


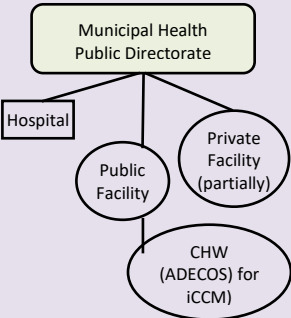


RHIS Profile: This document outlines the reporting structures of routine health information systems (RHIS) that include malaria data. The Angola National Health Management Information System (NHMIS) enables health information to flow in a single direction, from health service units and epidemiological surveillance sites to the central level (Departamento de Estatística do Gabinete de Estudos, Plano e Estatística [GEPE], and National Directorate of Public Health). Currently, malaria data in Angola are collected mostly through a parallel system. This parallel system, known as the National Malaria Surveillance System (NMSS), arose in 1999 to meet the needs of the National Malaria Control Program (NMCP). 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.

Acronyms:

ADECOS: Agentes de Desenvolvimento Comunitário e Sanitário
 CPDE: Centro de Processamento de Dados Epidemiológicos¹
 CHW: community health worker
 DHVE: Departamento de Higiene e Vigilância Epidemiológica
 HMIS: health management information system
 iCCM: integrated community case management
 IDSR: integrated disease surveillance and response
 M&E: monitoring and evaluation
 MHPD: Municipal Health Public Directorate
 MoH: Ministry of Health
 PHPD: Provincial Health Public Directorate

	NHMIS	NMSS	IDSR
	When started: Prior to 1989 Scale-up status: n/a	When started: 1999 Scale-up status: National with the first Malaria National Strategic Plan 2008–2012	When started: 1985/86 Scale-up status: National in 2005
National 	Reporting format/platform: Paper 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	Reporting format/platform: Excel Managed by: NMCP M&E Unit (M&E Officer and Epidemiologist) Dissemination: Quarterly, semiannual, and annual reports Key tasks: Data collection and management, analysis, M&E of the program	Reporting format/platform: Excel 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
Provincial <ul style="list-style-type: none"> • 18 provinces • 9 municipalities per province 	Reporting format/platform: Paper Managed by: PHPD Statistics Manager Reported to: GEPE of MoH Reporting frequency: Monthly by the Statistician of the PHPD Key tasks: Collect and aggregate data from municipalities, analysis, feedback to municipalities, and data management at provincial level	Reporting format/platform: Excel Managed by: Provincial Malaria Supervisor (MoH) and Provincial Malaria Officer (Global Fund) Reported to: NMCP M&E Unit Reporting frequency: Monthly by the Provincial Malaria Supervisor (MoH) Key tasks: Data management, converting paper-based data to Excel for reporting	Reporting format/platform: Excel Managed by: PHPD Epi Surveillance focal point Reported to: CPDE at DHVE Reporting frequency: Monthly by the PHPD Epi Surveillance focal point; weekly by the PHPD Epi Surveillance focal point for potential epidemic diseases and fevers Key tasks: Data management and analysis, supporting outbreak investigation, converting paper-based data to Excel for reporting
Municipalities <ul style="list-style-type: none"> • 164 municipalities • 18 health facilities or other sub-units per municipality 	Reporting format/platform: Paper Managed by: MHPD Statistics Manager Reported to: PHPD Statistics Manager Reporting frequency: Monthly by the municipal statistician Key tasks: Collect and aggregate data from health facilities and community levels, analysis, feedback to health facility, and data management at municipal level	Reporting format/platform: Paper/Excel 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	Reporting format/platform: Paper Managed by: PHPD Epi Surveillance focal point Reported to: PHPD 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
Facility Level 	Reporting format/platform: Paper Managed by: Hospital statistician or health facility point person Reported to: MHPD Reporting frequency: Monthly by the appointed data reporting focal point or statistician of the health facility Key tasks: Collecting data from registers and reporting to the municipal level. Larger health facilities, such as hospitals, have a dedicated statistician tasked with collecting data from health facility registers and reporting to MHPD via paper forms. For smaller facilities, physicians or nurses serve this role. iCCM data are collected by ADECOS but not currently captured in the HMIS.	Reporting format/platform: Paper Managed by: Physicians, nurses, clinic clerks, techs at facilities; ADECOS in community Reported to: MHPD municipal malaria supervisor (from health facility). ADECOS 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 ADECOS from community Key tasks: Collecting data from registers and reporting to the municipal level	Reporting format/platform: Paper Managed by: Health facility focal points such as physicians, nurses, clinic clerks, techs Reported to: MHPD 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.

