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| SITUATION: LASSA FEVER OUTBREAK | LOCATION: LIBERIA |
| DATE OF REPORT: MARCH 1, 2024 | OUTBREAK START DATE: JAN 6, 2022 |
| REPORTING PERIOD: FEB 24-MAR 1, 2024 | SITREP NO: 92 |

HIGHLIGHTS

- **One (1) new confirmed case reported from Bong County**
- Sixteen (16) contacts line listed and under follow up
- Cumulative Case Fatality Rate (CFR): 29% (41/140)
- Two counties currently in outbreak

SITUATIONAL CONTEXT

Lassa fever (LF) is an acute viral haemorrhagic 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 faeces. 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, diarrhoea, 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 13 outbreaks. The ongoing outbreak, which started January 6, 2022 in Bong County, has recorded 140 laboratory-confirmed cases including 41 deaths (CRF 29%). A total of 1133 contacts have been recorded including 399 healthcare workers.

Table 1: Summary of Lassa fever Outbreak, Liberia, January 6, 2022 –March 1, 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 | Over |
| | Central Monrovia | 27-Nov-23 | 1 | 2 | 0 | 1 | 0 | 50% | 49 | 0 | 0 | 0 | 49 | Completed | Over |
| | Central Monrovia | 3-Mar-23 | 38 | 2 | 0 | 1 | 0 | 50% | 28 | 27 | 0 | 0 | 28 | Completed | Over |
| Bong | Suakoko | 21-Apr-24 | 192 | 54 | 18 | 13 | 2 | 24% | 496 | 114 | 6 | 0 | 417 | Completed | Over |
| | Suakoko | 23-Feb-24 | 2 | 1 | 0 | 0 | 0 | 0% | 16 | 10 | 0 | 16 | 0 | Active | Ongoing |
| | Jorquelleh | 15-Oct-23 | 14 | 6 | 3 | 1 | 1 | 17% | 121 | 86 | 3 | 0 | 169 | Completed | Over |
| Grand Bassa | District 3A&B | 21-Aug-23 | 87 | 44 | 0 | 10 | 0 | 23% | 177 | 40 | 40 | 0 | 159 | Completed | Over |
| | Buchanan | 11-Aug-23 | 2 | 1 | 0 | 1 | 0 | 100% | 4 | 2 | 0 | 0 | 4 | Completed | Over |
| Nimba | Saclepea-Mah | 21-Nov-23 | 4 | 2 | 0 | 1 | 0 | 50% | 5 | 0 | 0 | 0 | 5 | Completed | Over |
| | Samniquellie-Mah | 6-Feb-23 | 41 | 15 | 0 | 6 | 0 | 40% | 43 | 35 | 8 | 0 | 43 | Completed | Over |
| | Tappita | 20-Nov-23 | 11 | 5 | 0 | 3 | 0 | 60% | 88 | 39 | 4 | 0 | 77 | 26 | Countdown |
| | Bain-Garr | 1-Jun-23 | 24 | 6 | 0 | 3 | 0 | 50% | 61 | 25 | 0 | 0 | 31 | Completed | Over |
| River Gee | Putupo | 25-Nov-22 | 1 | 1 | 0 | 1 | 0 | 100% | 14 | 0 | 0 | 0 | 14 | Completed | Over |
| Total | | | 434 | 140 | 21 | 41 | 3 | 29% | 1131 | 399 | 61 | 16 | 1025 | | |

Nimba: Bain Garr, Tappita, Sacclepea-Mah, Sanniquellie-Mah Districts

- ☞ No new confirmed case reported
- ☞ Cumulative confirmed cases: 28
 - Bain Garr District: 6
 - Sacclepea-Mah: 2
 - Sanniquellie-Mah: 15
 - Tappita District: 5
 - CFR (13/28) 46%
 - All contacts completed 21 days follow up
 - Nimba County has gone 26 days in countdown (Feb 5 –March 1, 2024)

Bong County: Suakoko District

- ☞ One confirmed confirmed case reported
- ☞ Cumulative confirmed cases: 1
 - CFR (0/1): 0%
 - Sixteen (16) contacts including 10 HCWs line listed and under 21 days follow up

