



SITUATION: LASSA FEVER OUTBREAK	LOCATION: LIBERIA
DATE OF REPORT: SEPTEMBER 6, 2024	OUTBREAK START DATE: JAN 6, 2022
REPORTING PERIOD: AUG 31-SEPT 6, 2024	SITREP NO: 117

HIGHLIGHTS

- **One (1) confirmed case reported from Grand Bassa County**
- Four (4) contacts including 3 health care workers (HCWs) line listed
- Total of 89 contacts including 37 HCWs undergoing 21 days follow up
- A total of 168 confirmed cases including 49 deaths reported
- **Cumulative Case Fatality Rate (CFR): 29% (49/168)**
- Three 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 have recorded 23 outbreaks. The ongoing outbreak, which started January 6, 2022 in Bong County, has recorded 168 laboratory-confirmed cases including 49 deaths (CRF 29%). A total of 1,467 contacts have been recorded including 569 healthcare workers.

Table 1: Summary of Lassa fever Outbreak, Liberia, January 6, 2022 – September 6, 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	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	Countdown
Nimba	District 3A&B	3-Sep-24	1	1	0	0	0	0%	4	3	0	4	0	Active	Ongoing
	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	18	9	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	17	7	0	3	0	43%	134	79	1	54	80	Active	Ongoing
Total	Putupo	25-Nov-22	2	1	0	1	0	100%	14	0	0	0	14	Completed	Ended
			524	168	22	49	3	29%	1467	569	62	89	1288		

Grand Bassa County

☞ **One (1) confirmed case reported from District 3A&B.**

☞ **S.M.S.**, a 37-year-old male and resident of Gbotogba Town, District #4. The case has an onset of illness on the 19th of August 2024. He was admitted at LAC Hospital on September 1, 2024, with a high fever (>38.5⁰C), sore mouth, vomiting, generalized body pain, and weakness. The patient was immediately isolated and a whole blood specimen was collected on the same day (September 1, 2024; and sent to the National Reference Laboratory (NRL) on September 2, 2024. Ribavirin treatment was initiated on September 1, 2024. A positive Lassa fever virus infection by RT-PCR result was sent to the county on September 3, 2024. Five (5) contacts were identified and line-listed (1 family member and 3 health care workers). One of the contacts is a high-risk contact. The case was not linked to any confirmed case.

Bong County: Jorquelleh, Suakoko and Kokoyah Districts

☞ **No new confirmed case reported**

☞ Cumulative confirmed cases for the current outbreak: 13

- Suakoko District: 8
- Salala District: 2
- Jorquelleh District: 2
- Kokoyah: 1

☞ CFR (3/13): 23%

☞ Total of 137 contacts including 53 HCWs line listed

- Thirteen (13) contacts including 9 HCWs undergoing 21 days follow up

☞ Safe and dignified burials conducted for deceased cases

☞ The confirmed case in isolation was treated with ribavirin and discharged.

Nimba County: Bain-Garr & Tappita Districts

☞ **No new confirmed case reported**

☞ Cumulative confirmed cases for the current outbreak: 9

- Tappita District: 2
- Bain Garr District: 7
- ☞ CFR (4/9): 44%
- ☞ Total of 162 contacts including 98 HCWs line listed
 - Total of 54 contacts including 32 HCWs undergoing 21 days follow up
- ☞ Safe and dignified burials conducted for the deceased cases
- ☞ The confirmed cases treated and discharged

