



How One Health Data Use in Burkina Faso is Helping Prevent and Control Epidemics

Diby Konan¹, Issaka Sawadogo¹, Hélène Yaméogo-Kaboré¹, Alimou Barry², Romain Tohouré², Madi Savadogo³, Dany Malaba⁴, Ramatoulaye Dioume⁴, Stephanie Watson-Grant²

Affiliations: ¹Country Health Information Systems and Data Use Program, John Snow Inc., Ouagadougou, Burkina Faso; ²Country Health Information Systems and Data Use Program, John Snow Inc. Arlington, VA, USA; ³Animal Health Department, Ouagadougou, Burkina Faso; ⁴United States Agency for International Development Health Office, Ouagadougou, Burkina Faso

Key Messages

The interconnectedness of human, animal, and environmental health highlights the importance of the One Health approach, which promotes interdisciplinary collaboration to address global health challenges. This approach is particularly vital in managing emerging health threats, such as zoonotic diseases that can spill over from animals to humans. Effective implementation of One Health strategies requires robust information systems capable of monitoring, analyzing, and responding to health threats across these interconnected domains. However, many countries struggle to assess the maturity and effectiveness of their existing One Health information systems, leading to gaps in their ability to respond effectively.

Introduction

- Burkina Faso's One Health approach addresses five priority zoonotic diseases: rabies, highly pathogenic avian influenza, brucellosis, anthrax, and dengue.
- The One Health ministries in Burkina Faso use a shared electronic data entry and feedback platform for decision-making that requires human resource capacity and the availability of appropriate tools to prevent, detect, and rapidly respond to public health threats.
- Routine data use is critical to anticipate and respond to zoonotic diseases.

Methods

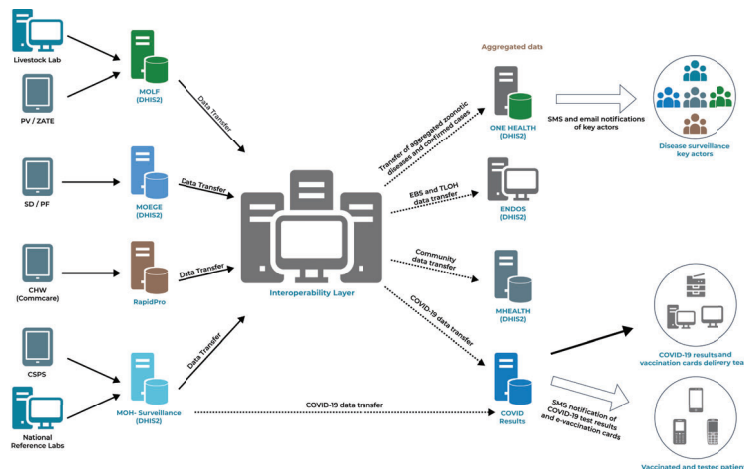
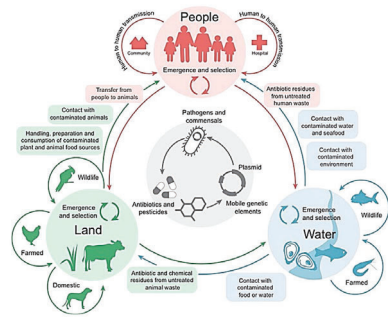
- Paper-based tools are used to gather information from "rumors" within communities that become event notifications (known as unusual health events) which are entered into the One Health platform and then investigated. With the One Health Tracker (an IDSR/SIMR tool), other information, including case information; laboratory samples and results; and case follow-up is collected.
- Data dashboards that are integrated into the platform are used to monitor the various zoonoses. Stakeholders from all three ministries participated in elaborating the processes and tools used.

Results

- Since the One Health platform launched in 2018, stakeholders have used it to record **122,421 unusual health events**, including **3,848 records** since January 2024.
- These events triggered **13 joint investigations**, including 4 since January 2024.
- The trend in suspected cases from 2018 to 2023 is detailed in Table 1.

Table 1: Trends in suspected zoonoses

Suspected zoonotic cases	2019	2020	2021	2022	2023
Animal rabies	10		5	27	22
Highly pathogenic avian influenza	0		14	17	11
Brucellosis	1	1	0	0	11
Anthrax	4		1	0	11
Dengue	0		0	0	22
Total	15		20	44	77



Conclusion

The One Health platform in Burkina Faso boosts zoonotic disease notifications. Local authorities, like Regional or District Directorates, now proactively engage, leveraging data to prevent community epidemics. National expansion of the One Health platform will yield wider data generation and use while enhancing better epidemic preparedness and control in the country.