in Liberia. To date, eight (8) out of the fifteen (15) counties (Bong, Grand Bassa, Nimba, Margibi, Lofa, Montserrado, Grand Kru, and River Gee) have reported confirmed cases. Bong, Grand Bassa, and Nimba counties are endemic, while Margibi, Lofa, Montserrado, Grand Kru, and River Gee have reported sporadic cases.

In 2021, the country recorded 12 outbreaks including 25 laboratory-confirmed cases with 15 deaths accounting for a 60% case fatality rate (CFR). These outbreaks generated 325 contacts of which 196 were healthcare workers (HCWs).

From January 6, 2022 to present, we recorded 22 outbreaks. The ongoing outbreak, which started January 6, 2022 in Bong County, has recorded 157 laboratory-confirmed cases including 46 deaths (CRF 29%). A total of 1315 contacts have been recorded including 475 healthcare workers.

**Table 1: Summary of Lassa fever Outbreak, Liberia, January 6, 2022 – August 2, 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
Montserrado	Bushrod	13-Feb-23	17	1	0	0	0	0%	29	21	0	0	29	Completed	Ended
	Central Monro	27-Nov-23	1	2	0	1	0	50%	49	0	0	0	49	Completed	Ended
	Central Monro	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	36	Countdown
	Suakoko	29-Jul-24	2	1	0	0	0	0%	8	2	0	8	0	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
	Jorquelleh	11-Apr-24	3	2	0	1	0	0%	41	30	0	0	41	36	Countdown
	Jorquelleh	22-Jul-24	1	1	0	0	0	0%	14	2	0	14	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	6	3	0	1	0	33%	12	3	0	0	12	Completed	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	6	0	40%	43	35	8	0	43	Completed	Ended
	Tappita	29-Jul-24	1	1	0	0	0	0%	8	6	0	8	0	Active	Ongoing
	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
River Gee	Bain-Garr	18-Jul-24	2	1	0	1	0	100%	20	16	0	20	0	Active	Ongoing
	Putupo	25-Nov-22	2	1	0	1	0	100%	14	0	0	0	14	Completed	Ended
<b>Total</b>			<b>495</b>	<b>157</b>	<b>21</b>	<b>46</b>	<b>3</b>	<b>29%</b>	<b>1315</b>	<b>475</b>	<b>61</b>	<b>50</b>	<b>1175</b>		

**Bong County: Jorquelleh, Suakoko and Kokoyah Districts**

☞ **One new confirmed case reported from Suakoko District**

☞ A 2-year-old female resident of Garyea Community

- Onset of illness was July 17, 2024; admitted at Phebe Hospital and treated for malaria and sepsis
- Suspected of Lassa fever on July 25, 2024, specimen collected and sent to the National Public Health Reference Laboratory (NPHRL) on July 26, 2024
- Results released Lassa fever positive on July 29, 2024 (patient recovered and was discharged on the same day).
- Eight contacts line listed including 2 HCWs and 6 family members
- Case is currently well at home and being monitored

