

# Operationalising regional public health in Africa: The contributions of the West African Health Organization

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## Abstract

Public health in Africa is at a critical juncture. Debates over securing population health have swung between strengthening national systems and building pan-African institutions. Today, cross-border disease transmission, the transnational determinants of health (from migration to climate change), and the need for coordinated health diplomacy show that neither national approaches nor international aid alone is sufficient. A third approach, placing regional institutions at the center of public health governance, is essential. The West African Health Organization (WAHO), the specialised health agency of the Economic Community of West African States (ECOWAS), illustrates this model by combining technical coordination, policy harmonization, capacity building, and practical support in contextually appropriate ways. This perspective advances three key claims. First, many public health challenges in Africa are inherently regional; second, WAHO demonstrates how a regional institution can add value without replacing national responsibilities; third, scaling this model across the continent requires investments in institutional capacity, financing, and political frameworks that support regionalism in health. We discuss WAHO's contributions, structural challenges, and strategies to strengthen regional public health governance in Africa. We refer to layered governance as the coordinated interaction of national, regional, continental, and global public health actors. These experiences are discussed in the context of Africa's New Public Health Order, a strategic framework promoted by the Africa Centres for Disease Control and Prevention to strengthen health security, local manufacturing, and resilient health systems across the continent.

**Keywords:** Regional health governance, West African Health Organization (WAHO), Cross-border disease control, African public health, Health systems strengthening, Global health diplomacy

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## Perspective

### Why does a regional model matter?

Diseases do not respect borders. Lassa fever, yellow fever, cholera, meningitis, Ebola, and, more recently, mpox, along with recurring outbreaks of measles and dengue, spread along the same human, animal, and commodity routes that connect communities across political boundaries. Entry points, land borders, ports, and airports are often porous, under-resourced, and managed differently on each side. Climate variability, urbanization, and labour migration further change transmission patterns, creating risk landscapes that are regional rather than confined to individual nations [1].

Beyond pathogens, the social determinants of health, trade policies, food systems, migration, and environmental degradation function at scales that transcend single states. Coordinating policy, surveillance, and response at a regional level, therefore, offers several pragmatic advantages: alignment of surveillance systems for early detection, harmonization of clinical guidelines and laboratory standards, pooled procurement and supply-chain efficiencies, coordinated training to standardize competencies across countries, and a shared platform for negotiating with global partners and markets [2].

For these reasons, national public health investments are necessary but insufficient. The optimal architecture is layered: strong national systems embedded in robust regional mechanisms that can convene, standardize, and coordinate action. WAHO has been experimenting with precisely this layered role in West Africa, and its experience provides instructive lessons. As the following sections demonstrate, these theoretical advantages are now supported by documented outcomes. WAHO's regional coordination has reduced outbreak detection times, accelerated cross-border response, and built measurable institutional capacity across Member States, providing empirical grounding for the layered governance model

### Introducing WAHO: History, mandate, and regional context

The West African Health Organization (WAHO) was established in 1987 as the specialised health institution of the Economic Community of West African States (ECOWAS). Its primary mandate is to “attain the highest possible standard and protection of health of the peoples in the sub-region through the harmonization of the policies of Member States, pooling of resources, and cooperation with one another and with others for a collective and strategic combat against the health problems of the sub-region” [3]. WAHO operates through its Secretariat based in Bobo-Dioulasso, Burkina Faso, and is governed by the Assembly of Health Ministers of ECOWAS Member States.

WAHO's 15 Member States include: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. The region is demographically, economically, and politically diverse: populations range from approximately 600,000 in Cabo Verde to over 200 million in Nigeria; it includes one island state (Cabo Verde); and Human Development Index (HDI) rankings vary from medium (7 countries) to low (5 countries).

The region also faces significant political and security challenges, including the withdrawal of three Member States, Burkina Faso, Mali, and Niger, from ECOWAS and WAHO in 2024, which has introduced new complexities for regional health coordination [4]. As of 2024, Burkina Faso, Mali, and Niger have formally withdrawn from ECOWAS and WAHO, though health collaboration in certain technical areas continues on an ad hoc basis. The withdrawals stem from political disagreements and coup-related sanctions imposed by ECOWAS, reflecting broader tensions between regional integration and national sovereignty.

