

West African Health Organization (WAHO)



Dear colleagues and partners,

Welcome to the fifth edition of the Lassa Lens Initiative, your quarterly insight into efforts to combat Lassa fever across the ECOWAS region. This platform remains a shared space for knowledge,

collaboration and collective action against one of the region’s most persistent public health threats. As of 1 December 2025 the ECOWAS region recorded 1,069 confirmed Lassa fever cases and 205 deaths across five member states. These figures highlight the enduring burden of the disease and the continued need for strong, resilient, and coordinated preparedness and response systems.

Despite ongoing challenges, this quarter delivered encouraging advancements in research, partnerships, and regional leadership. A major milestone emerged in vaccine development. The Oxford Vaccine Group initiated its first-in-human trial of the ChAdOx1 Lassa vaccine, marking significant progress toward a safe and effective vaccine. IAVI reported promising Phase I results for the rVSVΔG-LASV-GPC vaccine, which is now in multi-country Phase 2a trials in Nigeria, Liberia, and Ghana. These developments signal growing momentum toward eventual licensure and equitable access for at-risk communities.

Another key achievement this quarter was the launch of the Lassa Fever Vaccine Policy Research Agenda and the Lassa Fever Research Repository during a webinar hosted by WAHO, CEPI, and MMGH Consulting. The Lassa fever Coalition’s Policy Research Working Group, worked with more than 200 experts across West Africa to outline priority research questions on epidemiology, delivery, economics and community engagement that need to be addressed to enable future introduction of a Lassa vaccine. This is the first coordinated vaccine policy research agenda for an epidemic-prone disease in the region.

Complementing this, the new Lassa Fever Research Repository will provide an open-access digital platform cataloguing ongoing and completed research across the region. Once fully operational in 2026, it will improve access to research materials, increase visibility of who is working on what, and offer researchers and policymakers a clearer view of the Lassa research landscape. Stakeholders are encouraged to align future studies with the policy research agenda and contribute their work to the repository.





As you explore this edition, you will find updates on epidemiological trends, frontline worker experiences, research and development progress, new partnerships, and upcoming opportunities for engagement.

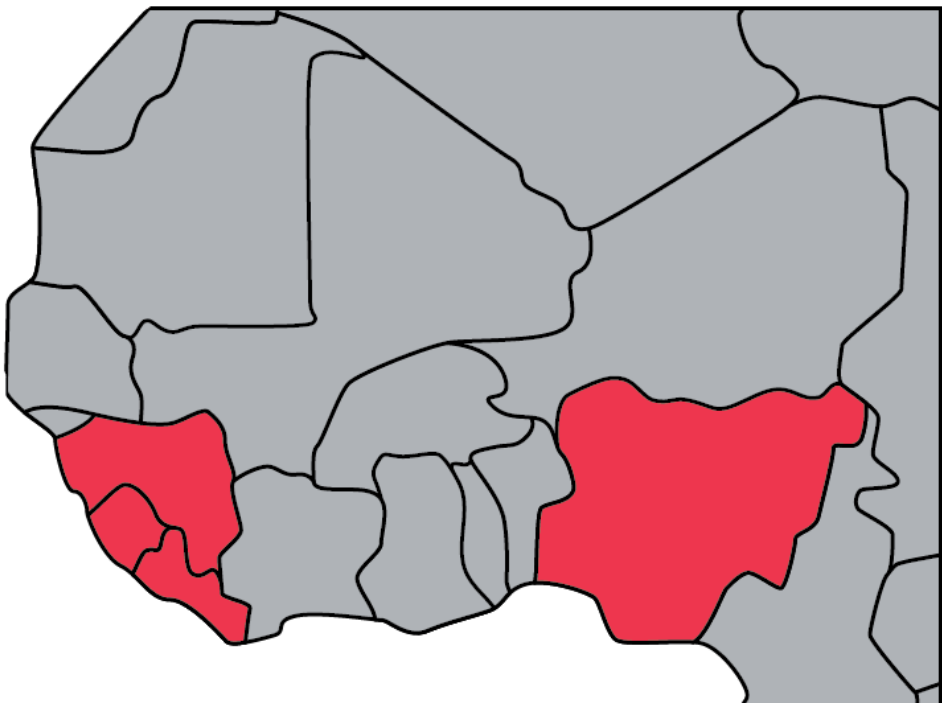
Thank you for being part of this journey.



