



Vaccine Preventable Disease Surveillance systems in Mali

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

July 2025

KEY FINDINGS

- VPD systems in use: Epi-Info transitioning to DHIS2
- Dual entry on paper-based and digital tools
- Case-based surveillance

Analysis Overview

From the outset, Mali's deployment of DHIS2 has focused on integrating it with existing systems to address critical gaps. The country has successfully scaled its integrated disease surveillance system, including IDSR and EWARN, and introduced a case-based tracking system. After a period of testing and development, Mali also adopted the new WHO VPD case-based surveillance package. The first major interoperability effort began in 2016, with the implementation of interoperability between Outil de Suivi des Produits de Sante (OPSANTE), a tool used for analysis and reporting, with DHIS2 for aggregated data collection. Since then, nearly a dozen systems have been integrated into DHIS2, reflecting the strong leadership and coordination of the Ministry of Health.

The transition from Epi Info to DHIS2 has been pivotal for Mali's VPD surveillance, enabling the consolidation of both case-based and aggregate data on a single platform. This shift has significantly improved data management, supporting more timely and effective outbreak detection and response. A key achievement was the integration of routine and malaria surveillance data into the national health information system, which has enhanced the responsiveness of health authorities and strengthened the overall surveillance infrastructure.

Mali was selected to participate in the **deep dive evaluation** because it represents a strong example of a country that has scaled the WHO VPD case-based surveillance package nationally. Its advanced implementation status provides critical insights into how integrated VPD surveillance systems can function in resource-constrained settings. Mali's national experience offers a practical lens for understanding the operational, policy, and technical enablers and barriers of scaling case-based surveillance at a national level. **For a more advanced analysis, please read the main report.**

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Foundational	Developing	Established	Not Applicable or No Data
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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	0
	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	1
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	1
	Capacity to maintain infrastructure	1
	Infrastructure disparities	0
System Lifecycle and Localization	Length of time system has been in use	2
	Multilingual software maturity	2
	VPD surveillance system transition	1
	User support during system transition	0

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

Use and limitations of the maturity model

The maturity model provides a framework for identifying strengths and gaps in Mali'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.