



SITUATION: LASSA FEVER OUTBREAK	LOCATION: LIBERIA
DATE OF REPORT: MAY 3, 2024	OUTBREAK START DATE: JAN 6, 2022
REPORTING PERIOD: APR 27-MAY 3, 2024	SITREP NO: 101

HIGHLIGHTS

- **Four (4) new confirmed cases reported**
- Thirty (30) contacts including 16 healthcare workers line listed
- Total of 87 contacts including 33 HCWs under 21 days follow up
- Total of 149 confirmed cases including 45 deaths reported
- Cumulative Case Fatality Rate (CFR): 30% (45/149)
- Four counties 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 18 outbreaks. The ongoing outbreak, which started January 6, 2022 in Bong County, has recorded 149 laboratory-confirmed cases including 45 deaths (CRF 30%). A total of 1223 contacts have been recorded including 432 healthcare workers.

Table 1: Summary of Lassa fever Outbreak, Liberia, January 6, 2022 – May 3, 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
	Bushrod	30-Apr-24	2	1	0	0	0	0%	14	6	0	14	0	Active	Ongoing
Bong	Suakoko	21-Apr-23	192	54	18	13	2	24%	496	114	6	0	417	Completed	Over
	Jorquelleh	15-Oct-23	14	6	3	1	1	17%	121	86	3	0	169	Completed	Over
	Suakoko	23-Feb-24	12	3	0	0	0	0%	21	10	0	0	16	Active	Ongoing
	Salala	8-Mar-24	2	2	0	1	0	50%	21	0	0	21	0	Active	Ongoing
	Jorquelleh	11-Apr-24	2	1	0	1	0	0%	22	17	0	22	0	Active	Ongoing
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
	District 3A&B	30-Apr-24	2	1	0	1	0	100%	5	3	0	5	0	Active	Ongoing
Nimba	Saclepea-Mah	21-Nov-23	4	2	0	1	0	50%	5	0	0	0	5	Completed	Over
	Sanmiquellie-Mah	6-Feb-23	42	15	0	6	0	40%	43	35	8	0	43	Completed	Over
	Tappita	20-Nov-23	12	5	0	3	0	60%	88	39	4	0	77	Completed	Over
	Bain-Garr	1-Jun-23	24	6	0	3	0	50%	61	25	0	0	31	Completed	Over
	Bain-Garr	15-Apr-24	2	2	0	1	0	50%	25	7	0	25	0	Active	Ongoing
River Gee	Putupo	25-Nov-22	1	1	0	1	0	100%	14	0	0	0	14	Completed	Over
Total			456	149	21	45	3	30%	1223	432	61	87	1041		

Bong County: Jorquelleh, Suakoko and Salala Districts

- ☞ One new confirmed case reported from Suakoko District
- ☞ Cumulative confirmed cases for the current outbreak: 6
 - Suakoko District: 3
 - Salala District: 2
 - Jorquelleh District: 1
- ☞ CFR (2/6): 33%
- ☞ Safe and dignified burials were conducted for the deceased cases
- ☞ Total of 65 contacts including 27 healthcare workers identified and line listed
 - Twenty-one (21) contacts including 10 HCWs completed 21 days follow up
 - Total of 44 contacts under 21 days follow up

Nimba County: Bain-Garr District

- ☞ One new confirmed case reported (dead)
- ☞ Cumulative confirmed cases for the current outbreak: 2
- ☞ Bain-Garr District: 2
- ☞ CFR (1/2): 50%
- ☞ Twenty-five (25) contacts including 9 HCWs identified and line listed
- ☞ The confirmed case death was buried under safe and dignified burial condition

Montserrado County: Bushrod District

- ☞ One confirmed case reported
- ☞ Cumulative confirmed cases for the current outbreak: 1
- ☞ CFR (0/1): 0%
- ☞ Total of 14 contacts including 6 HCWs line listed and under 21 days follow up
- ☞ The confirmed case was treated with ribavirin at Redemption isolation and discharged