☞ Cumulative confirmed cases for the current outbreak: 9

- Suakoko District: 4
- Salala District: 2
- Jorquelleh District: 3
- Kokoyah: 1

☞ CFR (2/10): 20%

☞ Total of 124 contacts including 44 healthcare workers line listed

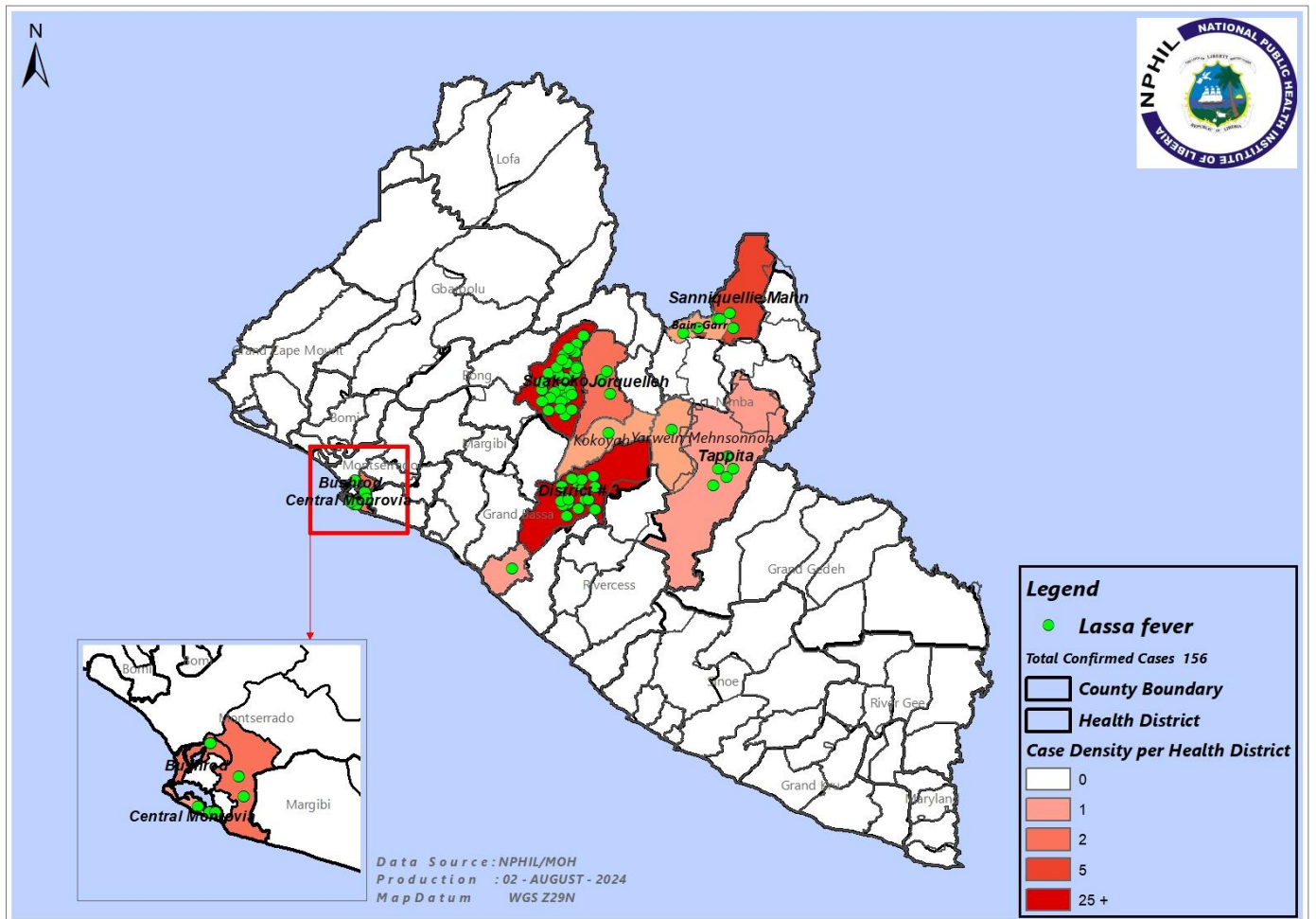
☞ Twenty-four (24) contacts including 4 healthcare workers under 21 days follow up

