

West African Health Organization (WAHO)



Lassa Lens Initiative

March 2026

A Message from the Director General



Dr. Melchior A.J.C. AISSI

Director General, WAHO

Dear colleagues and partners,

Welcome to the sixth edition of the Lassa Lens Initiative newsletter, your quarterly update on progress to accelerate Lassa fever vaccine research and development across the ECOWAS region. Through this platform, partners will share insights, highlight emerging evidence, and strengthen collaboration to support our shared mission in accelerating the development of vaccines against emerging infectious diseases and advance preparedness for the region's most persistent public health threats.

The latest data underscores the urgency of our mission as we begin the first quarter of 2026. Between January and March 2026, the ECOWAS region recorded **482 confirmed Lassa fever cases** and **96 deaths** across five member states. These figures highlight the continuing burden of the disease and the need for stronger, more resilient, and better coordinated preparedness and response systems.

A major milestone this quarter was the launch of the **Lassa Fever End-to-End Access Roadmap**, the first regional framework of its kind for West Africa. Developed in partnership with the Coalition for Epidemic Preparedness Innovations (CEPI) and the West African Health Organization (WAHO), the roadmap lays out a coordinated pathway to ensure that future Lassa fever vaccines move from research and development to equitable and sustained use across endemic countries.

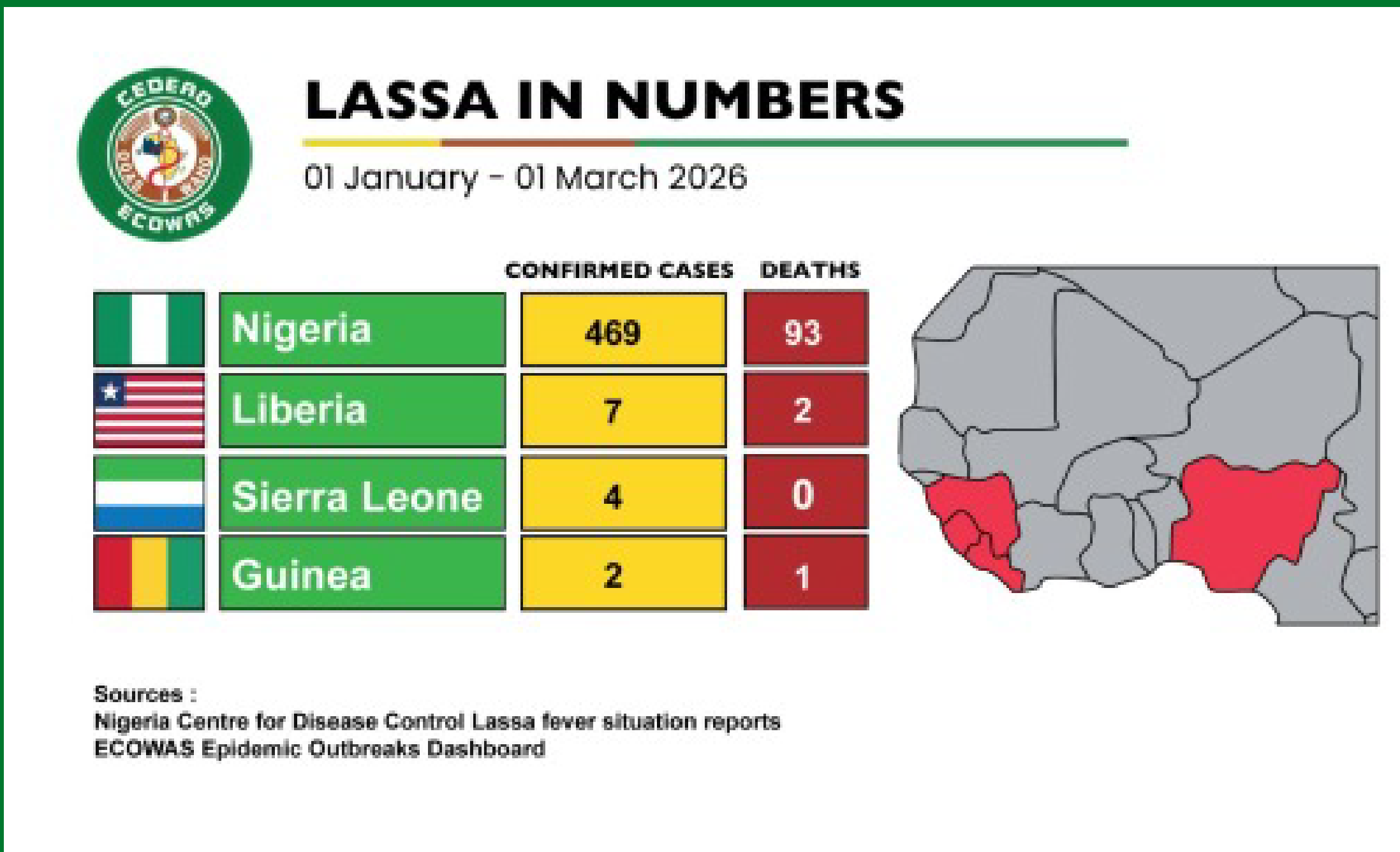
To support the translation of the roadmap from plan to practice, a webinar titled **"Operationalising West Africa's First Vaccine Access Roadmap"** was held. The discussion focused on practical steps needed to implement the region's vaccine access roadmap. Speakers from WAHO, CEPI, Women Advocates for Vaccine Access (WAVA), and national public health representatives from Sierra Leone and Guinea highlighted operational barriers and identified practical actions needed to ensure equitable access to future Lassa fever vaccines.