Grand Bassa County: District 3 A & B

- ☞ **One confirmed case reported**
- ☞ Cumulative confirmed cases for the current outbreak: 1
- ☞ CFR (1/1): 100%
- ☞ Safe and dignified burial was conducted for the deceased case
- ☞ Total of 5 contacts including 3 HCWs identified, line listed and under 21 days follow up

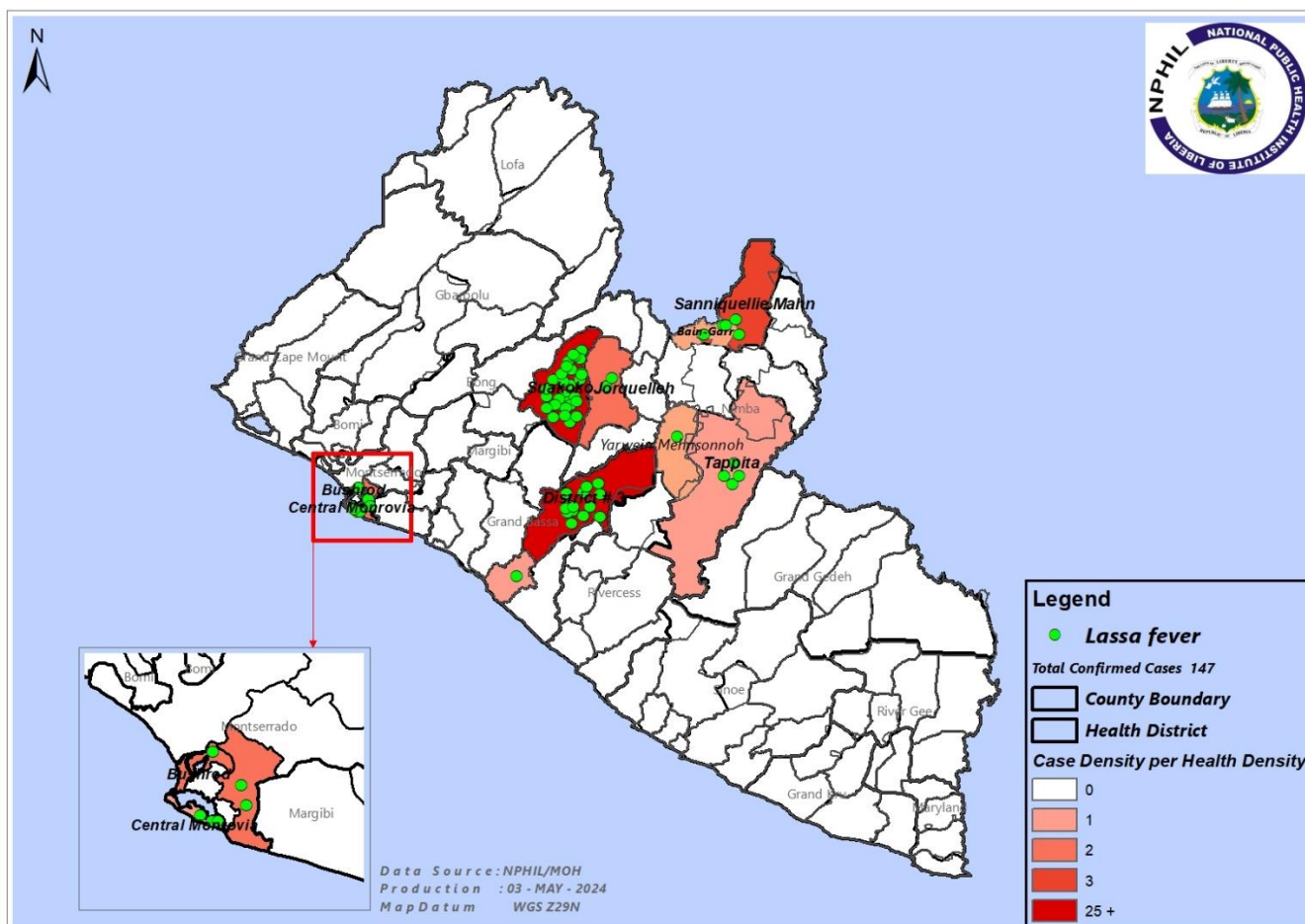


Figure 1: Distribution of Confirmed Lassa fever cases by Health District, Jan 6, 2022-May 3, 2024