☞ Safe and dignified burials were conducted for deceased cases

**Nimba County: Bain-Garr & Tappita Districts**

☞ **One new confirmed case reported from Tappita District**

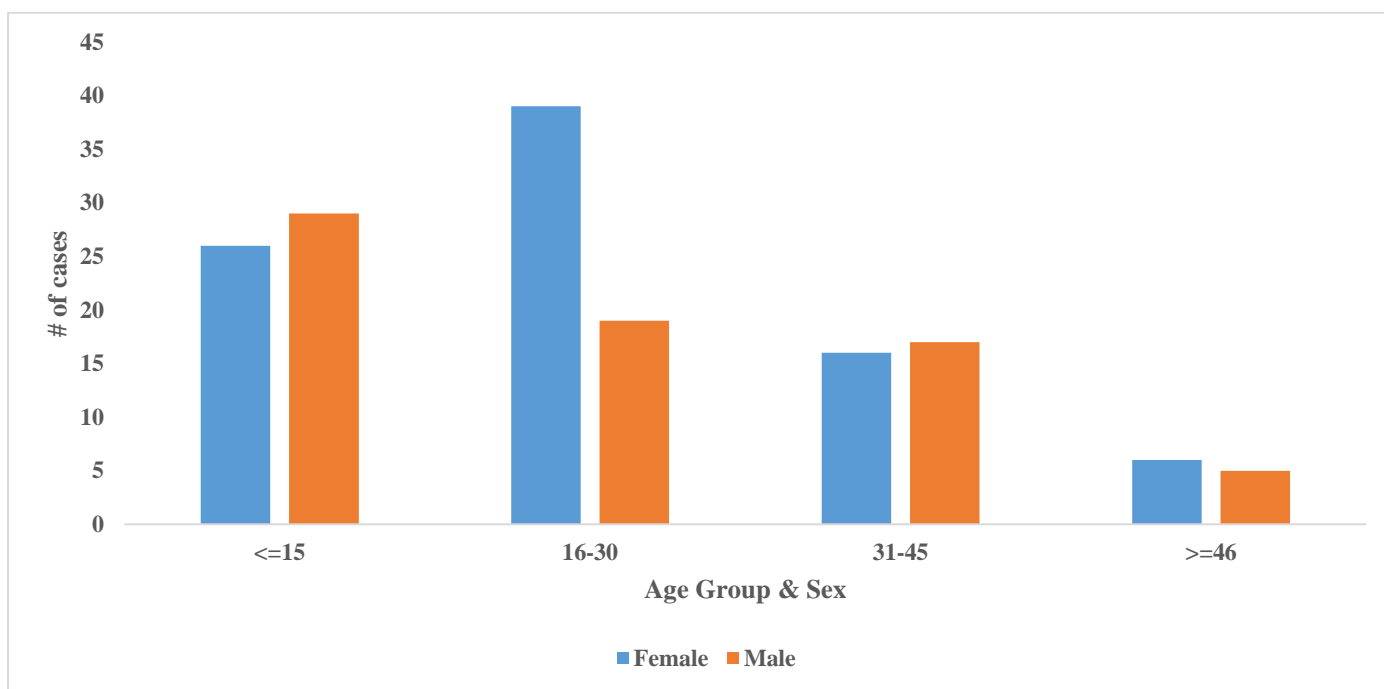
- ☞ A one-year-old male, resident of Jackson F. Doe Hospital ((JFD) Compound
  - Onset of illness was July 9, 2024; presented with fever, cough, and headache
  - Admitted at JFD and treated for malaria on July 16, 2024
  - Suspected for Lassa fever on July 23, isolated, specimen collected and sent to NPHRL
  - Tested Lassa fever positive on July 29
  - Eight (8) contacts line listed including 6 HCWs and 2 family members
  - The case is currently in isolation undergoing treatment
- ☞ Cumulative confirmed cases for the current outbreak: 2
- ☞ CFR (1/2): 50%
- ☞ Twenty-eight (28) contacts including 24 healthcare workers under 21 days follow up
- ☞ Safe and dignified burial was conducted for deceased case.