Alongside the webinar, a three-day national capacity-building workshop was held in Sierra Leone. With the aim of strengthening the institutional capacity, coordination, and operational effectiveness of the country's Lassa fever taskforce, the workshop brought together senior government officials, public health agencies, civil society organisations (CSOs), and media representatives to promote a structured, evidence-based approach to planning, coordinating, and implementing the vaccine access roadmap.

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

Thank you for being part of this journey.

Lassa in Numbers



Frontline Health Worker Story



IN CONVERSATION WITH

Airefetolor Amanda Ivie

*Study Coordinator & ISF Manager, ENABLE Project
Irrua Specialist Teaching Hospital, Edo State, Nigeria*

Q. PLEASE INTRODUCE YOURSELF AND YOUR ROLE AT IRRUA SPECIALIST TEACHING HOSPITAL.

My name is Airefetolor Amanda Ivie. I am the Study Coordinator and Investigator Site File (ISF) Manager for the **ENABLE Project** — a CEPI-funded epidemiological research project that provides evidence needed to support the development and future rollout of Lassa fever vaccines — at Irrua Specialist Teaching Hospital (ISTH), Edo State. I coordinate project operations across hospital units and lead community-based activities to raise awareness about Lassa fever. My responsibilities include overseeing participant follow-up, facilitating referral and care for confirmed cases, ensuring effective data management, and collaborating with Community Liaison Officers and Community Advisory Boards to strengthen community engagement and participation.

Q. WHAT MOTIVATED YOU TO WORK ON LASSA FEVER, AND WHAT KEEPS YOU COMMITTED?

As a public health physician, I have always wanted a safe and disease-free community. Living in a Lassa fever-prone environment has made it both a personal desire and a professional responsibility to contribute to efforts that educate vulnerable communities on prevention, early detection and treatment.

What keeps me committed are the positive impacts of my work. I have received positive responses during community sensitisation activities and heard success stories of patients who received appropriate care and were discharged home healthy. Seeing people's lives protected and restored reinforces my dedication to the fight against Lassa fever.

Q. CAN YOU SHARE A RECENT ACHIEVEMENT, MILESTONE, OR EXPERIENCE FROM YOUR WORK THAT YOU ARE PROUD OF?

Recently, I accompanied a monitoring team from Margan Clinical Research Organisation (MMARCRO) to visit randomly selected households in one of the host communities. We talked to two of our Lassa fever survivors during the visit. They told us how thankful they were for the ENABLE project and how it had helped them. Listening to them recount their recovery and the support they received was deeply fulfilling, and hearing that they have since become advocates within their community, helping to dispel earlier fears and misconceptions surrounding Lassa fever, made me more proud.

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We can eliminate this scourge. It is achievable. By working closely with hotspot communities, continuously encouraging adherence to preventive measures, and advancing the development of a Lassa fever vaccine, we can make a lasting impact.