### WAHO's practical contributions: coordination, capacity, and convening

WAHO's mandate is to improve health and health systems in West Africa by supporting Member States and coordinating action across the region. In practice, the organization contributes across several mutually reinforcing domains.

#### 1. Regional surveillance and cross-border health security

Regional frameworks such as the Integrated Disease Surveillance and Response (IDSR) already provide a standardized approach for disease monitoring in Africa. Building on this framework, WAHO has strengthened regional surveillance and early-warning systems by supporting Member States to implement Integrated Disease Surveillance and Response (IDSR) through regionally coordinated training and harmonized case definitions. To facilitate routine and event-based data sharing across borders, WAHO established an ECOWAS regional data warehouse for health information, which aggregates surveillance data from Member States and underpins the weekly ECOWAS epidemiological bulletin disseminated to ministries of health, partners, and regional decision-makers.

These surveillance strengthening efforts have yielded documented improvements in outbreak detection and cross-border information sharing. Between 2020 and 2024, the median time from outbreak alert to verification decreased from 7 days to 3 days across participating Member States, with cross-border notifications increasing by 40% following the

implementation of harmonized data-sharing protocols [5]. During the 2023-2024 mpox outbreak, WAHO-coordinated surveillance enabled simultaneous case confirmation and response activation in three neighbouring countries within 48 hours of the initial alert, a timeline previously unachievable through bilateral channels alone [6].

To address the need for interoperability and timeliness in a highly mobile region, WAHO convened a Regional Disease Surveillance Digitalization Workshop in November 2023 and subsequently led the development of a strategic roadmap for surveillance digitalisation, intending to achieve full integration of all ECOWAS Member States by 2030. These efforts transform early warning from ad hoc information exchange into a predictable regional public good.

WAHO has further institutionalized cross-border cooperation through the ECOWAS Cross-border Surveillance Technical Working Group and the facilitation of Joint Risk Assessment (JRA) processes. Regional JRA workshops and cascaded national trainings, including in Mali and Togo, have enhanced evidence-based decision-making during health emergencies. Surveillance at points of entry has been strengthened through harmonised training of PoE staff using a standardized ECOWAS curriculum, complemented by bilateral and multilateral cross-border meetings among neighbouring Member States (e.g., Senegal–Guinea-Bissau, Benin–Burkina Faso, and Togo–Benin).

One Health surveillance has also been operationalised via the Surveillance and Information Sharing Operational Tool (SIS OT), supported by regional workshops engaging human, animal, and environmental health sectors. The organization's regional convening ability allows neighbouring ministries of health to agree on standardized surveillance case definitions, data-sharing protocols, and rapid notification pathways, all vital when an outbreak in one country poses a clear threat to its neighbours. This collaboration is institutionalized through frameworks like the ECOWAS Cross-border Surveillance and Points of Entry Strategic Plan (2025–2029) [7] and the ECOWAS Regional One Health Strategy [8]. By facilitating joint simulation exercises, cross-border outbreak investigations, and regional after-action reviews, WAHO helps turn ad hoc cooperation into a consistent, systematic practice.

The emphasis on cross-border surveillance also reflects a key insight: early detection is only valuable if it is linked to coordinated action. WAHO's role is less about commanding national programmes and more about ensuring interoperability and mutual aid,

that is, ensuring that an alert in Country A triggers a coordinated public health response in Countries B and C with clear roles and resources.

## 2. Workforce development and training

Public health systems are only as strong as their people. Recognizing this, WAHO has invested systematically in building a regionally competent, interoperable public health workforce capable of operating across national boundaries. These efforts aim not only to strengthen technical skills but also to foster professional networks that enable rapid collaboration during cross-border health emergencies.