Table 2: Summary of Lassa fever cases and samples, Liberia, Jan 6, 2022–May 3, 2024

Variables	2022 & 2023	2024	Total
	Epi wk 1-52	Epi wk 1-17	
Total suspected cases reported to the national level	439	72	511
Total samples collected	437	72	509
Total samples tested	416	69	485
Total samples not collected OR samples collected but not sent to NRL	20	3	23
Total samples pending testing	0	0	0
Total samples collected & rejected by the Laboratory	3	0	3
Total Laboratory confirmed	138	11	149
Total confirmed cases alive	97	7	104
Total deaths among confirmed cases	41	4	45
Overall case fatality rate (CFR)	30%	36%	30%
Total confirmed cases currently in isolation	0	1	1
Total suspected cases in isolation	0	0	0

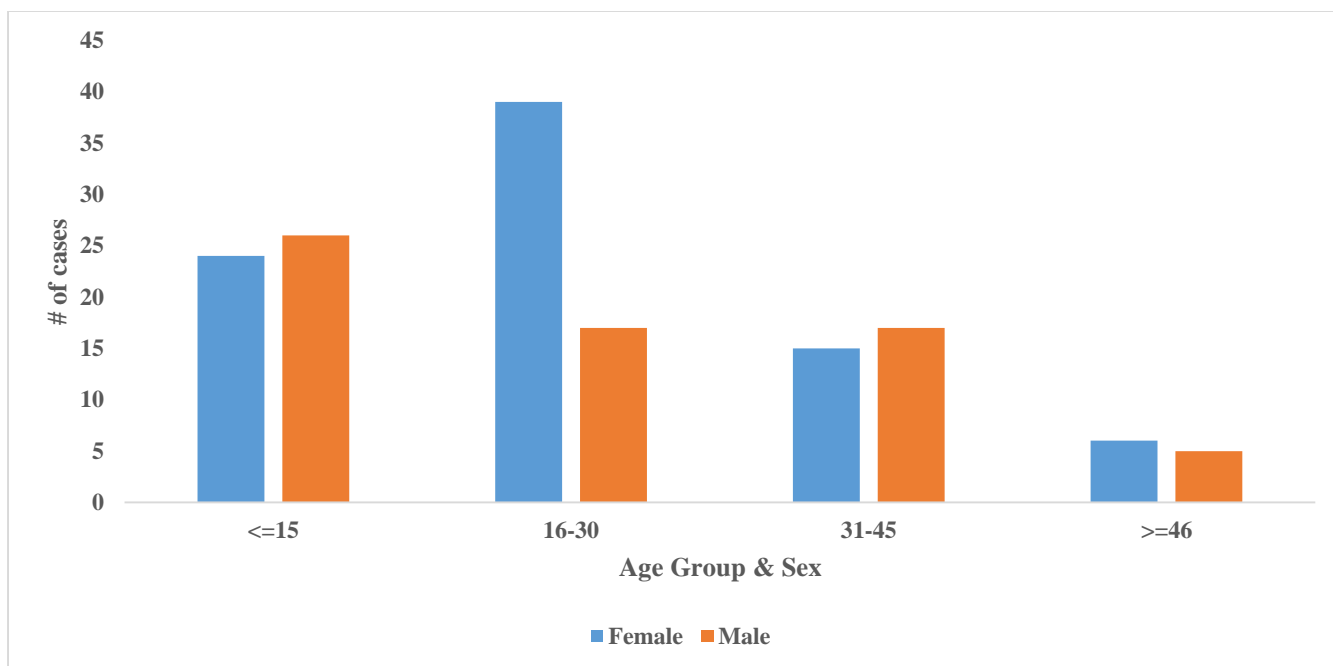


Figure 2: Distribution of confirmed Lassa fever cases by Age and Sex, Liberia, Jan.2022-May 3, 2024