— Airefetalor Amanda Ivie

Q. WHAT ARE THE BIGGEST CHALLENGES YOU FACE IN YOUR WORK ON LASSA FEVER, AND HOW ARE YOU ADDRESSING THEM?

One of the biggest challenges I face in my work would be the myths and misconceptions that people have about Lassa fever. I address them through continuous community engagements — a key strategy that my team adopted to educate community members with accurate information about the disease.

Q. IN YOUR VIEW, WHAT IS ONE THING THAT COULD SIGNIFICANTLY IMPROVE LASSA FEVER PREVENTION OR RESPONSE IN YOUR COUNTRY OR THE REGION?

Personally, I believe that strengthening early reporting through targeted community outreach and social media sensitisation would significantly improve Lassa fever outcomes. Other efforts that would be beneficial include the expansion of testing and treatment centres, the investigation of vaccine development, and the continuous training of healthcare workers for early detection and rapid response.

Q. IS THERE ANYTHING ELSE YOU'D LIKE TO ADD OR SHARE WITH OUR READERS?

Teamwork, effective communication and adherence to Infection Prevention and Control (IPC) practices have been pivotal in the successes we have achieved in managing suspected and confirmed Lassa fever cases.

Lassa Fever Coalition Activities

Recent actions, collaborations, and coordinated interventions undertaken by the Lassa Coalition across the ECOWAS region.

A Launch of Lassa Fever End-to-End Access Roadmap

In February 2026, WAHO announced the launch of the Lassa Fever End-to-End (E2E) Access Roadmap for West Africa. Developed in partnership with CEPI, the roadmap marked a major step toward strengthening equitable access to Lassa fever prevention, diagnostic and response tools across the region. Drawing lessons from past epidemics, it emphasizes early and deliberate planning, uninterrupted vaccine supply, and equitable access, ensuring that countries are prepared well before vaccine licensure.

The **Lassa Fever E2E Access Roadmap** presents a coordinated regional strategy linking vaccine development to real-world deployment, covering research and development, regulatory readiness, manufacturing, financing, procurement, delivery systems, and sustainability. By defining responsibilities and timelines across these stages, governments and partners are offered a clear framework to support timely and equitable vaccine access, particularly in endemic countries.

More than a planning tool, the roadmap signals a shift from reactive response to proactive preparedness. By strengthening regional coordination and aligning stakeholders around shared goals, it lays the groundwork for improved epidemic readiness in West Africa.



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2026

LASSA END-TO-END ACCESS ROADMAP

a regional plan to support equitable access to future Lassa fever vaccines

B Webinar: Operationalising West Africa's First Vaccine Access Roadmap

On 26 February 2026, WAHO, in collaboration with the Lassa Fever Vaccine Coalition, convened a regional webinar titled "Operationalising West Africa's First Vaccine Access Roadmap." This event followed the public launch of the region's End-to-End Vaccine Access Roadmap and marked a deliberate shift from strategy to execution.

The 90-minute webinar brought together technical leaders and policy actors from WAHO, CEPI, Women Advocates for Vaccine Access (WAVA), and national public health representatives from Sierra Leone and Guinea. Discussions centred on defining what effective implementation demands, highlighting immediate priorities, aligning regional commitments with national operational plans, strengthening regulatory and governance frameworks, mobilising sustainable financing, enhancing surveillance and community engagement networks, and integrating equity and accountability mechanisms that ensure that Lassa fever vaccine readiness translates into coordinated, politically backed, and executable action across the region.

The webinar concluded with a strengthened collective understanding of the roadmap's priorities and clearer alignment among national and sub-national actors, donors, and implementers. It also produced practical, stakeholder-specific recommendations outlining immediate next steps, providing a concrete pathway to accelerate progress toward equitable Lassa fever vaccine access.



► Missed the webinar? Watch the playback: [Watch on YouTube →](#)

C Workshop: National Capacity Building for the Lassa Fever Task Force in Sierra Leone

WAHO, in partnership with the Lassa Fever Vaccine Coalition and the Ministry of Health and Sanitation of Sierra Leone, organised a 3-day national capacity-building workshop for the Lassa fever taskforce from 24–26 February 2026 in Freetown, Sierra Leone. The workshop aimed to strengthen national preparedness for the future introduction of a Lassa fever vaccine by promoting a structured, evidence-based approach to planning and coordination.