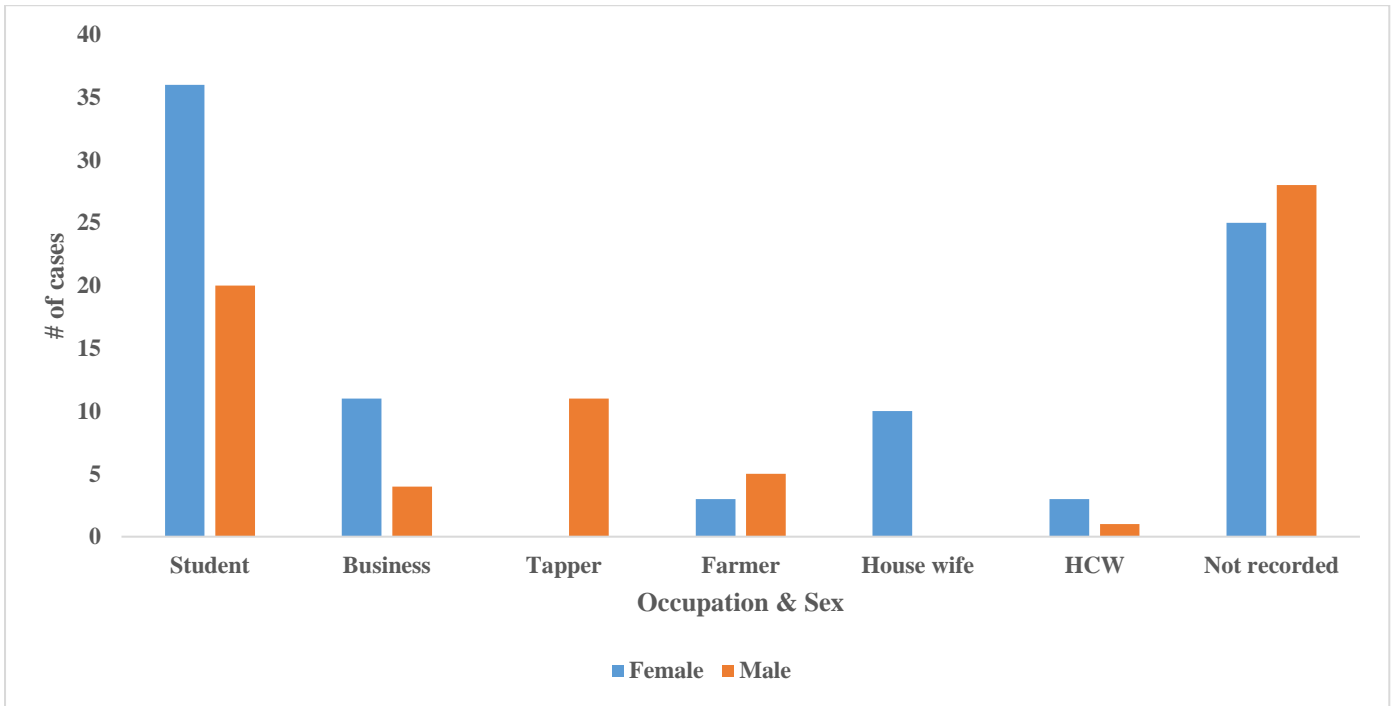
**Figure 1: Distribution of Confirmed Lassa fever cases by Health District, Jan 6, 2022-August 2, 2024**