LASSA IN NUMBERS

01 January – 01 December 2025

		CONFIRMED CASES	DEATHS
	Nigeria	1012	185
	Liberia	24	7
	Sierra Leone	31	11
	Guinea	2	2



Sources :
Nigeria Centre for Disease Control Lassa fever situation reports.
National Public Health Agency website, Sierra Leone
National Public Health Institute Liberia Website
Agence Nationale de Sécurité Sanitaire-ANSS GUINEE



Frontline Health Worker Story



Q: Please introduce yourself and your role in Bong County, Liberia.

My name is Emmanuel Dwea. I am the Surveillance Officer for Bong County Liberia, a position I have held since 2012. I work closely with the County Health Team to monitor infectious diseases and coordinate our public health response.

Q: What has been your experience with infectious diseases in the county?

Bong County has experienced several major outbreaks, including the Ebola outbreak in 2014, which had a devastating impact across Liberia and the wider West African region. Lassa fever has also been a long-standing challenge here, and we continue to record cases every year.

Q: Phoebe Hospital is known for its role in Lassa fever management. Can you tell us more?

Phoebe Hospital is the main referral centre in Bong County and is recognised nationally for its expertise in treating Lassa fever. For decades, patients from neighbouring counties—Lofa, Nimba, Margibi and others—have travelled here for treatment. The hospital’s emergency and ward staff are highly experienced in detecting Lassa fever, and our surveillance system works closely with them to follow up all suspected cases.

Q: What does the current Lassa fever situation look like?

Since January, we have reported 74 suspected cases in the county. Eleven have been confirmed, and unfortunately, two patients died because they arrived very late for treatment. However, overall mortality has dropped significantly—from around 50% in previous years to about 25% now. This decline reflects improved case detection, better clinical management, and closer collaboration between the hospital and surveillance teams.

Q: What community-level work is supporting this progress?

We regularly conduct community engagement alongside the County Health Team. We mobilise local leaders and work with communities to share health-promotion messages and reduce the risk of transmission. Using a One Health approach, we collaborate across human, animal and environmental health sectors to address factors contributing to Lassa fever spread.

Q: There is ongoing research in the county. What insights are emerging?

The University of North Carolina is leading a major research study involving 500 participants, including confirmed Lassa fever patients. Their work is helping us understand patterns of transmission and immunity. Early findings show that not all persistent fevers are caused by Lassa fever, while some mild fever cases do test positive. This tells us that community transmission may be under-detected and that some people may have higher levels of natural resistance.

Q: What factors make Bong County particularly vulnerable to Lassa fever?

There are several factors:

Geographic location: Bong County sits in a central transit corridor where people frequently travel to Monrovia.

High patient inflow: Phoebe Hospital receives referrals from several counties.

Cultural practices: Many people are farmers and traditionally consume rodents, which are known carriers of the virus.

Environmental conditions: Farming activities and vegetation patterns create favourable habitats for rodents, increasing the chance of human contact.

Q: What gives you hope as a frontline surveillance officer?

Despite limited resources, the commitment of Phoebe Hospital staff and the strong collaboration between surveillance teams, health workers, and research partners are making a real difference. The reduced fatality rate is a major success story, and it shows that with continued support and community cooperation, we can significantly reduce transmission and save more lives.