Senior government officials demonstrated institutional mobilisation through plenary presentations, facilitated discussions, group exercises, and country-led experience sharing. Participants reviewed and prioritised vaccine readiness indicators, assessed existing frameworks for deploying investigational vaccines during outbreaks, identified funding needs, and developed a national roadmap with clear timelines, laying the foundation for more coordinated, effective, and sustainable implementation of Lassa fever vaccine access strategies across West Africa.



D Publication: Strengthening Regional Preparedness and Response to Lassa Fever in West Africa: Evidence, Innovations and Lessons from the ECOWAS Lassa Fever International Conference

Building on the convening of the 2nd ECOWAS Lassa Fever International Conference (ELFIC) held in September 2025, this publication marks a milestone achievement for WAHO by reviewing Lassa fever vaccine research and development efforts in Africa from 2000 to 2024. It maps vaccine candidates, stages of progress, and the institutions driving research.

By consolidating this evidence, WAHO has strengthened regional knowledge, highlighting the need for sustained financing, stronger collaboration, and increased African-led leadership to accelerate vaccine development and ensure equitable access.

With support from ECOWAS Lassa Fever Vaccine Coalition

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Progress on Lassa R&D Efforts in the Region

Brief, actionable updates on R&D activities across West African countries, including diagnostics, treatment, and prevention.

ENABLE 1.5 STUDY · NIGERIA

Activities and Progress — Tier 4 Phase

PROGRESS OF TIER 4 ACTIVITIES

The ENABLE 1.5 project is now at **Tier 4** phase, the final stage of the study. This phase includes quarterly follow-up activities, blood sample testing, 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).

COMPLETION OF QUARTERLY FOLLOW-UP VISITS

The Nigeria Centre for Disease Control and Prevention (NCDC) ENABLE study team has successfully completed all four rounds of the quarterly (3-monthly) participant follow-up and blood draw visits that were conducted at the three study sites. Support from the NCDC Coordination team and study partners was provided both on-site and remotely to site teams throughout the exercises.

PREPARATION FOR SEROLOGY TESTING

The ENABLE study team is preparing to commence training and initiate serological testing of samples shipped from the study sites in collaboration with colleagues from the National Reference Laboratory (RL) in NCDC and the Bernhard Nocht Institute for Tropical Medicine (BNITM) in Germany. Two new cases were recorded at the ISTH site, bringing the total number to 21. One patient has been discharged, while the other remains on admission and is receiving ongoing treatment.



RUMOUR MANAGEMENT AND COMMUNITY ENGAGEMENT

As community engagement and rumour management remain constitutive to the ENABLE 1.5 project, the study team has successfully completed its rumour collation exercise across all three study sites, and the team is currently finalizing the analysis. The findings are intended to inform future clinical research at the study sites and contribute to reducing vaccine hesitancy.

The team also continues to implement advocacy and engagement activities at the site level. A cross-sectional learning session on community engagement was conducted on 26 February 2026, across all study sites.

NEXT STEPS

As the ENABLE 1.5 study enters its final phase, preparations are underway for study close-out activities across the three study sites, including final documentation and archiving. The NCDC national coordination office will provide oversight and support throughout the close-out process.

Collectively, the ENABLE 1.5 project continues to make significant progress in advancing Lassa fever vaccine development by generating essential scientific evidence needed to inform next steps. These efforts underscore the value of coordinated, multi-partner collaboration in accelerating vaccine development and contributing to the reduction of Lassa fever burden.

REGIONAL WORKSHOP · COTONOU, BENIN

Strengthening Integrated Surveillance through the "One Health" Approach

WAOH **convened** a regional workshop from **23–27 February 2026** in Cotonou, Benin, bringing together representatives from ECOWAS Member States, Africa CDC, WHO, GIZ/RPPP3, and the Institut Pasteur de Dakar to strengthen integrated epidemiological surveillance linking human health, animal health, and the environment.



RESEARCH MILESTONE

First Human Trial for Ebola, Marburg and Lassa Vaccines

In January, **Imperial College London** announced a new research partnership with Chelsea and Westminster Hospital NHS Foundation Trust to deliver a first-in-human clinical trial of three vaccine candidates targeting Ebola, Marburg, and Lassa viruses. The **EML-Vac** study utilises a novel self-amplifying RNA (saRNA) platform designed to enhance immune response while enabling lower vaccine doses.