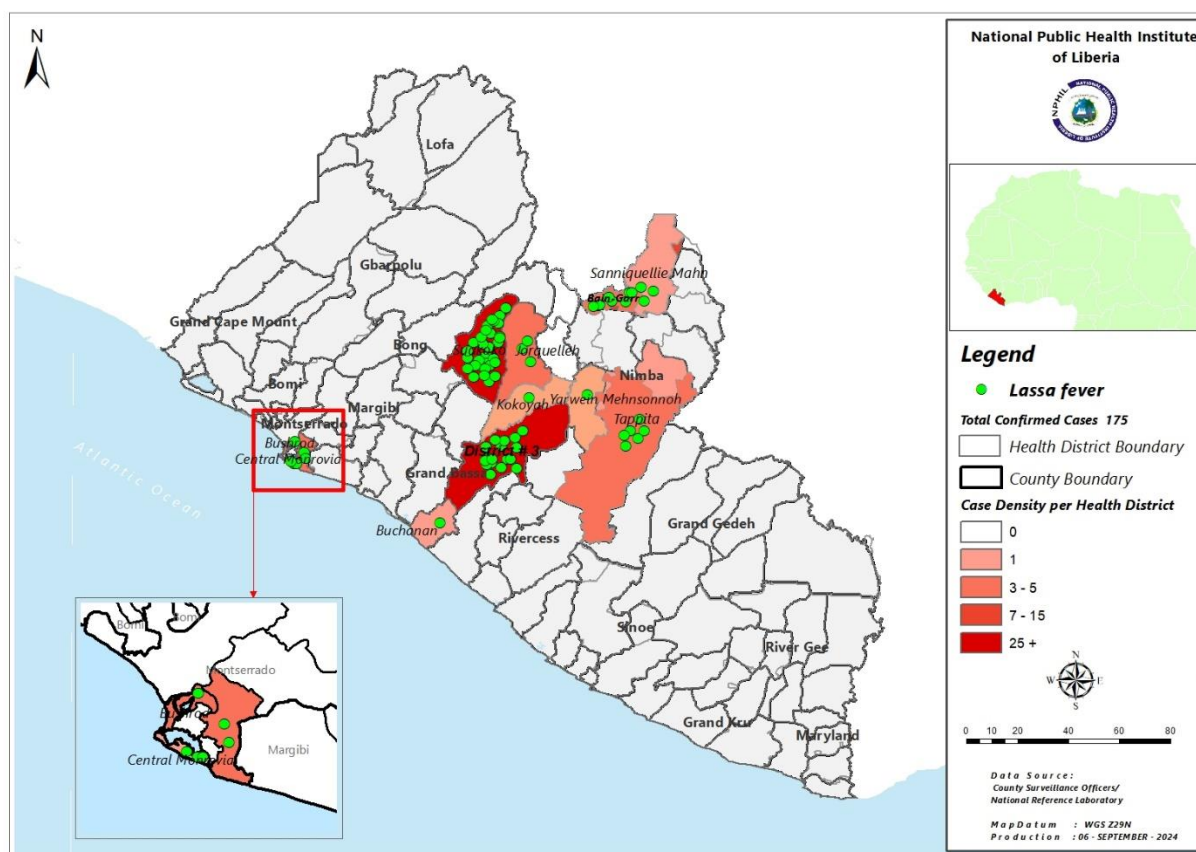


Figure 1: Distribution of Confirmed Lassa fever cases by Health District, Jan 6, 2022–Sept 6, 2024

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

Variables	2022 & 2023	2024	Total
	Epi wk 1-52	Epi wk 1-35	
Total suspected cases reported to the national level	439	181	620
Total samples collected	437	181	620
Total samples tested	416	174	590
Total samples not collected OR samples collected but not sent to NRL	20	6	26
Total samples pending testing	0	1	1
Total samples collected & rejected by the Laboratory	3	0	3
Total Laboratory confirmed	138	30	168
Total confirmed cases alive	97	22	119
Total deaths among confirmed cases	41	8	49
Overall case fatality rate (CFR)	30%	27%	29%
Total confirmed cases currently in isolation	0	1	1
Total suspected cases in isolation	0	0	0