WAHO's workforce development strategy spans Field Epidemiology Training Programs (FETPs), One Health leadership initiatives, and institutional capacity strengthening. As of 2024, WAHO allocated US\$1 million to workforce training, mentoring field epidemiologists, and training leaders of public health institutions. It has supported nine Member States to establish FETPs, and since 2017, over 350 field epidemiologists trained through WAHO-supported programs have led 80% of sub-national outbreak investigations in the region, forming the core of rapid response teams deployable across borders [9].

Leadership development has been advanced through the ECOWAS One Health Leadership Course, implemented in countries such as Ghana and Benin, alongside the launch of a Francophone One Health leadership programme. WAHO has also organized regional capacity-building workshops on the management and control of emerging and re-emerging diseases, including viral haemorrhagic fevers, Ebola, and Marburg virus disease. These initiatives strengthen technical competence while fostering professional networks that enable rapid cross-border collaboration during public health emergencies.

To ensure consistency and recognition of skills, WAHO is harmonizing epidemiological training curricula across the region [10]. This competency-based framework, aligned with international standards, provides training at three levels: Basic, Intermediate, and Advanced, enhancing the quality and interoperability of field epidemiology training in ECOWAS Member States. The outcomes of this workforce strategy are quantifiable: since 2017, over 350 trained field epidemiologists have led 80% of sub-national outbreak investigations, forming the backbone of national and regional response capacity. Building on this foundation, WAHO established a regional rapid response roster of more than 700 vetted experts, epidemiologists, laboratory specialists, logisticians, and risk communication professionals, trained through FETPs and One Health leadership initiatives. Deployment protocols, harmonized with

ECOWAS guidelines, enable Member States to request surge support, with 92% of rostered experts deployed within 72 hours during recent health emergencies [9–11]. By embedding these teams within a regional framework, WAHO ensures that alerts in one country trigger coordinated responses in neighbouring states, operationalizing the principle of layered governance and mutual aid across borders.

### 3. Technical guidance, policy harmonization, and normative work

An important but often underappreciated contribution of WAHO lies in technical guidance and normative standard-setting. By developing and disseminating harmonized regional tools—such as standardized curricula for Points of Entry surveillance, a Regional PHEOC Manual, and induction frameworks for Emergency Medical Teams—WAHO enables Member States to align regulations and operational plans [12], reducing duplication, making regional procurement more feasible, and simplifying multi-country responses.

WAHO has also supported Joint External Evaluations (JEE) of International Health Regulations core capacities and led the development of a regional contingency plan for displaced populations, providing a shared normative basis for preparedness planning across Member States. Through its engagement in regulatory harmonization for medicines, vaccines, and diagnostics via the ECOWAS Joint Assessment Procedure (JAP) [13], WAHO enables countries to align national policies with regional standards, facilitating mutual assistance, pooled procurement, and cross-border deployment of health technologies. For instance, when countries adopt common laboratory standards and case management guidelines, samples and protocols can circulate more freely across national labs and treatment centres. Shared norms also strengthen the region's bargaining position with external partners and pharmaceutical suppliers because it can speak with a single technical voice rather than 12 different ones.

WAHO's Regional Pharmaceutical Plan 2014 [14], which guides pooled procurement, quality assurance, and local production, and the 2023 WAHO–WHO joint policy brief on regional vaccine manufacturing [15]. The organization has facilitated the establishment of regional regulatory harmonization frameworks for medicines and vaccines, adopted by 13 Member States. Through its pooled procurement mechanism, WAHO coordinated the purchase of over \$15 million worth of essential medicines and diagnostics in 2023, achieving cost savings of approximately 20% compared to national procurement [16,17]. Recently, WAHO held the

second joint drug evaluation session in June 2025 as part of the West African Drug Regulatory Harmonisation Initiative (WADRI), focusing on reviewing applications submitted by manufacturers in accordance with the ECOWAS Common Technical Document (CTD).

### 4. Logistics, procurement, and resource mobilization

WAHO has supported pooled approaches to procurement, stockpile planning, and regional logistics coordination, enabling Member States, particularly smaller or resource-constrained countries, to benefit from economies of scale and improved predictability of supply [18]. During public health emergencies, this regional coordination reduces delays in the movement of essential commodities across borders and clarifies responsibilities for surge support [19].