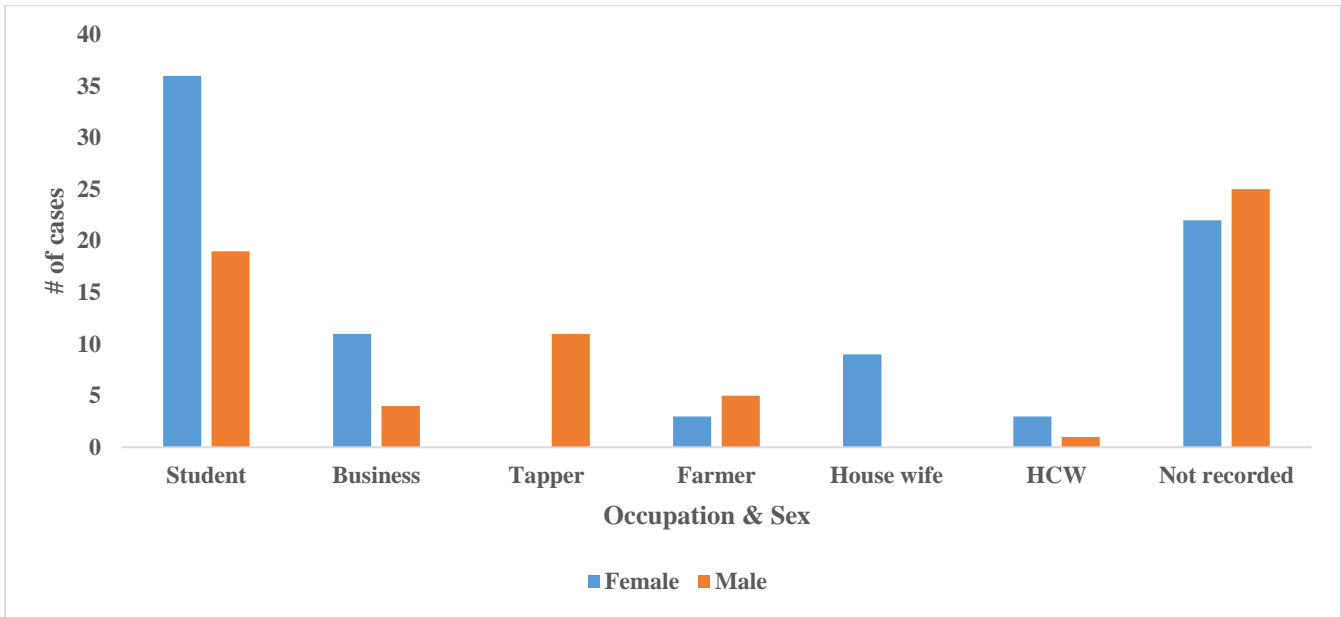


Figure 3: Distribution of confirmed Lassa fever cases by Occupation and Sex, Liberia, Jan. 6, 2022 – May 3, 2024