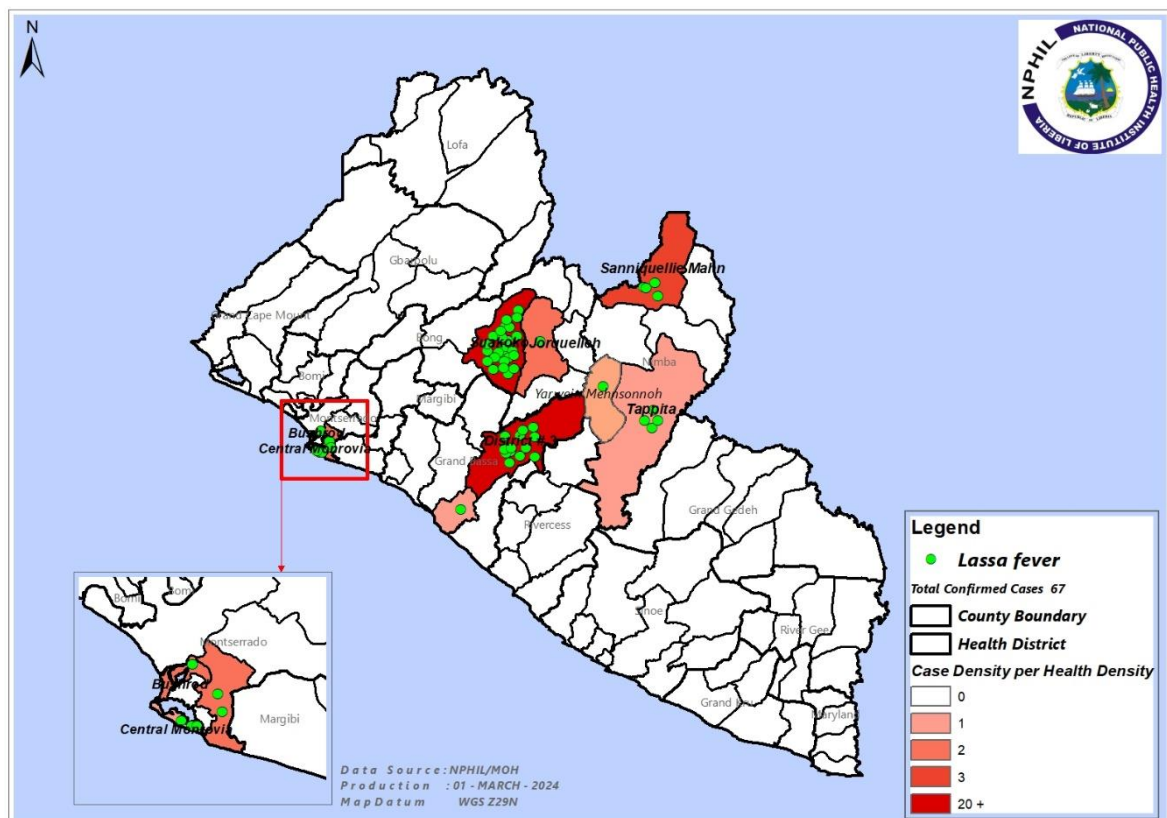


Figure 1: Geographical Distribution of Confirmed Lassa fever cases by Health District, Jan 6, 2022- March 1, 2024

Table 2: Summary of Lassa fever samples & cases, Liberia, Jan 6, 2022 – March 1, 2024

| Variables | 2022&2023 | 2024 | Total |
|--|-------------|------------|-------|
| | Epi wk 1-52 | Epi wk 1-8 | |
| Total suspected cases reported to the national level | 440 | 33 | 473 |
| Total samples collected | 421 | 33 | 455 |
| Total samples tested | 394 | 32 | 424 |
| Total samples not collected OR samples collected but not sent to NRL | 14 | 1 | 15 |
| Total samples pending testing | 0 | 0 | 0 |
| Total samples collected & rejected by the Laboratory | 3 | 0 | 3 |
| Total Laboratory confirmed | 138 | 2 | 140 |
| Total confirmed cases alive | 97 | 2 | 99 |
| Total deaths among confirmed cases | 41 | 0 | 41 |
| Overall case fatality rate (CFR) | 30% | 0% | 29% |
| Total confirmed cases currently in isolation | 0 | 0 | 0 |
| Total suspected cases in isolation | 0 | 0 | 0 |

