

Strengthening Multisectoral Coordination to address Priority Zoonotic Diseases: A review of disease surveillance systems in Uganda

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Coordination of surveillance systems across human, animal, and environmental sectors, using a **One Health approach**, is critical in the prevention, detection, and response to **priority zoonotic diseases**. Use of **electronic surveillance systems** that utilize a common platform across relevant sectors would improve **data sharing**.

Abstract Reference

PP09

BACKGROUND

Uganda is prone to outbreaks of zoonoses that threaten lives and livelihoods. Integration of surveillance activities across relevant sectors enhances prevention, detection, and response to Priority Zoonotic Diseases (PZDs). Despite the 2017 World Health Organization (WHO) Joint External Evaluation (JEE) recommendation to improve multisectoral integration of surveillance activities, existing surveillance systems are largely sector siloed. The USAID Infectious Disease Detection and Surveillance (IDDS) project in collaboration with the Uganda National One Health Platform members reviewed existing surveillance systems as part of developing a National Strategy for Coordinated Surveillance of PZDs to operationalize data sharing across sectors as stipulated in the National One Health Strategic Plan.

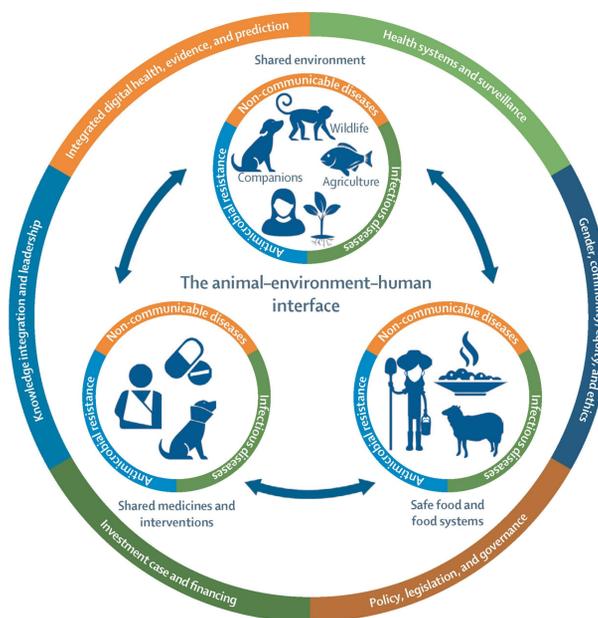
METHODS

From November 2020 to March 2021, a series of multisectoral and multidisciplinary stakeholder meetings were held to review existing surveillance systems. Panel and group discussions included participants from human, animal, and environmental sectors, WHO, Food and Agriculture Organization (FAO) and other key stakeholders, identified mechanisms for integrating surveillance of PZDS using a One Health approach leading to the development of a draft Strategy for Coordinated surveillance of PZDs in Uganda.

RESULTS

Several electronic surveillance systems exist in the human, animal, and environment sectors but are not connected. The human health sector utilizes the District Health Information System 2 (DHIS2) platform for indicator-based surveillance (IBS), and the Electronic Integrated Disease Surveillance and Response for event-based surveillance (EBS). The animal health sector utilizes a paper-based tool for IBS, Open Data Kit (ODK), and the FAO-developed Event Mobile Application for EBS. The environment sector uses geographic information systems and remote sensing, ODK, AVENZA, and other paper-based tools. Although some tools in human health capture some aspects of zoonotic disease surveillance, they are neither accessible nor utilized by the other sectors.

Figure 1. One Health approach, an excerpt of The Lancet One Health Commission



CONCLUSIONS

Multisectoral coordination of surveillance of PZDs requires interconnection and interoperability of electronic surveillance systems. Migrating the existing surveillance systems in human, animal, and environment sectors into one platform like DHIS2 will ease interconnection and interoperability.

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