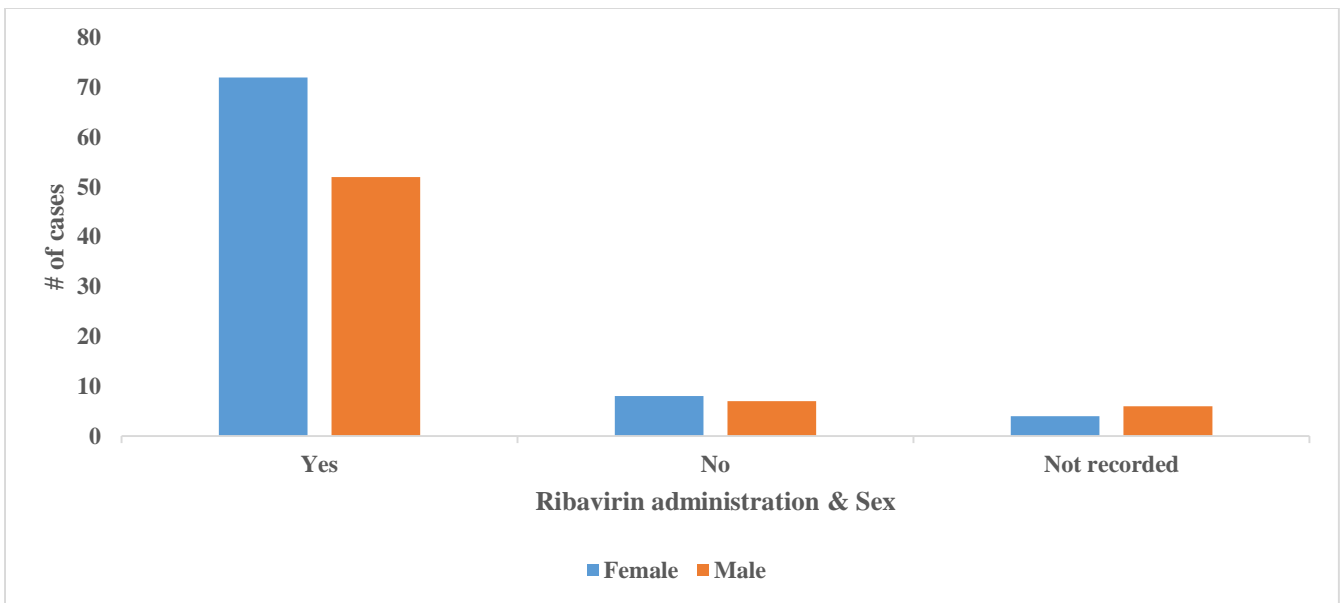


Figure 4: Confirmed Lassa fever cases by Ribavirin administration and Outcome, Liberia, Jan. 6, 2022 – May 3, 2024