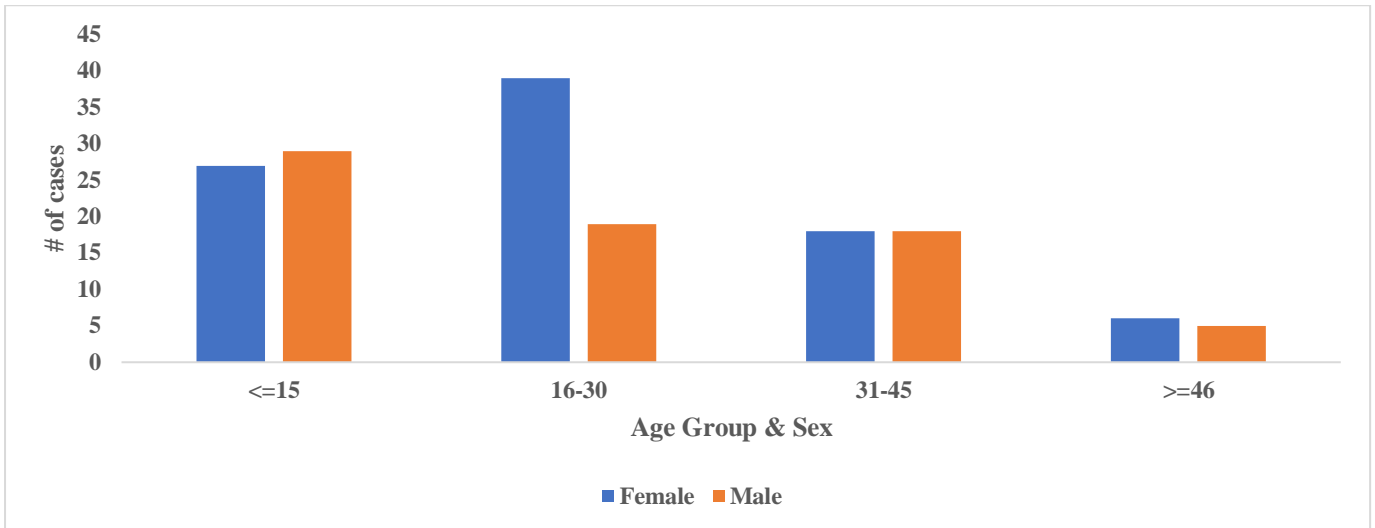


Figure 2: Distribution of confirmed Lassa fever cases by Age and Sex, Lib, Jan 6, 2022-Sept 6, 2024

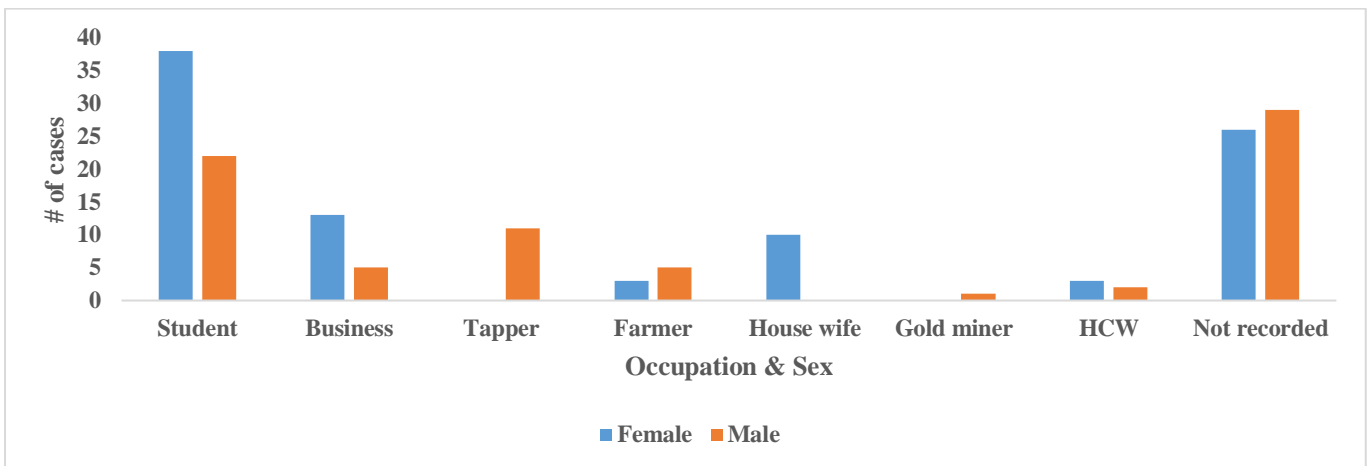


Figure 3: Distribution of confirmed Lassa fever cases by Occupation and Sex, Lib, Jan. 6, 2022-Sept 6, 2024