LASSA FEVER COALITION ACTIVITIES



Roundtable on Advancing Lassa Fever Vaccine Development at WHS 2025

The Lassa Fever Coalition – led by the West African Health Organisation (WAHO) with support from the Coalition for Epidemic Preparedness Innovations (CEPI) convened a high-level roundtable during the World Health Summit (WHS) in October 2025 to sustain the momentum from the Abidjan Ministerial meeting and advance co-financing discussions for Lassa fever vaccine development, focused on the IAVI candidate.

The session brought together European financing institutions, global health partners, research organisations and civil society, including Africa CDC, WHO, EDCTP and Gavi who highlighted the importance of coordinated efforts to accelerate progress on the IAVI rVSV Lassa fever vaccine candidate, explore innovative funding arrangements, and strengthen regional manufacturing capacities as part of the 100 Days Mission and broader pandemic preparedness goals.

Development partners and the financing institutions expressed strong interest in aligning investments with existing initiatives and supporting a sustainable approach to vaccine development in West Africa. Discussions reinforced that regional leadership, political commitment and harmonised financing mechanisms will be vital to transition from commitments to tangible action.



Webinar: Strengthening Multisectoral Action for Lassa Fever Prevention and Control in West Africa

On 3 November 2025, the West African Health Organization (WAHO), in collaboration with the Lassa Fever Vaccine Coalition, the World Health Organization (WHO), the World Organisation for Animal Health (WOAH), the Food and Agriculture Organization of the United Nations (FAO), and the United Nations Environment Programme (UNEP), convened a regional webinar on “Strengthening Multisectoral Action for Lassa Fever Prevention and Control in West Africa,” marking One Health Day.

The webinar highlighted the critical role of the One Health approach in preventing, detecting, and responding to Lassa fever outbreaks and how environmental factors such as poor sanitation and climate change further exacerbate risk.

Panel discussions highlighted that veterinary services are essential yet underutilised in zoonotic disease surveillance, emphasising the need for institutionalised coordination, interoperable data systems, and regular joint simulation exercises. ECOWAS initiatives, including REZAO Lab, RECIPE, and the Zoonotic Disease Prioritisation Platform, support regional harmonisation, although long-term sustainability requires domestic funding and integration into national policies. Senegal’s high-level governance model demonstrated the effectiveness of centralised coordination, rapid multisectoral responses, and strong community engagement, mobilising over 2,700 health workers for local risk communication. Participants also stressed that integrating gender perspectives is crucial for equitable, effective, and sustainable One Health interventions. These insights provide actionable guidance for ECOWAS Member States to enhance epidemic preparedness, surveillance, and vaccine readiness across West Africa.

Missed it? Watch the playback here



Webinar: Advancing Lassa Fever Vaccine Policy and Decision-Making – Launch of the Lassa Fever Research Agenda and Repository

Discussion explored the operationalisation of the agenda, progress in vaccine R&D, research coordination mechanisms and opportunities for funder alignment.

The research agenda is publicly made available in English and French

Research Agenda:

- English
- French

The webinar concluded with the unveiling of the Lassa Fever Research Repository, an open-access platform designed to support knowledge sharing and track research progress, which will be fully operational by January 2026. Stakeholders were encouraged to adopt the research agenda, contribute studies and support dissemination to advance regional preparedness. The agenda was also presented at the annual conference of the Americal Society for Tropical Medicine and Hygiene in Toronto, Canada.

Missed the webinar? Watch the playback here



PROGRESS ON LASSA R&D EFFORTS IN THE REGION



ENABLE 1.5 Study in Nigeria - Activities and Progress:

The ENABLE 1.5 project is now approaching the end of its Tier 4 (T4) phase, the final stage of the study. This phase includes quarterly follow-up activities, blood sample collection, and ongoing community engagement across the three study sites: Alex Ekwueme Federal University Teaching Hospital Abakaliki (AEFUTHA), Federal Medical Centre Owo (FMC Owo), and Irrua Specialist Teaching Hospital (ISTH Irrua).



