



Vaccine Preventable Disease Surveillance systems in Mozambique

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

July 2025

KEY FINDINGS

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

Analysis Overview

Mozambique's vaccine-preventable disease (VPD) surveillance system is managed by a dedicated national officer and employs a dual-entry approach, combining paper-based and digital tools. The country uses two digital systems, DHIS2 and Epi Info, with weekly data reporting to the national level and data submission to WHO AFRO. While both national and sub-national reporting are in place, the system operates without a national HMIS digital strategy, costed work plan, or dedicated funding for software and infrastructure maintenance. Funding currently comes from both national budget allocations and a single donor. Despite having a formal governance structure, key gaps persist in strategic planning and long-term sustainability.

The Ministry of Health (MOH) has a technical team responsible for system monitoring, and tools are in place for backup and performance tracking. However, the number of technical staff is insufficient, and integration capabilities are limited. Although training needs for the technical team are identified, reliance on external support persists for interoperability functions. The system uses census, CRVS, and survey data for population estimates, and a formal data quality assurance framework is in place, with routine training and assessments conducted for data entry and integration staff. Reports and dashboards are generated for both national and sub-national use, and data sharing with other ministries and partners informs planning and resource allocation.

The system is operational in 1,248 rural and 1,248 urban facilities, but infrastructure disparities affect performance, especially in rural areas. Most sites rely on mobile devices (100%) for data entry, while computer use remains low (19%). Although internet connectivity and power are generally stable, staffing limitations hinder hardware and infrastructure support. Case-based surveillance is active and not limited to specific diseases. The system is not yet integrated with WHO AFRO or other health systems, and while a draft national interoperability framework exists, it has not been approved. Mozambique's VPD surveillance system demonstrates strong national commitment, with routine data reporting, functional digital tools, and widespread facility access, forming a solid foundation for continued improvement and integration.

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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	0
	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	1
	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	1
Infrastructure Readiness	Availability of computers	0
	Mobile devices and mobile data access	2
	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	1
	VPD surveillance system transition	0
	User support during system transition	0

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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	1
Data Standards and Data Quality	Metadata dictionary	1
	Org units structure	2
	Compliance with WHO AFRO standardized indicators	2
	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	2
	Timeliness and quality of aggregate data	
	Case-based data security compliance	0

Use and limitations of the maturity model

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