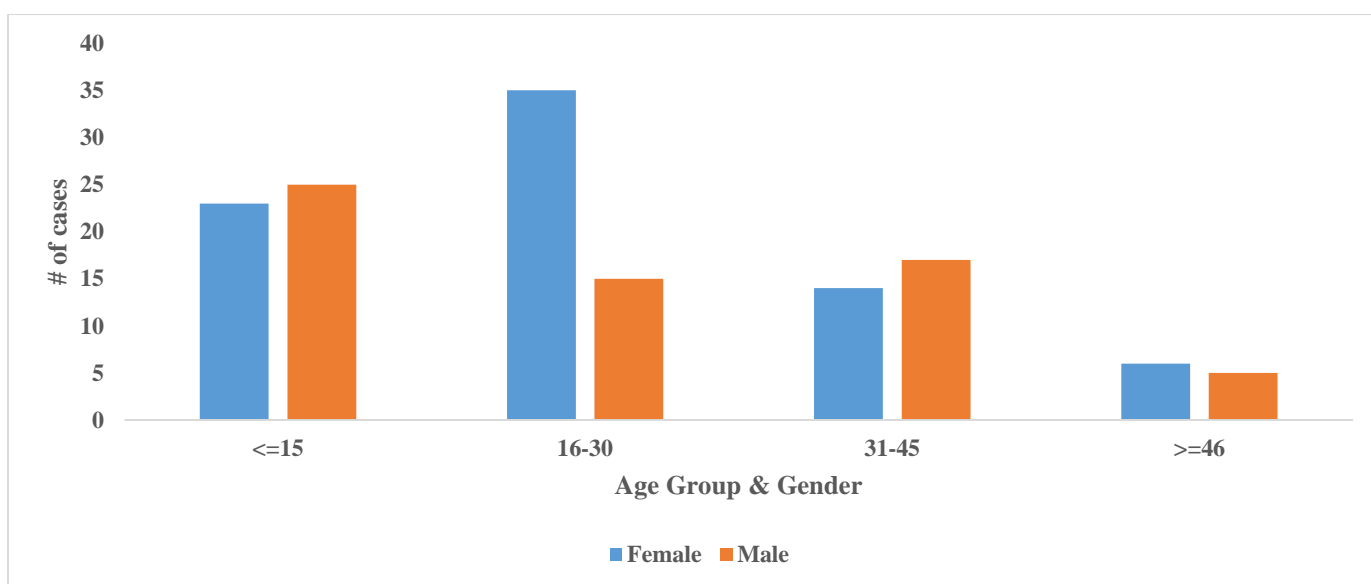


Figure 2: Distribution of confirmed Lassa fever cases by Age and Gender, Liberia, Jan. 6, 2022-March 1, 2024