These mechanisms are complemented by WAHO's efforts to strengthen the enabling environment for local manufacturing of vaccines, diagnostics, and treatments through regulatory harmonization, technical assistance, and quality assurance frameworks [18,20]. By linking pooled procurement with local production, WAHO advances both immediate outbreak response capacity and longer-term regional self-reliance. Investments in infrastructure, knowledge transfer, and regulatory frameworks have further guaranteed the safety and efficacy of regionally produced medical products [20].

During outbreaks, the capacity to move supplies rapidly across borders and coordinate responsibilities is as important as the surveillance architecture that detects a problem. By choreographing logistics across multiple states, WAHO reduces delays that cost lives [19]. Through its pooled procurement mechanism, the organization coordinated the purchase of over \$15 million worth of essential medicines and diagnostics in 2023, achieving cost savings of approximately 20% compared to national procurement [16,17].

WAHO also serves as a regional interlocutor with donors and global initiatives, aligning external financing with regional priorities and ensuring that investments are coordinated rather than fragmented [21,22]. This role translates national needs into a coherent regional investment case that captures economies of scale and cross-border externalities.

During the COVID-19 pandemic, WAHO implemented regional emergency projects to combat the virus and strengthen health systems, including targeted operational support in countries such as Mali and The Gambia. Evaluation of these efforts documented a 4-day reduction in cross-border sample transport and result reporting times, directly

attributable to WAHO-coordinated logistics protocols and harmonized entry point procedures [19].

Beyond emergency response, WAHO has promoted pooled procurement mechanisms and coordinated regional supply planning to improve access to essential medicines, diagnostics, and outbreak response commodities [16,17]. These efforts are complemented by support for local manufacturing initiatives such as the Institut Pasteur de Dakar's vaccine production expansion and the Nigerian Biovaccines Ltd. joint venture, which have increased regional vaccine production capacity by 15% since 2021 [23]. WAHO's Regional Stockpile of PPE and outbreak response items was also activated during the 2022–2023 meningitis outbreak, supplying 12 countries with over 500,000 PPE units [23].

### 5. Research, innovation, and partnership platforms

WAHO has increasingly established itself as a platform for regional research collaboration and operational research that addresses practice-oriented questions, such as optimizing surveillance strategies or evaluating vaccine delivery models in border zones [24]. It supports locally driven research by providing grants for scientists focused on West Africa's unique disease burden, and by convening ministries, academic institutions, and partners, WAHO speeds up the translation of evidence into policy and practice within the regional context.

The organization's partnerships with Africa CDC, WHO, and specialized technical bodies such as the African Society for Laboratory Medicine enable alignment of regional research agendas with continental and global initiatives [25]. These partnerships also support innovation in surveillance tools, laboratory systems, and local manufacturing, ensuring that research and innovation efforts are grounded in regional priorities and operational realities.

Between 2020 and 2024, WAHO research grants totalling \$2.1 million were awarded to West African institutions for studies on malaria, maternal health, and health systems resilience [26,27]. The organization also coordinates with the African Development Bank, World Bank, WHO AFRO, Kreditanstalt für Wiederaufbau (German Development Bank), U.S. Centers for Disease Control and Prevention (CDC), and Coalition for Epidemic Preparedness Innovations (CEPI) through structured partnerships to align surveillance, laboratory strengthening, and workforce investments [21,22].

### 6. Strengthening National Public Health Institutes (NPHIs)

WAHO recognizes that regional health security depends on resilient national institutions, a core principle of the layered model. It has actively supported the establishment or strengthening of Public Health Emergency Operations Centers (PHEOCs) in countries like Benin, Niger, and Mali. It provides technical support for strategic planning and operational assessments, and facilitates quarterly webinars to connect NPHIs, WAHO, and Africa CDC to share lessons and align priorities. This dual investment regional integration alongside national strengthening is a defining feature of the WAHO model.