CEPI and Partners’ Visit to the Study Sites

A delegation from CEPI, supported by the Nigeria Centre for Disease Control and Prevention (NCDC) coordination team and other partners, visited all three study sites to review progress. Their mission was to assess the project’s implementation from inception to date, examining achievements, challenges, and emerging recommendations. The visit also enabled the team to evaluate laboratory capacity and functionality, determine site preparedness for potential clinical trials, and strengthen relationships with key stakeholders. The timing coincided with the start of the T4 quarterly blood sample collection, giving CEPI and partners the opportunity to observe field activities directly within the study communities.

Follow-Up and Surveillance Updates

The T4 follow-up activities are now in their final quarter. The NCDC ENABLE Coordination Team has visited each site to provide oversight and technical support, ensuring smooth and standardised operations. Since Tier 1 follow-up began, the project has recorded seventeen confirmed Lassa fever cases. The coordination team continues to closely track progress as the study approaches the conclusion of the T4 phase.

Community Engagement and Rumour Management

Community engagement remains integral to the ENABLE 1.5 project. The team continues to conduct advocacy and sensitisation activities at the site level. The study’s Rumour Management Tool has been instrumental in identifying misinformation across the study communities, and insights from the tool are being used to tailor corrective messages. The project continues to be well received by participants across all three sites.

Next Steps

As the T4 phase concludes, the project will transition into its final processes, including documentation, archiving, and study close-out at the three study sites. The NCDC national coordination office will support and oversee these activities. Overall, the ENABLE 1.5 project continues to contribute valuable scientific evidence needed to advance the development of a Lassa fever vaccine, reinforcing the importance of coordinated and collaborative efforts in reducing the burden of Lassa fever.



WAHO at the World Bank Stakeholders’ Meeting | Monrovia, Liberia

At a World Bank stakeholders’ meeting in Monrovia on 10 November 2025, the WAHO delivered a presentation focused on mobilising sustained commitment to advance Lassa fever research and development (R&D) across West Africa. The engagement built on the momentum generated by the recent 2nd ECOWAS Lassa Fever International Conference and emphasised the importance of moving from dialogue to long-term, coordinated action.

A key message to stakeholders was the need to maintain investment in Lassa fever R&D, ensuring that ongoing scientific advances translate into accessible tools for countries most affected. WAHO also emphasized the importance of aligning research efforts with national and regional preparedness priorities, including stronger health systems and cross-border coordination.

The discussion further pointed to the role of the World Bank’s support in helping countries turn commitments into implementation, particularly by strengthening preparedness and response capacities and supporting long-term solutions rather than short-term, reactive interventions.

IAVI’s Lassa Fever Vaccine Candidate Phase I Results

In November 2025, IAVI announced promising results from Phase I clinical trials of its Lassa fever vaccine candidate, rVSVΔG-LASV-GPC, conducted in the US and Liberia. The trials, which involved over 100 healthy adults, demonstrated a strong and sustained immune response alongside a favourable safety profile. The vaccine is built on the same platform as Merck’s licensed Ebola vaccine, ERVEBO.

A Phase IIa trial, supported by CEPI, is ongoing in Nigeria, Liberia, and Ghana to assess performance in a larger group of volunteers, making it the most advanced Lassa fever vaccine candidate in clinical testing

The positive trial data aligns with the September 2025 Lassa International Conference communiqué, where West African health ministers pledged to advance a Lassa vaccine to licensure, ensuring affordability and coordinated regional action.

First Volunteer Receives Lassa Fever Vaccine in Cutting-edge Oxford Trial:

The Oxford Vaccine Group has administered the first dose of a new Lassa fever vaccine to a volunteer in its first-in-human clinical trial. The study will assess the safety and immune response of the ChAdOx1 Lassa vaccine, with 31 adult volunteers taking part in Oxford and a second phase 1 trial planned for Ghana early 2026. Developed using the same viral vector platform as the Oxford/AstraZeneca COVID-19 vaccine, the candidate builds on Oxford’s established expertise in outbreak vaccine development. The trial also aligns with broader regional efforts led by the Lassa fever Coalition to accelerate vaccine licensure and ensure equitable access.