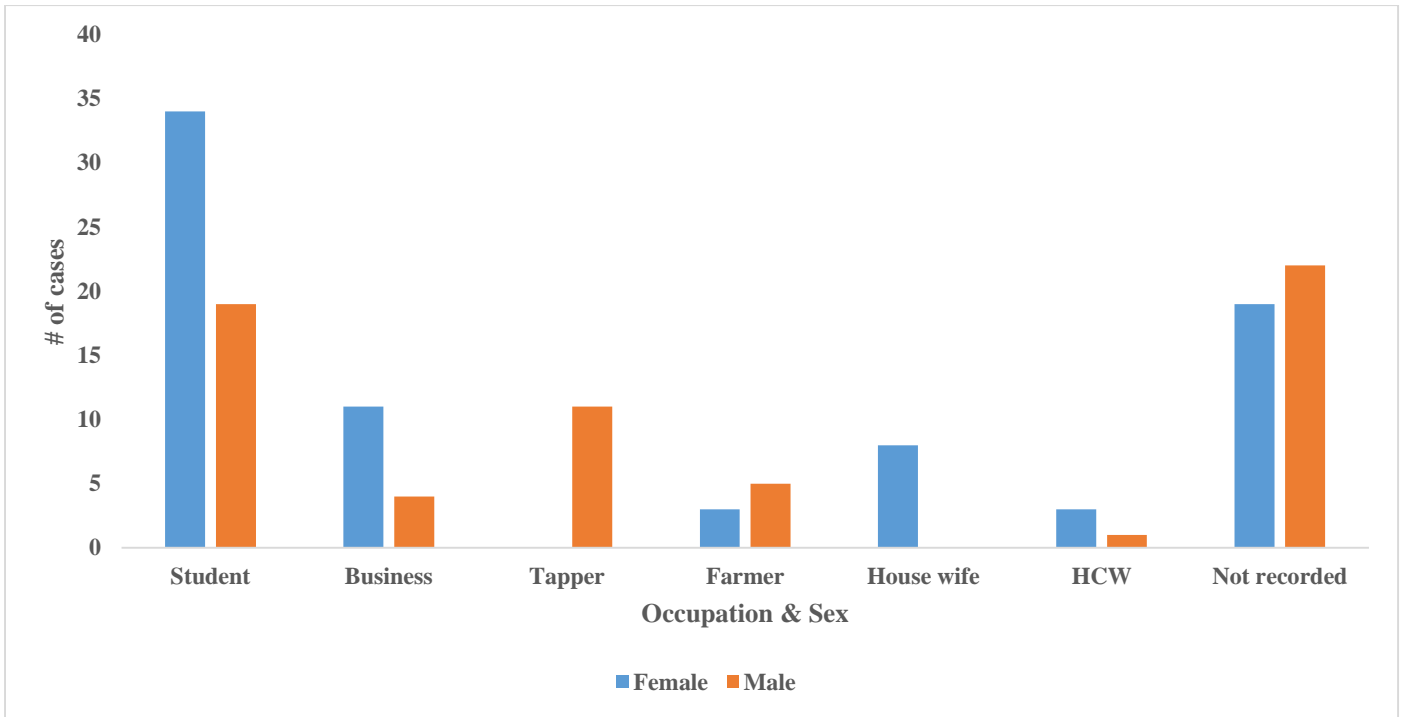


Figure 3: Distribution of confirmed Lassa fever cases by Occupation and Gender, Liberia, Jan. 6, 2022 – March 1, 2024

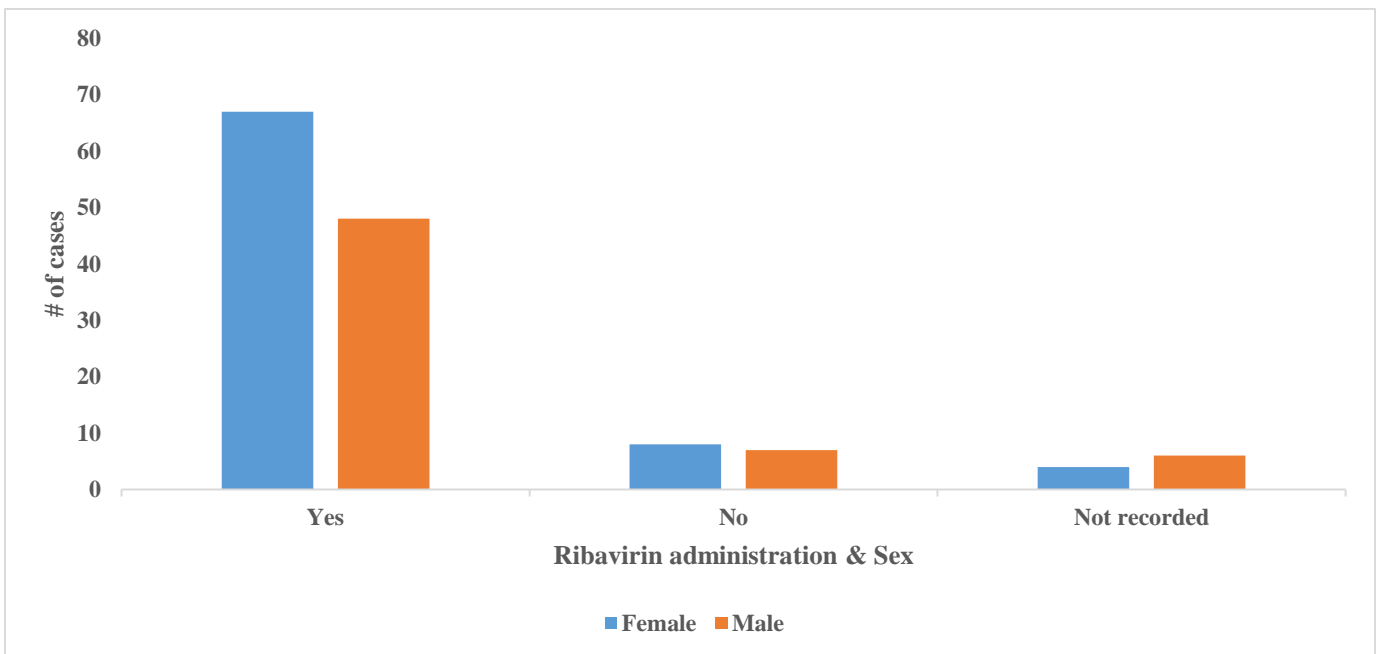


Figure 4: Confirmed Lassa fever cases by Ribavirin administration and Outcome, Liberia, Jan. 6, 2022 – March 1, 2024