WAHO's regional approach explicitly reinforces, rather than substitutes for, national institutional capacity. To operationalize this layered governance model, WAHO facilitates quarterly coordination meetings that bring together National Public Health Institutes, the Regional Centre for Surveillance and Disease Control (RCSDC), the Regional Animal Health Centre (RAHC), and the West Africa Regional Coordinating Center (West Africa RCC). These platforms enable alignment of epidemiological priorities, sharing of intelligence on emerging threats, and coordination of technical assistance.

At the country level, WAHO has supported the establishment or strengthening of Public Health Emergency Operations Centres (PHEOCs) in countries such as Benin, Niger, and Mali. This has been complemented by training-of-trainers programmes for PHEOC managers and the rollout of the electronic Public Health Emergency Management (ePHEM) system in countries including Togo, Mali, Burkina Faso, Sierra Leone, and Liberia, strengthening national operational readiness within a coherent regional framework.

The impact of WAHO's investment in national institutions is now evident: 11 of 15 Member States have established functional NPHIs with WAHO support, a 177% increase since 2015 [6]. These NPHIs have led over 200 joint outbreak investigations, demonstrating that regional coordination strengthens, rather than replaces, national capacity [6].

## 7. Cross-Cutting Dimensions of WAHO's Work

### 7.1 WAHO in practice: Bridging the political and the technical

What makes WAHO's contributions particularly notable is the organization's capacity to operate at the intersection of politics and technical public health. Regional health governance is inherently political: it requires diplomacy, respect for national sovereignty, and the

cultivation of consensus among states with differing capacities and priorities. WAHO's work demonstrates how a technically oriented regional agency can add value precisely because it navigates this political terrain.

Rather than dictating solutions, WAHO often facilitates peer learning, joint planning, and negotiated harmonization. This approach respects national ownership while creating the conditions for collective action. In emergencies, WAHO's legitimacy as an ECOWAS institution gives it leverage to convene heads of state, ministers, and technical actors in ways that purely external actors cannot.

### 7.2 Interface with regional, continental, and global bodies

WAHO operates within a multi-layered health governance ecosystem that links national systems to continental and global institutions. At the continental level, WAHO coordinates closely with the Africa Centres for Disease Control and Prevention through the West Africa Regional Coordinating Centre and with the World Health Organization Regional Office for Africa to align priorities in disease surveillance, laboratory strengthening, and workforce development. The organization also engages with peer regional platforms, such as the East and Central Africa Health (ECSHA), to have an MOU and exchange share lessons and promote harmonization of cross-border health protocols where relevant.

Globally, WAHO partners with institutions including the Coalition for Epidemic Preparedness Innovations, the World Bank, and the United States Agency for International Development to ensure that international investments support regional priorities and avoid duplication. For example, WAHO collaborates with CEPI, Africa CDC, and partners such as the Institut Pasteur de Dakar on Lassa Vaccine development and manufacturing. Compared with other regional health coordination platforms in Africa, WAHO's institutional mandate within the ECOWAS framework provides a relatively strong institutional platform for operationalizing cross-border disease governance, offering lessons that could inform broader continental approaches.

### 7.3 Sovereignty, data governance, and cross-border collaboration

Cross-border disease control initiatives inevitably raise questions related to national sovereignty, data governance, and the sharing of

sensitive public health information. While regional cooperation can strengthen surveillance and response, countries may remain cautious about sharing epidemiological data that could have political, economic, or reputational implications. Regional institutions such as the West African Health Organization help mediate these concerns by providing a trusted platform for coordination within the broader policy framework of the Economic Community of West African States.

At the continental level, initiatives led by the Africa Centres for Disease Control and Prevention and supported by the World Health Organization Regional Office for Africa are increasingly promoting common standards for data sharing, surveillance governance, and public health emergency coordination. Strengthening legal frameworks, trust among member states, and clear protocols for data protection will be essential to ensure that cross-border collaboration advances regional health security while respecting national authority.

## Challenges and limits

If the regional model is promising, it is not without important constraints.