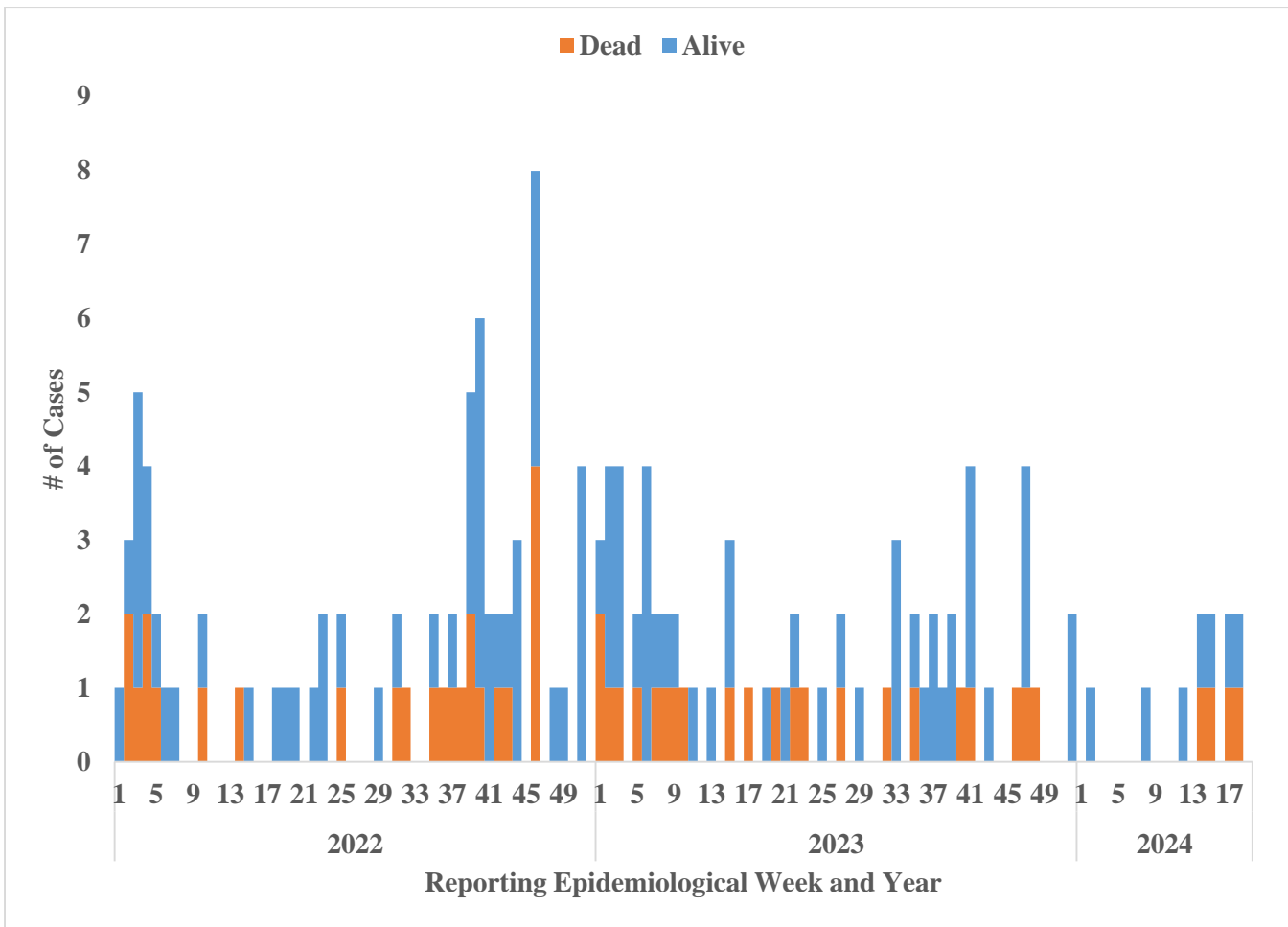


Figure 5: Epi-curve of confirmed Lassa fever cases and deaths by reporting Epi week & Year, Liberia, January 6, 2022-May 3, 2024

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. Epidemiological Surveillance

- Active case search and contact tracing ongoing in affected communities and districts
- Thirty (30) contacts including 16 HCWs identified and line listed
- Situational reports have been developed and disseminated to stakeholders

III. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- Total of 149 Lassa fever cases have been confirmed since this outbreak

IV. Case management and IPC

- One confirmed case in isolation undergoing ribavirin treatment
- Ribavirin supply in country and being distributed for treatment of Lf cases to affected counties

V. Risk Communication and Community Engagement

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



County risk communication manager conducting health education on Lassa fever prevention measures in affected community, Bain Garr, Nimba County, April 30, 2024

VI. Dead Body Management

- Total of 45 confirmed deaths recorded and buried under safe and dignified condition



The burial team conducts safe and dignified burial of the deceased patient, Ganta United Methodist Hospital, Bain Garr, Nimba County, April 29 2024

VI. Key Challenges

- Limited supply of IPC materials in affected counties
- Lack of IEC materials for community sensitization
- 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

For comments or questions, please contact:

Emmanuel Dwalu, BSc, BSEd, PDGE, MPH, FETP
Epidemiologist/Lassa fever Disease Lead
Division of Infectious Disease and Epidemiology, NPHIL
Cell: (+231-770883760)
Email: dwaluemmanuel2@gmail.com

Ralph W. Jetoh, MD, MPH
Director
Division of Infectious Disease and Epidemiology, NPHIL
Cell: (+231-777372655)
Email. ralphica2000@gmail.com

Issuing Authority:
Hon. Jane A. MaCauley, MPH
Director General
National Public Health Institute of Liberia
Cell: +231 (0555)-152-926
Email: janemacauley2@gmail.com