**Table 2: Summary of Lassa fever cases and samples, Liberia, Jan 6, 2022–August 2, 2024**

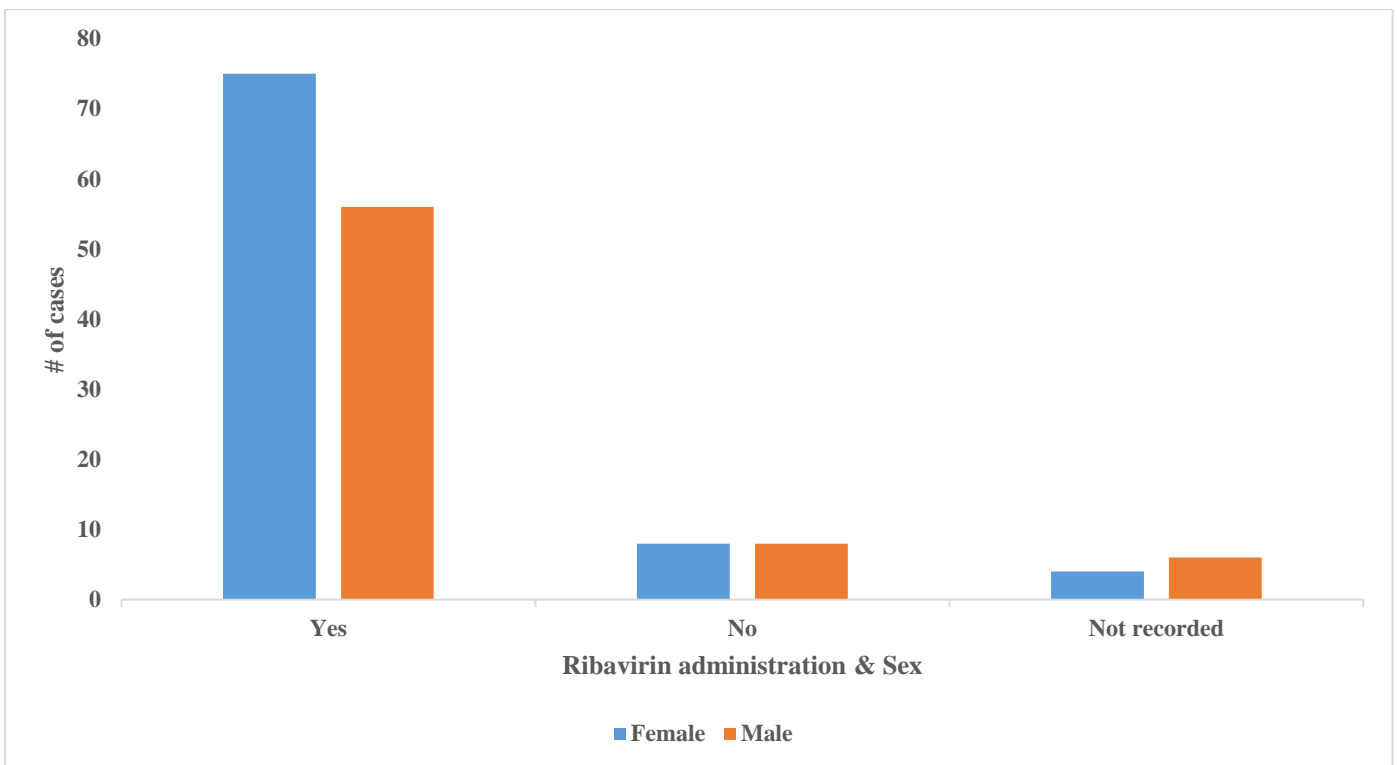
Variables	2022 & 2023	2024	Total
	Epi wk 1-52	Epi wk 1-30	
Total suspected cases reported to the national level	439	131	570
Total samples collected	437	131	568
Total samples tested	416	126	542
Total samples not collected OR samples collected but not sent to NRL	20	4	24
Total samples pending testing	0	0	0
Total samples collected & rejected by the Laboratory	3	0	3
Total Laboratory confirmed	138	19	157
Total confirmed cases alive	97	14	111
Total deaths among confirmed cases	41	5	46
Overall case fatality rate (CFR)	30%	26%	29%
Total confirmed cases currently in isolation	0	1	1
Total suspected cases in isolation	0	0	0



