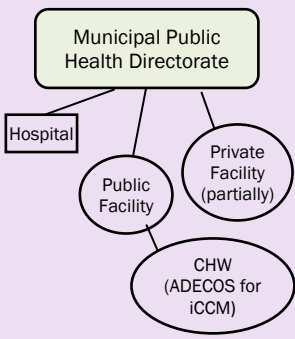


Angola

Routine Health Information System (RHIS) Malaria Reporting Structures

RHIS Profile: This document outlines the reporting structures of routine health information systems (RHISs) that include malaria data. The Angola National Health Management Information System (NHMIS) enables health information to flow in a single direction, from health service units and epidemiological surveillance sites to the central level (Departamento de Estatística do Gabinete de Estudos, Plano e Estatística [GEPE] and National Directorate of Public Health). As of 2017, Angola began to take steps for a profound change in the reporting of routine health data, moving from the paper-based reporting system to the DHIS 2 digital system (www.sisangola.org). The NHMIS and disease-specific programs meet quarterly, biannually, and annually for data harmonization meetings to compare and harmonize data collected from their respective systems.

	NHMIS	NMSS (National Malaria Surveillance System)	IDSR
	<p>When started: Prior to 1989 Scale-up status: N/A</p>	<p>When started: Prior to 1999 Scale-up status: National with the first National Malaria Strategic Plan 2008–2012</p>	<p>When started: 1985/86 Scale-up status: National in 2005</p>
National	<p>Reporting format/platform: DHIS 2 www.sisangola.org Managed by: GEPE of MoH Dissemination: Annually in the “Anuário Estatístico” Key Tasks: Develop policy and coordinate all the health information system activities on behalf of the National Statistics Institute.</p>	<p>Reporting platform: DHIS 2 www.sisangola.org Managed by: NMCP M&E Unit (M&E officer and epidemiologist) Dissemination: Quarterly, semiannual, and annual reports. Key tasks: Data collection and management, analysis, and M&E of the program.</p>	<p>Reporting platform: DHIS 2 www.sisangola.org Managed by: DHVE of MoH Dissemination: Quarterly, semiannual, and annual epidemiological bulletin. Key tasks: Epidemiological data collection and management, analysis and dissemination of bulletin data, and outbreak investigation.</p>
Provincial • 18 provinces	<p>Reporting format/platform: DHIS 2 www.sisangola.org Managed by: County Health Records & Information Officer Reported to: PPHD statistics manager Key Tasks: Data analysis at provincial level and feedback at municipal level.</p>	<p>Reporting platform: DHIS 2 www.sisangola.org Managed by: Provincial malaria supervisor (MoH) Key tasks: Data analysis at provincial level</p>	<p>Reporting platform: DHIS 2 www.sisangola.org Managed by: PPHD Epi surveillance focal point Key tasks: Data analysis, supporting outbreak investigation.</p>

<p>Municipalities</p> <ul style="list-style-type: none"> • 164 municipalities 	<p>Reporting format/platform: DHIS 2 www.sisangola.org Managed by: MPHD statistics manager Reported to: PPHD statistics manager Reporting frequency: Monthly by the municipal statistician Key Tasks: Collection and aggregation of data from health facilities and community levels, analysis, feedback to health facility, and data management at municipal level.</p>	<p>Reporting platform: DHIS 2 www.sisangola.org Managed by: Municipal malaria supervisor Reported to: Provincial malaria supervisor and provincial malaria officer. Reporting frequency: Monthly by the municipal malaria supervisor. Key tasks: Malaria data management, supervision.</p>	<p>Reporting platform: DHIS 2 www.sisangola.org Managed by: PPHD Epi Surveillance focal point. Reported to: PPHD Epi Surveillance focal point. Reporting frequency: Monthly; weekly for some diseases. Malaria as a potential epidemic disease is reported weekly to CPDE. Key tasks: Data management and analysis, supporting outbreak investigation.</p>
<p>Facility Level</p>  <pre> graph TD MPHD[Municipal Public Health Directorate] --- Hospital[Hospital] MPHD --- PF[Public Facility] MPHD --- PPF[Private Facility (partially)] PF --- CHW[CHW (ADECOS for iCCM)] PPF --- CHW </pre>	<p>Reporting format/platform: Paper Managed by: Hospital statistician or health facility point person. Reported to: MPHD Reporting frequency: Monthly by the appointed data reporting focal point or statistician of the health facility. Key Tasks: Collecting data from the registers and writing a report at the municipal level. Larger health facilities, such as hospitals, have a dedicated statistician in charge of collecting data from the health unit records and reporting to the Data Management System DMS through printed summaries. In smaller health facilities, doctors or nurses play this role.</p>	<p>Reporting format/platform: Paper Managed by: Physicians, nurses, clinic clerks, techs at facilities; ADECOSs in community. Reported to: MPHD municipal malaria supervisor (from health facility). ADECOSs report to reference health facility and municipal project supervisor; facility reports to municipal malaria supervisor. Reporting frequency: Monthly by the appointed data-reporting focal point or statistician of the health facility and ADECO from community Key tasks: Collecting data from the records and writing the report at the municipal level. The iCCM data are collected by ADECOSs and inserted into the monthly report of the health unit where they are linked.</p>	<p>Reporting format/platform: Paper Managed by: Health facility focal points such as physicians, nurses, clinic clerks, and techs. Reported to: MPHD Epi Surveillance focal point. Reporting frequency: Monthly; weekly for some diseases Key tasks: Data management and analysis, supporting outbreak investigation. These point persons serve as surveillance focal points inside the health facility. Using the monthly and weekly surveillance forms, they report to the municipal surveillance focal point...</p>