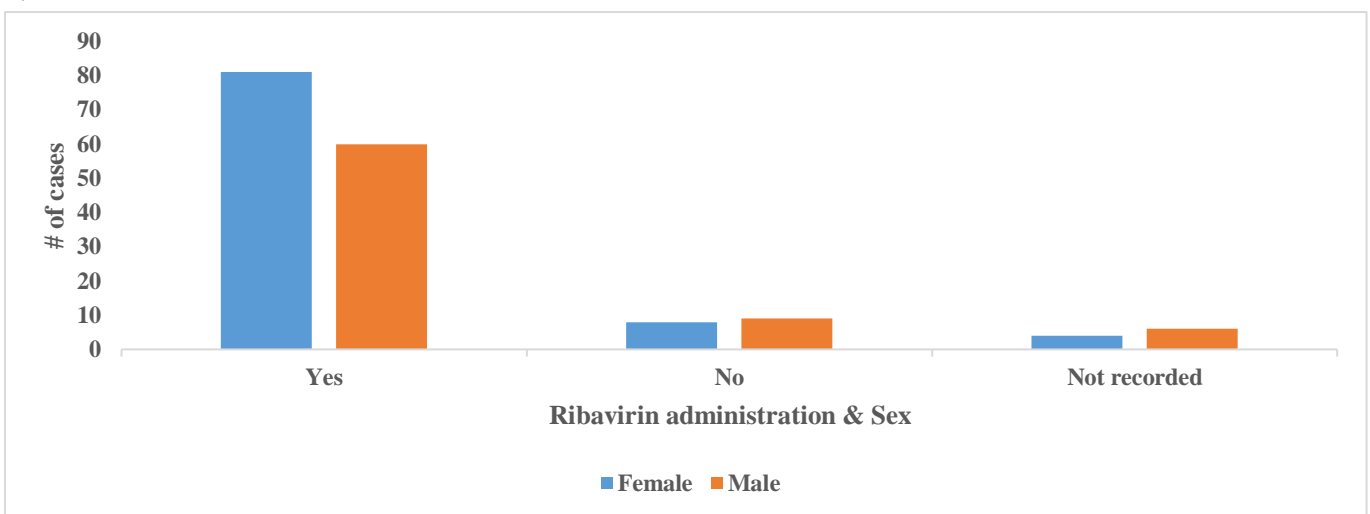


Figure 4: Confirmed Lassa fever cases by Ribavirin administration and Outcome, Liberia, Jan. 6, 2022 – Sept 6, 2024

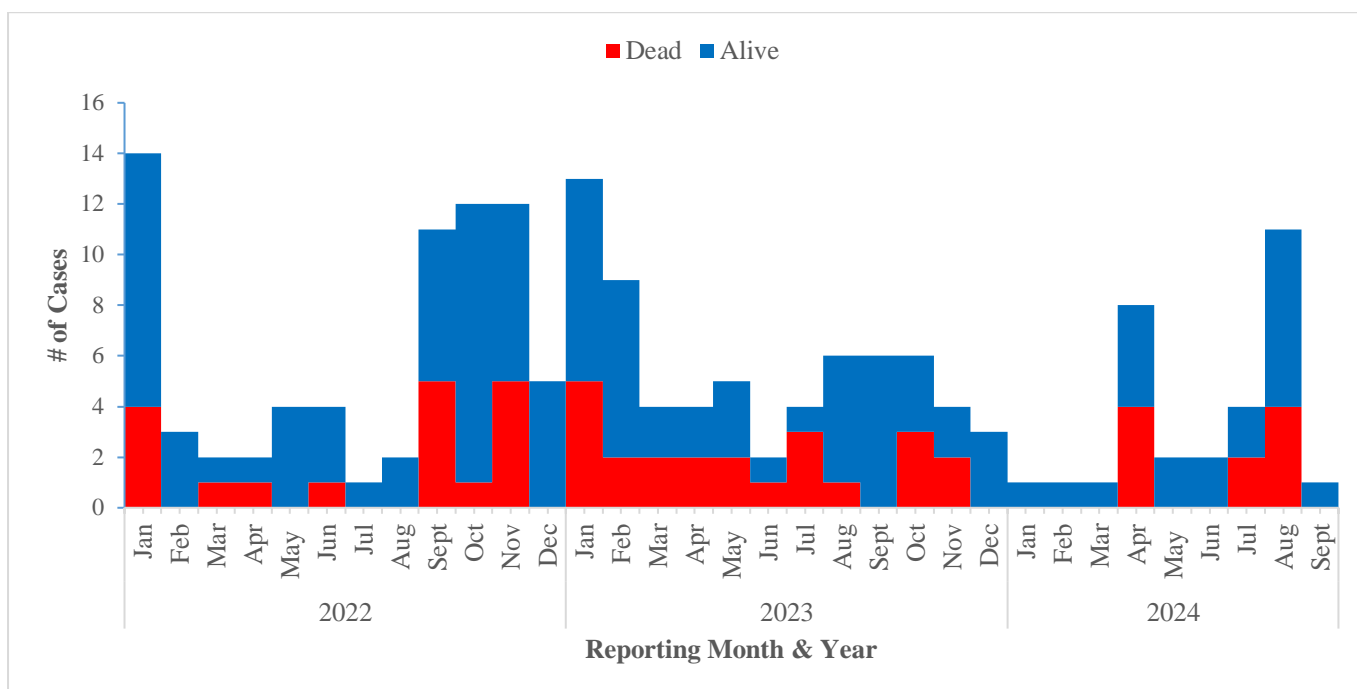


Figure 5: Epi-curve of confirmed Lassa fever cases and deaths by reporting Epi week & Year, Liberia, Jan 6, 2022-Sept 6, 2024

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
- Eighty-nine (89) contacts including 37 HCWs line listed & undergoing 21 days' follow-up
- Weekly sit-reps developed and disseminated to stakeholders

III. Case management and IPC

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

IV. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- A total of 168 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 49 confirmed deaths recorded and were buried under safe and dignified condition

Key Challenges

- Limited ribavirin supply in country
- 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 counties
- Limited stationeries in the EOC to produce case alert forms, contact tracing form and other tools for investigation (Bong & Nimba)
- Limited computers for District and County Surveillance Officers (Bong & Nimba)

For comments or questions, please contact:

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