Lassa Therapeutic Trials

Safety and tolerability of dexamethasone combined with standard-of-care Ribavirin for the treatment of Lassa fever: An open-label randomized controlled phase II clinical trial: The study provides early but compelling evidence that adding dexamethasone to standard ribavirin therapy may improve clinical outcomes for Lassa fever by reducing the severity of complications linked to inflammation. While adverse events occurred in both study arms, the ribavirin-only group experienced more severe events—including dyspnoea, Lassa meningitis, and one death—whereas the dexamethasone group reported only mild reactions and no serious adverse events. All patients receiving dexamethasone completed treatment, suggesting better tolerability. These preliminary findings indicate that inflammation plays a critical role in Lassa fever progression and that targeted immunomodulation could strengthen existing treatment protocols. The results justify larger trials to confirm efficacy and potentially reshape future therapeutic guidelines for Lassa fever management.

The INTEGRATE study: An adaptive platform trial for the development of new interventions to combat Lassa Fever in West Africa: The INTEGRATE study is a major multinational effort to develop more effective treatments for Lassa fever which still relies on ribavirin—a drug with uncertain efficacy and significant toxicity. To address this gap, the trial uses an adaptive platform design that allows multiple new therapies to be tested efficiently against ribavirin across several West African countries. Recruitment began in May 2025 in Nigeria, with additional sites in Liberia, Benin, Guinea, and more expected to join. The first intervention being tested is a combination of dexamethasone and ribavirin for severe cases, with other promising candidates such as favipiravir and ARN 75039 planned for later phases. Over the coming years, more than 500 participants will be enrolled. By generating high-quality evidence on the safety and effectiveness of new treatments, the INTEGRATE trial aims to reshape clinical management of Lassa fever and reduce its significant regional burden

INSIGHTS AND ANALYSIS

Epidemiological Trends & Surveillance

A Review of the Epidemiology of Lassa Fever in Nigeria

A recent study provides an updated overview of the disease's trends and control efforts, covering data up to 2024. It outlines the widening geographic spread, rising case numbers, and seasonal patterns linked to increased rodent activity during the rainy season. The review notes progress in surveillance and response through the Integrated Disease Surveillance and Response framework and the Nigeria Centre for Disease Control, while also highlighting persistent challenges such as underreporting, limited diagnostics, and surveillance gaps. The authors call for sustained investment, stronger community engagement, and coordinated action to improve prevention and response strategies for Lassa fever in Nigeria.

Preparedness of Health Institutions and Healthcare Workers for Managing Lassa fever Epidemics in Benue State, Nigeria

The study highlights that, in Benue state Nigeria, the overall preparedness of health institutions was found to be poor, with critical gaps such as the absence of functional diagnostic laboratories, limited isolation wards, inconsistent supply of ribavirin, and insufficient availability of personal protective equipment. Infection prevention and control practices among healthcare workers were uneven, with nurses and community health extension workers demonstrating better adherence than doctors and pharmacists. Training on Lassa fever emerged as a key determinant of good IPC practices, with those trained being substantially more likely to follow recommended protocols. Other factors influencing IPC adherence included years of experience, age, gender, and the level of health facility, with primary health facilities generally performing better in practice despite lower institutional readiness.

