

Building Enduring Health Security Systems: Insights from the 2025 Conference on Public Health in Africa

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Introduction

The Conference on Public Health in Africa (CPHIA), held in Durban, South Africa, from October 22nd to 25th, 2025, marked a turning point in Africa's public health narrative. Discussions moved decisively beyond emergency response toward sovereignty, sustainability, and system strengthening. Across plenaries and technical sessions, one message was consistent: Africa's health security will best be secured by stable institutions, sovereignty over data, and predictable financing.

Recent global health shocks exposed structural weaknesses but also demonstrated what works. Countries with strong public health institutions, timely surveillance, and clear leadership responded more quickly and recovered more quickly (1,2). CPHIA 2025, therefore, challenged Member States to consolidate crisis-driven gains into routine, nationally owned systems. Health security was framed not as a technical aspiration, but as a core development and governance choice.

The Role of National Public Health Institutes

National Public Health Institutes (NPHIs) were identified as the backbone of preparedness. Their role extends beyond outbreak response. NPHIs integrate surveillance, laboratories, emergency operations, research translation, and coordination across sectors. Evidence shows that countries with empowered public health institutions achieve greater coherence and speed during crises (1).

The continental emphasis on measurable performance was particularly notable. The 7-1-7 framework: detect-

ing outbreaks within seven days, reporting within one day, and initiating response actions within seven days, has shifted preparedness from static capacity assessments to accountability for speed (2). This approach exposes real system bottlenecks, including delayed sample transport, fragmented data, and under-resourced subnational response.

For Zambia, the lesson is clear. Preparedness must be institutionalized, measured, and there must be continuous learning and improvement. Timeliness should be tracked routinely. NPHIs must be enabled to lead, and not only convene during crises.

Data System Interoperability

CPHIA 2025 reinforced that data is at the core of emergency preparedness. Digital health systems are expanding across Africa, yet many remain fragmented and donor-dependent. This fragmentation undermines real-time decision-making. Interoperability is therefore not optional. It is foundational (3).

For Zambia, the priority is to formalize a national interoperability agenda anchored by the NPHI and aligned with health information governance frameworks. This will allow event-based surveillance, laboratory systems, emergency operations, and program datasets to communicate seamlessly. Interoperability reduces duplication and avoids additional reporting burdens. It is not an abstract goal; it is the infrastructure that enables speed. Without interoperability, early detection and rapid response remain limited (2,3).

Genomic sequencing as routine surveillance

ZNPHI's side event on the operationalization of genom-

ic sequencing in Zambia resonated strongly with the conference's broader emphasis on sovereign capabilities. Advances during COVID-19 demonstrated how sequencing enables real-time tracking of variants and transmission pathways (4). Zambia's experience shows that genomic capacity can evolve from crisis response into a regional public good when supported by skilled workforce development and data-sharing governance. However, sequencing capacity alone is insufficient. Impact depends on integration into routine surveillance, defined turnaround times, interdisciplinary collaboration, and clear pathways from data to action (4).

Financing Health Security as a Public Good

Perhaps the most consequential discussions at CPHIA 2025 focused on financing. The message was unambiguous. Resilience without predictable financing is fragile. Emergency reallocations cannot substitute for sustained investment.

Countries were encouraged to expand fiscal space through innovative domestic mechanisms, including digital services taxes, sin taxes, pooled procurement, and efficiency gains through transparency and anti-corruption reforms (5,6). Evidence shows that such mechanisms can generate revenue and improve outcomes when well governed (5).

Health financing was also framed as a political decision. Strong governance, efficient procurement, and accountability determine whether resources translate into results (7). Importantly, preparedness was linked to Primary Health Care (PHC) and Universal Health Coverage (UHC). Resilient systems are built on strong PHC platforms that enable prevention, trust, and early detection (8).

For Zambia, financing preparedness as a public good that is protected during fiscal shocks will be essential to sustaining recent gains.

Call to Action

CPHIA 2025 offered clarity. The tools are available. The evidence is strong. What remains is implementation. For Zambia, five priority actions stand out. First, institutionalise timely outbreak monitoring using the 7-1-7 framework. Second, implement a governance-led national interoperability roadmap. Third, integrate genomic sequencing into routine surveillance to enable faster decision-making. Fourth, align regulatory and procurement reforms to strengthen access and

system resilience. Finally, secure predictable domestic financing anchored in primary health care and universal health coverage as national development priorities.

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