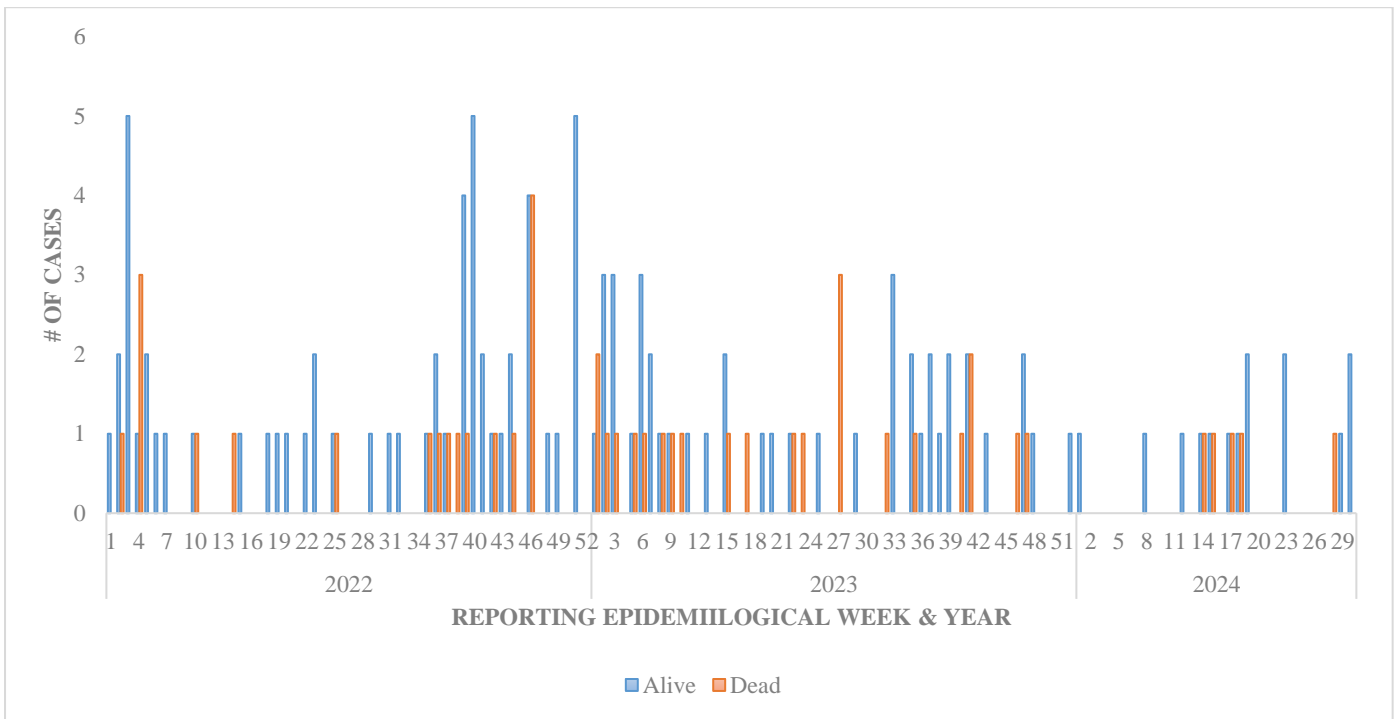
**Figure 2: Distribution of confirmed Lassa fever cases by Age and Sex, Lib, Jan.2022-August 2, 2024**



**Figure 3: Distribution of confirmed Lassa fever cases by Occupation and Sex, Lib, Jan. 6, 2022 – August 2, 2024**



**Figure 4: Confirmed Lassa fever cases by Ribavirin administration and Outcome, Liberia, Jan. 6, 2022 – August 2, 2024**



**Figure 5: Epi-curve of confirmed Lassa fever cases and deaths by reporting Epi week & Year, Liberia, January 6, 2022- August 2, 2024**

## PUBLIC HEALTH INTERVENTIONS

Since the inception of the 2022 outbreak, several measures including response initiatives have been instituted including surveillance and laboratory testing, vector surveillance and control, case management, etc. These interventions aim to protect at-risk populations; prevent international spread; containing outbreaks rapidly. Below are details of the measures taken in the ongoing outbreak:

### 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
  - The Incident Management Systems (IMSs) have been activated in the affected counties
  - The PHEOCs in the response counties are in response mode coordinating the response

### II. Surveillance

- Active case search ongoing in affected communities
- Fifty (50) contacts including 24 healthcare workers line listed and under 21 days follow-up
- Weekly sit-reps developed and disseminated to stakeholders



Photos of field investigation and burial team, Nimba County, July 18 & 19, 2024

### III. Case management and IPC

- Ribavirin distributed to all affected counties
- Cases treated with ribavirin and discharged

### IV. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- A total of 157 Lassa fever cases have been confirmed since this outbreak

### V. Risk Communication and Community Engagement

- Risk communication and community engagement ongoing in affected and surrounding communities

### VI. Dead Body Management

- Total of 46 confirmed deaths recorded and were buried under safe and dignified condition

### VII. Key Challenges

- Limited supply of IPC materials in affected counties
- Lack of logistics (gasoline, communication cards, fuel, etc) to support active case search and contact tracing in affected county
- Limited stationeries in the EOC to produce case alert forms, contact tracing form and other tools for investigation
- Lack of computer for District and County Surveillance Officers (Bong & Nimba)

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