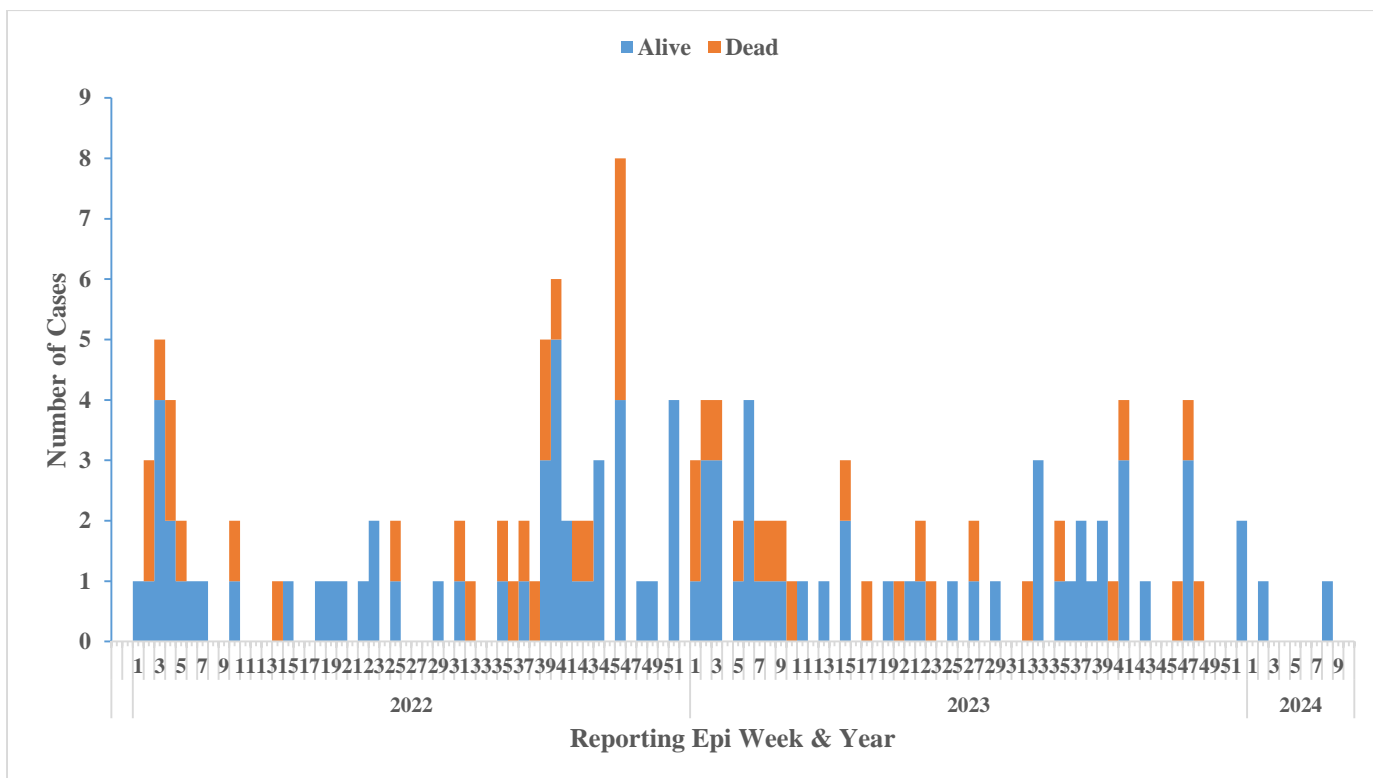


Figure 5: Epi-curve of confirmed Lassa fever cases and deaths by reporting Epi week & Year, Liberia, January 6, 2022-March 1, 2024

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

- National Public Health Institute of Liberia (NPHIL) and the Ministry of Health (MOH) are providing technical and logistical support to County Health Teams with support from partners.

II. Epidemiological Surveillance

- Active case search and contact tracing ongoing in affected communities and districts
- Development and dissemination of weekly SitReps by affected counties

III. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- Total of 140 Lassa fever cases have been confirmed since this outbreak

IV. Case management and IPC

- Cases are being isolated and managed at designated facilities
- Ribavirin supply in country and being distributed for treatment of Lf cases to affected counties

V. Environmental and Vector Control

- Ongoing clean-up campaigns and rodent control measures in affected communities

VI. Risk Communication and Community Engagement

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

VII. Dead Body Management

- Safe and dignified burial conducted for a diseased suspected case in Tappita District

VIII. Key Challenges

- Late arrival of cases at health facilities
- Limited number of trained clinical staff for case management (Bong and Nimba)
- Limited supply of IPC materials in affected counties
- Inadequate IEC materials for community sensitization
- Limited logistics (communication cards, fuel, etc) to support contact tracing in affected county

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