### 1. Predictable financing

Regional institutions suffer when their operations depend on short-term project funding or externally driven priorities. For WAHO to sustain capacities, particularly in preparedness, workforce retention, and rapid response, predictable core financing from Member States is essential. Donor funding should be complementary, not substitutive, of national and regional commitments [28].

### 2. Political will and sovereignty concerns

Member States rightly guard their sovereignty, and regional harmonization can be perceived as encroaching upon domestic prerogatives [29,30]. Sustaining regional action, therefore, requires continual diplomatic work: demonstrating the concrete benefits of coordination, designing opt-in mechanisms where appropriate, and ensuring that regional protocols are co-created rather than imposed.

### 3. Technical asymmetries

Member States vary widely in surveillance capacities, laboratory infrastructure, and human resources. Regional institutions must tailor assistance to these asymmetries without creating dependency [31]. Success requires a dual strategy: uplift the weakest systems while enabling stronger systems to act as regional hubs and mentors.

#### 4. Data governance and information sharing

Data sharing across borders raises legitimate concerns about privacy, political sensitivity, and the economic implications of outbreak reporting (for trade and tourism). Regional institutions must work with Member States to build trusted data governance frameworks that protect sensitive information while ensuring timely public health action.

#### 5. Integration with continental frameworks and fragmentation risks

WAHO's successes sit within a broader continental ecosystem that now includes institutions such as the Africa Centres for Disease Control and Prevention (Africa CDC). Harmonizing roles, avoiding duplication, and leveraging complementarities are complex tasks that require clear mandates and cooperative frameworks across regional and continental bodies. WAHO addresses fragmentation by participating in structured coordination mechanisms, aligning its strategic plans with Africa CDC's New Public Health Order, and co-developing joint initiatives such as the Regional Communication Network and Joint Plan for Mpox response for West Africa to ensure efforts are synergistic and gaps are collectively addressed.

### A forward agenda: Strengthening the regional model

If we accept that regional institutions like WAHO are central to the new model for public health in Africa, the question becomes: how do we strengthen this model so that it is robust, sustainable, and scalable? We propose five complementary priorities.

#### 1. Secure sustainable financing and fiscal autonomy

Scaling regional public health initiatives will require more predictable and diversified financing mechanisms. While important investments have been provided by global partners such as the World Bank and the Coalition for Epidemic Preparedness Innovations, long-term sustainability will depend on stronger domestic and regional resource mobilization among Member States of the Economic Community of West African States. Institutions such as the West African Health Organization can play a central role in coordinating pooled regional funding, aligning external investments with regional priorities, and supporting joint preparedness initiatives.

Strengthening collaboration with continental mechanisms led by the Africa Centres for Disease Control and Prevention may also help develop innovative financing approaches to support the broader goals of Africa's New Public Health Order. Member States should progressively increase predictable contributions to regional health bodies and embed regional financing in national budgets. Innovative financing mechanisms such as regional

health solidarity funds, pooled procurement rebates, or earmarked levies for cross-border health security can reduce donor dependence and ensure continuity of core functions.

#### 2. Invest in regional centers of excellence and interlink them

Rather than aim for identical capacities in every country, the region should invest strategically in centres of excellence (for laboratory diagnostics, epidemiology, and clinical care) that serve as referral hubs, training sites, and rapid response bases. The West African Regional Laboratory Network (WARLN) is a network of 12 national reference labs that function as a distributed center of excellence. Additional examples include the Nigeria Centre for Disease Control (NCDC) as a regional training hub for FETP and the Institut Pasteur de Dakar as a vaccine research and production Center of Excellence. Clear protocols for interoperability and mutual support will ensure that these centres enhance, rather than centralize, regional capacity.

#### 3. Strengthen legal and normative frameworks for data and cooperation

Regional protocols on data sharing, mutual assistance during outbreaks, and cross-border movement of health personnel and supplies should be codified in agreements that protect sovereignty while enabling action. Legal frameworks should be developed with attention to ethical safeguards, privacy protections, and mechanisms for dispute resolution.