Acronyms:

- ADECOS: Agentes de Desenvolvimento Comunitário e Sanitário (Community and health development agent)
- CPDE: Centro de Processamento de Dados Epidemiológicos (Epidemiological Data Processing Center¹)
- CHW: community health worker
- DHVE: Departamento de Higiene e Vigilância Epidemiológica (Department of Hygiene and Epidemiological Surveillance)
- HMIS: health management information system
- iCCM: integrated community case management
- IDSr: integrated disease surveillance and response
- GEPE: Gabinete de Estudos, Plano e Estatística
- M&E: monitoring and evaluation
- MPHD: Municipal Public Health Directorate
- MoH: Ministry of Health
- PPHD: Provincial Public Health Directorate

¹ The Epidemiological Data Processing Center is equipped with a dozen computers and is where the epidemiological data sent by the provinces are processed. The CPDE is in the National Directorate of Public Health, Department of Hygiene and Epidemiology.

Table 1: Key Malaria Indicators by System

Indicate Y or N for each reporting element captured by the system.

	NHMIS	NMSS	IDSR
Number of malaria cases			
Suspect/fever cases	N	Y	N
Tested (diagnostically)	N	Y	N
Diagnostically confirmed (positive)	N	Y	N
Clinical/presumed/unconfirmed	N	Y	Y
Outpatient	Y	Y	N
Inpatient	N	Y	N
Uncomplicated/severe	N/N	Y/Y	N/N
Age categories (e.g., <5, 5+) / Sex disaggregation (M, F)	Y/N	Y/N	Y/N
Pregnant women	N	Y	Y
Number of malaria deaths			
Age categories (e.g., <5, 5+) / Sex disaggregation (M, F)	Y/N	Y/N	Y/N
Pregnant women	Y	Y	Y
Commodities (Availability or stockout/consumption)			
RDT	N/N	Y/Y	N/N
ACT	N/N	Y/Y	N/N
Severe malaria treatment	N/N	Y/Y	N/N
SP	N/N	Y/Y	N/N
IPTp 1/2/3+	N/N	Y/Y/Y	N/N
Completeness of reporting	Y	Y	Y

Data Quality Activities

Routine data quality assessments/audits:

- Use of both on-site data verification (OSDV) and end-user verification (EUV). For the NMCP data, national, provincial, and municipal supervisors perform OSDV during their supervision visits to check the quality of data (registers and reports) at the health-facility level. EUV surveys are carried out by USAID's PSM Project in partnership with the NMCP and the Health Inspectorate. Both the NMCP and NHMIS staff perform data quality checks during quarterly, biannual, and yearly meetings at the national level, which bring together malaria and other disease control M&E officers and the National Epidemiological Surveillance officer doing CPDE. Data harmonization meetings between the NMCP and the IDSR take place every quarter. The NMCP does not regularly publish the malaria control bulletin, but the malaria data is included in the GEPE Statistical Yearbook (published for the first time in 2016) and the national DHVE Epidemiological Bulletin (published electronically in 2017).

Malaria bulletin:

- The NMCP does not regularly publish the malaria control bulletin, but the malaria data is included in the GEPE Statistical Yearbook (published for the first time in 2016) and the national DHVE Epidemiological Bulletin (published electronically in 2017).

Data availability:

- Data for each system are available through the DHIS 2 platform (www.sisangola.org). Key partners can gain access via email requests for data.

Data use:

- Data from systems are used in periodic reports, decision making, case forecasting, and targeting of malaria interventions. The provincial level is the lowest level at which data are routinely analyzed.

Additional Context

- A pilot project for malaria case management at the community level by community agents called ADECOSs has been implemented by World Vision (WV) since 2015 with funding from the Global Fund and by Population Service International with funding from USAID since 2018. ADECOSs test malaria suspected cases in their respective micro areas, report the malaria data to the health units where they are linked and from where their data are integrated separately into the monthly malaria report of the health units. This report is sent to the municipality where it will be transformed from paper to digital format into the DHIS 2 platform.
- The main partners for DHIS 2 implementation in Angola are: USAID through Population Service International, Global Fund through Support to Health Strengthening Projects, and European Union through Project PASS II and the World Bank.
- **Steps of shifting from the paper-based routine data reporting system to the digital system:**
 - From 2014 to 2016: Implementation of the DHIS 2 pilot phase in three municipalities (Bailundo, Mungu, and Londuimbali) of the province of Huambo with support from the Project Força Saúde with USAID funding.
 - In March 2017: National workshop held by the Ministry of Health with the support of key partners to launch the roadmap for the implementation of DHIS 2 and OpenLMIS in Angola.
 - On January 22, 2019, an Official Letter from the MoH was sent to all provincial governors informing them about the adoption of DHIS 2 as a health routine data reporting platform in Angola, thus marking the shift from a paper-based reporting system to the digital system DHIS 2.
 - For the Malaria Program, 2020 was the first year where monthly malaria reports were completely reported from DHIS 2. Historical data from previous years 2013 to 2017 were imported from Excel databases into DHIS 2, while in 2018 and 2019, data were partially reported on DHIS 2 with a low reporting rate.

PMI Measure Malaria

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