Environmental Drivers and Changing Ecology:

Clinical Outcomes of Severe Lassa Fever in West Africa: A Systematic Review and Meta-Analysis:

The publication shows that Lassa fever remains a major threat in Benue State, yet health institutions are largely unprepared to manage outbreaks. Many facilities lack essential resources such as functional diagnostic laboratories, consistent PPE supplies, isolation wards, and treatment drugs like ribavirin. Healthcare workers’ infection prevention and control practices vary widely, with nurses and community health extension workers performing better than doctors and pharmacists. Training is the strongest factor influencing good IPC practices, significantly improving adherence to safety protocols. While primary health facilities show better day-to-day IPC behaviour, they are still the least prepared institutionally. Overall, the key insight is that strengthening training, improving resource availability, and enhancing institutional readiness are critical to reducing Lassa fever transmission and protecting healthcare workers.

Regional Spread & Global Health Context

Lassa fever: A comprehensive review of virology, clinical management, and global health implications:

The publication highlights Lassa fever as a persistent and under-recognized public health threat in West Africa, driven by widespread rodent reservoirs, limited diagnostic capacity, and late clinical presentation. The review stresses that reducing the burden of Lassa fever will require integrated One Health approaches, strengthen health systems, and sustained international investment in vaccine and therapeutic development.

Vaccine Development and Strategic Leadership:

Challenges, progress, and pathways to equitable access in Lassa fever vaccine development:

The publication examines the persistent threat of Lassa fever in West Africa and the urgent need for effective vaccines to curb outbreaks and reduce mortality. It explores various vaccine platforms, including viral vectors and mRNA technologies, highlighting early clinical trials that show promising immune responses, though further testing remains necessary. The article emphasizes the importance of international collaboration to accelerate vaccine development while addressing challenges such as viral variability, which complicates vaccine design. Logistical issues, including cold chain requirements and distribution in remote areas, are also highlighted as major obstacles. Equitable access to vaccines across affected regions is identified as a critical public health priority. The study stresses that vaccination efforts must be integrated with broader surveillance and response strategies to be truly effective. Despite the challenges, the publication presents a cautiously optimistic perspective, suggesting that, with coordinated scientific and implementation efforts, vaccines could significantly reduce the burden of Lassa fever in West Africa.

Safety and Immunogenicity of an rVSV Lassa Fever Vaccine Candidate:

The study evaluated the safety and immunogenicity of a novel rVSVΔ G-LASV-GPC vaccine candidate for Lassa fever in a phase 1, double-blind, randomized trial conducted in the United States and Liberia. A total of 114 healthy adults received varying single or two-dose regimens of the vaccine or placebo. The vaccine was generally well-tolerated, causing only mild-to-moderate transient local and systemic reactions, with no serious adverse events or hearing loss. Immunogenicity analyses demonstrated robust and long-lasting LASV glycoprotein-specific antibody responses, as well as neutralizing antibodies and T-cell responses, across multiple Lassa virus lineages. Vaccine-derived RNA was transiently detected in plasma and saliva but not in urine, with no infectious virus recovered. Overall, the vaccine elicited broad and durable humoral and cellular immunity, supporting its potential as a safe and effective candidate for preventing Lassa fever, and paving the way for further trials in endemic populations.

OPPORTUNITIES AND EVENTS



Opportunities, Grants, and RFPs

Innovations to Prepare for Future Epidemics and Pandemics.

- Focus Area 1:** advancing innovative rapid-response vaccine platforms that can transform the response to a future Disease X.
- Focus Area 2:** developing new vaccine candidates against Lassa fever and Disease X exemplar viral families, including paramyxoviruses, arenaviruses, coronaviruses, phenuiviruses, hantaviruses and nairoviruses.

Innovative analytical technologies to improve vaccine manufacturing speed and equitable access

CEPI’s new funding opportunity seeks to develop innovative analytical technologies for vaccines. The goal is to reduce vaccine development, manufacturing and release times (e.g., within 100 days of an outbreak being identified) and to lower costs, improve equitable deployment in low- to middle-income countries and enhance analytical insights for vaccines such as RNA, viral vectors or protein-based vaccines.



Feedback and Comment Section
We would love to have your feedback. Please fill out the form below:

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