Lassa Fever Therapeutic Trials

A. ORAL ANTIVIRAL

Oral 4'-fluorouridine rescues nonhuman primates from advanced Lassa fever

A UTMB-led study showed that the oral antiviral 4'-fluorouridine successfully treated Lassa fever in non-human primates. Beginning 6 days after infection, a daily treatment regimen resulted in rapid, complete viral clearance in 4 out of 5 monkeys — all treated animals survived to the study endpoint. The study highlights African green monkeys as a cost-effective alternative animal model, supporting the further development of 4'-fluorouridine both as a post-exposure prophylaxis to control outbreaks and as a therapeutic agent to treat symptomatic patients.

B. PHASE 2 TRIAL

Investigational Antiviral ARN-75039 Moves into Phase 2 Lassa Fever Trial in West Africa

A Phase 2 clinical trial has begun in West Africa to evaluate ARN-75039, an investigational oral antiviral developed to treat Lassa fever. Registered as NCT07419373, the study which began in February 2026, is enrolling hospitalized adults across multiple treatment centres in West Africa with confirmed Lassa fever infection, to assess the drug's safety, tolerability, and ability to reduce viral load compared with the current standard treatment, ribavirin. Participants are randomized to receive two oral dose regimens of ARN-75039 (high and low dose) or the current standard of care, intravenous ribavirin, over a 10-day period. ARN-75039 works by blocking viral entry into human cells through targeting the virus's glycoprotein complex. The trial is being conducted under the INTEGRATE adaptive platform in West Africa, an initiative designed to accelerate testing of new Lassa fever therapies. With no approved antiviral treatment currently available and ongoing questions about ribavirin's effectiveness, this study represents an important step toward developing a targeted therapy for Lassa fever.

C. HEARING LOSS TREATMENT

A promising therapeutic approach for post-Lassa fever sensorineural hearing loss: a case report

A recent case report identified a potential breakthrough in managing one of the most disabling complications of Lassa fever: post-Lassa fever sensorineural hearing loss. The study was observed on a 13-year-old Lassa fever survivor who developed sudden sensorineural hearing loss shortly after discharge. Early treatment of a combination of intravenous steroids (hydrocortisone), mannitol, oral betahistine, and vitamin supplements was given to the patient and within 16 hours, results showed improvements in her hearing, with further gains confirmed on follow-up testing. Although a single case, the report suggests that early pharmacologic intervention may partially reverse hearing loss previously thought to be permanent. The study emphasized the need for integrated survivor care involving routine hearing assessments and structured follow-up care for Lassa fever survivors in endemic countries, and its integration into response strategies towards Lassa fever.

Insights & Analysis

NATIONAL ADVISORY

NCDC's Lassa Fever Advisory for Healthcare Workers

On 16 February 2026, the NCDC issued a Lassa Fever Advisory for Healthcare Workers, as part of its intensified national response to the ongoing Lassa fever outbreak. As of Epidemiological Week 7, 15 confirmed cases and 2 deaths were recorded among healthcare workers, with rising infections observed across multiple states including high-burden areas such as Ondo, Edo, Bauchi, Taraba, Ebonyi, and Benue. The urgency was further highlighted by a recent Lassa fever death of an Médecins Sans Frontières (MSF) staff member in Kano State, which triggered contact tracing and additional confirmed cases.

The advisory attributed the infections largely to gaps in infection prevention and control (IPC), low index of suspicion for Lassa fever, and exposures within healthcare settings, underscoring the urgent need for strict adherence to IPC measures, early case detection and improved facility preparedness.

EPIDEMIOLOGICAL TRENDS & SURVEILLANCE

Morbidity and Mortality Patterns of Lassa Fever at a Tertiary Treatment Centre in Southern Nigeria: A Five-Year Retrospective Review

A retrospective study was conducted to assess morbidity and mortality trends of Lassa fever among patients managed at Irrua Specialist Teaching Hospital between 2018–2022. The study's results revealed that the majority of affected individuals were under 30, with a slight male predominance among confirmed cases. For clinical presentation, fever was the most common presenting symptom while classical haemorrhagic signs such as bleeding were uncommon, reinforcing that Lassa fever often presents as a non-specific febrile illness. Additionally, a significant number of patients presented late to care leading to poorer outcomes. The study highlighted that non-specific symptoms and delays in seeking care remain major contributors to mortality, emphasizing the need for earlier diagnosis, improved clinical suspicion, and strengthened response systems in endemic regions.

