

## **From silos to synergy: Implementing SIS-OT to strengthen coordinated zoonotic disease surveillance in West Africa**

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### **Introduction**

Zoonotic diseases remain a top health threat in ECOWAS, driven by human-animal-environment interactions. The Tripartite Zoonoses Guide promotes cross-sector collaboration to strengthen surveillance and response. The Surveillance and Information Sharing Operational Tool (SIS OT), developed by the Quadripartite, was deployed to enhance coordinated surveillance systems. This study evaluates SIS OT implementation in six West African countries and highlights key challenges.

### **Methods**

From 2022 to 2025, national SIS OT workshops were conducted in Sierra Leone, Mali, Senegal, Guinea, Nigeria, and Côte d'Ivoire. Regional and international facilitators supported multisectoral participants from health, animal, and environmental sectors, along with agriculture and security. Countries used the standardized SIS OT workbook to self-assess 32 activities grouped under five domains: pre-planning, assessment, planning, implementation, and monitoring & evaluation. They rated capacity levels, set priorities, and developed country-specific SIS OT roadmaps. A mixed methods approach combining descriptive and content analysis was used to assess outcomes.

### **Results**

Across the six countries, over 70% of the 32 evaluated activities using the SIS OT tool were rated at the lowest capacity level (Target Level 1). Senegal and Guinea emerged with relatively stronger capacities, particularly in stakeholder mapping, notification, and simulation exercises. Nigeria showed moderate advancement in stakeholder engagement and compliance with international reporting requirements but continued to lag in data integration and surveillance implementation. Mali, Sierra Leone, and Côte d'Ivoire demonstrated limited capacity across all five operational domains. Only a small number of activities reached the "Complete" level, mostly those linked to international notification. Common challenges included weak legal mandates for data sharing, poor interoperability, underfunded laboratories, and limited accountability mechanisms. All countries developed 5-year, costed SIS OT plans with clear governance and follow-up structures.

### **Conclusion**

SIS OT provided a strong foundation for advancing One Health surveillance. While major capacity gaps persist, the approach catalyzed national ownership, fostered multisectoral dialogue, and produced



actionable roadmaps. Sustained investment and collaboration are now essential to transform these plans into resilient, responsive surveillance systems.