¹ Epidemiological Data Processing Center is equipped with a dozen computers and 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.

Number of malaria cases	NHMIS	NMSS	IDSR
Suspect/fever cases	N	Y	N
Tested (diagnostically)	N	Y	N
Diagnostically confirmed (positive)	N	Y	N
Clinical or presumed or unconfirmed	N	Y	Y
Outpatient/inpatient	Y/N	Y/Y	N/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 related to commodities are collected by the national essentials medicine program.

Data Quality Activities:

Routine data quality reviews/audits: Both onsite data verification (OSDV) and end user verification (EUV) are used. For NMCP data, national, provincial, and municipal supervisors carry out OSDV during their supervisory visits to check the data quality in all data collection tools (registers, reports) at all reporting level (health facilities, municipal, and provincial). EUV surveys are done by the United States Agency for International Development's (USAID) Procurement and Supply Chain Management (PSM) Project. Both the NMCP and NHMIS teams carry out data quality checks during data harmonization meetings held quarterly, semiannually, and annually at the national level, which bring together malaria and other disease monitoring and evaluation officers and the National Epidemiological Surveillance Officer from the Centro de Processamento de Dados Epidemiológicos. Data harmonization meetings between the NMCP and integrated disease surveillance and response occur each quarter.

Supportive supervision is conducted in Angola with funding from the Ministry of Health (MoH) and partners such as the Global Fund and USAID. Supervision for the provincial level is done semiannually by the national officer; for the municipal level, it is done quarterly by the provincial focal point; and for the health facility level, it is done monthly by the municipal focal point.

Malaria bulletin: NMCP does not publish a regular malaria bulletin, but malaria data are included in GEPE's *Anuário Estatístico* (last published 2016) and the Departamento de Higiene e Vigilância Epidemiológica's national-level *Boletim Epidemiológico* (published electronically in 2017).

Data availability: For each system, the NMCP has direct access to data through its Excel database. Municipal focal points have access through the municipal Excel database. Key partners can be granted access through data request emails to the NMCP.

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:

The MoH, with the support of its partners, is reforming the RHIS, moving from a paper-based reporting system to an integrated DHIS2. There is a roadmap for the implementation of DHIS2, and OpenLMIS and some partners, under the coordination of the MoH, will use project funds to start implementation of DHIS2 in targeted provinces. Priorities for system strengthening include (1) implementation of DHIS2 and OpenLMIS, (2) integration of health information tools (templates), and (3) training of health workers on the use of integrated tools.

An integrated community case management (iCCM) pilot project has been ongoing since 2015. Implemented by World Vision (WV) and funded by the Global Fund, the pilot project seeks to use Agentes de Desenvolvimento Comunitário e Sanitário (ADECOS), community agents, to collect community data. The ADECOS use the KOBOLLECT application to send data through a mobile phone to the WV and MAT database. Currently, these data are not captured in the health management information system (HMIS). However, the NMCP and iCCM stakeholders of the Ministry of Territorial Administration are discussing how to report data from ADECOS in the HMIS.

The principal partners for the implementation of DHIS2 are USAID through PSI, the Global Fund through the Health Strengthening System Grant, the European Union through the PASS II Project, and the World Bank.

This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement AID-OAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center, University of North Carolina at Chapel Hill in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of USAID or the United States government.



U.S. President's Malaria Initiative