# Vaccine Preventable Disease Surveillance systems in **Burkina Faso**

**Assessment of the implementation and use of VPD surveillance systems in Africa.**

July 2025

## KEY FINDINGS

- VPD systems in use: Epi-Info , STELaB, REDCAP, Excel and ACCESS
- Dual entry on paper-based and digital tools
- Case-based surveillance

## Analysis Overview

Burkina Faso has a well-established vaccine-preventable disease (VPD) surveillance system with a dedicated national manager and five digital systems currently in use. Data is reported weekly and consistently submitted to WHO AFRO, and the system successfully generates timely reports and dashboards at both national and sub-national levels. Governance structures are in place, with the use of standardized WHO AFRO indicators and an updated health facility hierarchy. The country has also integrated a data quality assurance framework and regularly conducts training for staff responsible for data entry and quality management.

Despite these strengths, several operational and resource challenges persist. While the Ministry of Health (MOH) technical team is staffed adequately and monitors system performance, there is no costed work plan or dedicated funding for software maintenance, infrastructure, or hardware. Data quality and timeliness issues exist within the case-based surveillance (CBS) system. Furthermore, although data sharing occurs across sectors and informs national planning, there is no integration with other health information systems, and the team responsible for interoperability still relies on external support.

Infrastructure disparities between rural and urban areas impact reporting, with only a small percentage of sites using computers for data entry and no use of mobile devices. However, mobile data is provided, and the overall system infrastructure is considered stable. Burkina Faso's vision is to achieve full digitization of VPD notification down to the health center level to ensure harmonized, real-time data, demonstrating strong national commitment to continual improvement of the surveillance system.

## Assessment of the implementation and use of VPD surveillance systems in Africa.

| Foundational | Developing | Established | Not Applicable or No Data |
|---|---|---|---|

| Domain/Theme | Sub-domain | Maturity Level |
|---|---|---|
| Governance and Strategic Alignment | Existence of a formal governing body | 2 |
| | Existence of a Digital Health Strategy | 2 |
| | Sustainable funding | 2 |
| | Equity infrastructure | 2 |
| | Equity policies (rural/urban) | 2 |
| | Submission to WHO AFRO regional system | 2 |
| Workforce/Technical Capacity | Dedicated VPD surveillance officer | 2 |
| | Admin/monitoring team in place | 2 |
| | Availability of monitoring tools/SOPs | 2 |
| | Software maintenance team in place | 2 |
| | Integration/interoperability tech capacity | 0 |
| End-user Readiness | End-user satisfaction | 2 |
| | End-user training | 2 |
| Infrastructure Readiness | Availability of computers | 0 |
| | Mobile devices and mobile data access | 1 |
| | Stable power/internet infrastructure | 2 |
| | Capacity to maintain infrastructure | 2 |
| | Infrastructure disparities | 2 |
| System Lifecycle and Localization | Length of time system has been in use | 2 |
| | Multilingual software maturity | 2 |
| | VPD surveillance system transition | |
| | User support during system transition | 0 |

DIGITAL HEALTH SYSTEMS TO SUPPORT VPD SURVEILLANCE IN **BURKINA FASO**

**Assessment of the implementation and use of VPD surveillance systems in Africa.**

| | Foundational | Developing | Established | Not Applicable or No Data |
|---|---|---|---|---|

| Domain/Theme | Sub-domain | Maturity Level |
|---|---|---|
| Interoperability | Integration with WHO AFRO system | 0 |
| | Integration with national HIS | 0 |
| | Interoperability standards use (FHIR, ADX) | 0 |
| | Existence of national interoperability framework | 0 |
| Data Standards and Data Quality | Metadata dictionary | 2 |
| | Org units structure | 2 |
| | Compliance with WHO AFRO standardized indicators | 2 |
| | Data quality governance | 2 |
| | Data entry/management training | 1 |
| Data Use and Reporting | Data reporting needs | 2 |
| | Data sharing practices | 2 |
| | Timeliness and quality of CBS data | 0 |
| | Timeliness and quality of aggregate data | |
| | Case-based data security compliance | 2 |

**Use and limitations of the maturity model**

The maturity model provides a framework for identifying strengths and gaps in Burkina Faso's VPD surveillance system. It covers key domains like governance, data quality, and infrastructure. However, it simplifies complex realities and may overlook regional variation or the interplay between paper based and digital tools. Results should be interpreted with field insights and stakeholder input.

DIGITAL HEALTH SYSTEMS TO SUPPORT VPD SURVEILLANCE IN **BURKINA FASO**