AI-driven diagnosis of Lassa fever: Evidence from Nigerian clinical records

A recent study developed an artificial intelligence (AI) model to help doctors distinguish Lassa fever from malaria, a common challenge as the two diseases share many early symptoms. Using real clinical records from two Nigerian hospitals, researchers combined three machine learning algorithms into an ensemble model (Support Vector Machine, K-Nearest Neighbours, and Multi-Layer Perceptron) to improve diagnostic accuracy. After cleaning and balancing the dataset (including roughly 400 confirmed Lassa fever cases and 100 malaria cases), the AI model achieved 98.7% overall accuracy, with 100% recall (meaning it correctly identified all true Lassa fever cases), a 98.3% precision, and an F1-score of 99.1%. These results far exceeded traditional diagnosis approaches, which often struggle to tell Lassa fever and malaria apart based on symptoms alone in low-resource settings. The study demonstrates that AI-based tools could support faster and more accurate diagnosis of Lassa fever in clinical settings where advanced laboratory tests may be unavailable, potentially reducing misdiagnosis and enabling earlier treatment.

VACCINE DEVELOPMENT & STRATEGIC LEADERSHIP

Health-economic impacts of age-targeted and sex-targeted Lassa fever vaccination in endemic regions of Nigeria, Guinea, Liberia, and Sierra Leone: a modelling study

The publication projected the health-economic burden of Lassa fever from 2025 to 2027 and estimated the cost-effectiveness of targeting Lassa vaccination to different risk groups. Using a vaccine-impact modelling approach, a mathematical model using a zoonosis risk map and epidemiological data from recent and ongoing cohort studies was used to predict the health-economic burden of Lassa fever across age and sex groups in endemic regions. Results showed that targeting adolescents and adults (15–49 years), regardless of sex, was the most impactful approach for preventing health-care costs and productivity losses, whereas targeting women of child-bearing age (WCBA) was most efficient for preventing DALYs and monetised life-year losses. Vaccinating children also showed to prevent many infections as it serves as the least cost-effective strategy due to their lower risk of severe outcomes. This study underscores that targeted approaches, especially among adolescents and adults, could yield the greatest return on investment, but effectiveness depends on vaccine price and delivery strategy.

Opportunities & Events

1 CEPI 3.0 INVESTMENT CASE

CEPI has launched its next five-year strategy — CEPI 3.0 — which aims to systematically reduce the likelihood, impact and cost of epidemics and pandemics. CEPI is seeking additional investment of **US\$2.5 billion** to implement the strategy. For ECOWAS, this presents a timely opportunity to back vaccine development for a priority pathogen like Lassa fever, that is endemic in the region, while strengthening regional preparedness, vaccine access, and response capacity against future outbreaks.

2 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.

3 INNOVATIVE ANALYTICAL TECHNOLOGIES TO IMPROVE VACCINE MANUFACTURING SPEED AND EQUITABLE ACCESS

This funding call seeks to develop innovative vaccine analytical technologies that speed up development and manufacturing, lower costs, and improve equitable access, particularly for RNA, viral vector, and protein-based vaccines.

4 WELLCOME DISCOVERY AWARDS

This award provides funding for established researchers and teams from any discipline who want to pursue bold and creative research ideas to deliver significant shifts in understanding related to human life, health and wellbeing.

5 INFECTIOUS DISEASE CLINICAL TRIAL AWARD: OPTIMISING INTERVENTIONS FOR IMPACT

This funding call seeks to support transdisciplinary teams led from Africa, South Asia or South-East Asia to conduct randomised controlled trials that optimise licensed pharmaceutical interventions for infectious diseases. The clinical trials are expected to generate evidence that will inform changes to policy, practice and guidelines, and lead to measurable impact in the communities most affected, ultimately improving the treatment and prevention of infectious diseases in low- and middle-income countries.

6 ENHANCING INTEGRATED RESEARCH AND HEALTHCARE IN SUB-SAHARAN AFRICA THROUGH DIGITAL INNOVATION AND ARTIFICIAL INTELLIGENCE

The European Commission's new funding opportunity aims to build and sustain capacity (networks) related to ethics, regulatory affairs, pharmacovigilance, including digital regulatory platforms to support clinical research and health interventions in sub-Saharan Africa.

Share Your Feedback

We would love to have your feedback. Please fill out the form below:

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