#### 4. Embed workforce networks and retain talent

Regional training programs are valuable only if graduates remain engaged in the region. Create incentives for retention, competitive career pathways, regional accreditation, and opportunities to serve in regional rapid response rosters. WAHO, through RCSDC, currently maintains ECOWAS regional rapid response team cross-cutting rosters (epidemiology, laboratory, and risk communication) with over 700 vetted experts. These rosters were deployed during the COVID-19 and Mpox outbreaks to support Member States, facilitating cross-border team support within 72 hours of a request. Establishing regionally recognized credentials will make mobility beneficial rather than a brain-drain risk.

#### 5. Foster research and locally relevant innovation

Support for operational research and regionally led clinical trials should be scaled, ensuring that policy choices are informed by evidence generated in West African contexts. Partnerships with universities and research institutions across the region will accelerate innovation tailored to local epidemiology and health systems realities. The push for local manufacturing should be sustained as a strategic component of health security and economic development.

## Conclusion

### Regional institutions as engines of resilient public health

The new model for public health in Africa is a practical, operational architecture, not a theoretical proposition. Regional frameworks such as the Integrated Disease Surveillance and Response (IDSR) already provide standardized approaches for monitoring and reporting, and WAHO builds on these systems to strengthen surveillance, early warning, and cross-border data sharing. By supporting Member States to implement IDSR, harmonizing case definitions, and maintaining a regional health information warehouse, WAHO actively coordinates surveillance, policy harmonization, workforce development, and partner engagement. Its value lies in enhancing national capacities collectively, rather than replacing them.

Reducing the impact of public health emergencies, improving routine health outcomes, and strengthening health security in the context of migration, climate change, and other transnational risks requires robust regional institutions that are technically excellent, politically legitimate, and financially sustainable. WAHO's experience demonstrates both the scale of what is achievable through regional cooperation and the importance of predictable financing, legal clarity, and sustained political stewardship.

Investing in operational regional institutions is an investment in shared sovereignty and collective action. In West Africa, the work WAHO and its partners are doing today provides a concrete foundation for a safer, healthier, and more resilient regional public health system.

#### What is already known about this topic

- National public health systems alone are insufficient to address cross-border disease threats, transnational health determinants (e.g., migration, climate change), and coordinated health diplomacy in Africa.
- Regional integration in health has been a theoretical goal, with frameworks such as the Integrated Disease Surveillance and Response (IDSR) providing standardized monitoring approaches.
- Continental health frameworks have increasingly emphasized local manufacturing, health security, and resilient health systems as pillars for sustainable public health governance in Africa.
- Sovereignty concerns, asymmetric national capacities, and fragmented donor funding remain persistent barriers to effective regional health governance.

#### What This Study Adds

- It provides empirical, outcome-based evidence of WAHO's effectiveness, including a reduction in outbreak alert-to-verification time from 7 to 3 days (2020–2024) and a 40% increase in cross-border notifications.
- It quantifies WAHO's workforce impact, showing that over 350 trained field epidemiologists led 80% of sub-national outbreak investigations, and a regional rapid response roster of 700+ experts deploys within 72 hours.
- It documents WAHO's layered governance model in practice, demonstrating how regional coordination strengthened rather than replaced national institutions (e.g., 11 of 15 Member States established functional NPHIs with WAHO support, a 177% increase since 2015).
- It offers a forward agenda with specific, actionable priorities (sustainable financing, centres of excellence, legal frameworks for data sharing, workforce retention, and locally led research) to scale the regional model across Africa.

## Conflict of Interest

The authors include professionals affiliated with the West African Health Organization, the health institution of the Economic Community of West African States; however, the perspectives presented reflect the authors' analysis and do not necessarily represent the official positions of these institutions.

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## Authors' contributions

AB and VL conceived the study. AB developed the outline, led data collection, and drafted the initial manuscript. VL, LS, EJ, BA, KT, IS, FA, and MA provided critical intellectual input and substantive revisions. All authors contributed to interpretation, reviewed the manuscript for important intellectual content, and approved the final version.

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