Madagascar

Routine Health Information System MALARIA REPORTING STRUCTURES

In Madagascar, the SISR is part of the National Health Information System (SNIS).

Current as of: September 2017

RHIS Profile: This document outlines the reporting structures of the routine health information systems (RHIS) that include malaria data. In Madagascar, the SISR is part of the integrated health management information system, *Système National d'Information Sanitaire* (SNIS). The SNIS includes the HMIS, *Système d'Information Sanitaire de Routine (SISR),* and the integrated disease surveillance and response system, *Surveillance Intégrée de la Maladie et la Riposte* (SIMR). As part of the Ministry of Public Health's RHIS reform, the monthly reporting framework used at *Centres de Santé de Base* (CSBs) and among community health workers (CHWs) has been integrated with all public health priority programs since 2015. Madagascar will be introducing DHIS2 software in 2017.

Acronyms:
AC: agents de santé communautaire
CSB: Centre de Santé de Base
DEP: Direction des Etudes et de la Planification
DRSP: Direction Régionale de Santé Publique
DVSSER: Direction de la Veille Sanitaire et de la Surveillance Epidémiologique et Riposte
IPM: Institut Pasteur de Madagascar
MSP: Ministère de la Santé Publique
SIMR: Surveillance Intégrée de la Maladie et la Riposte
SNIS: Système National d'Information Sanitaire
SSSD: Service de la Statistique Sanitaire et Démographique
SDSP: Service de District de Santé Publique

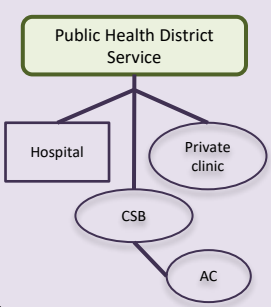
	SISR	SIMR
	When started: 2015 **Scale-up status**: National	**When started:** 2004; electronic since 2015 **Scale-up status:** National with paper system; 51 districts use electronic system (SMS ,tablet and smartphone)
National	**Reporting format/platform:** Access-based GESIS **Managed by:** SSSD (Health Statistics and Demography Service)/ DEPSI (Directorate of Studies and Planning) **Dissemination:** All central directorates using the SNIS, including the National Malaria Control Program (NMCP) and malaria partners **Key Tasks:** Data import, verification, analysis, sharing, and use, and planned feedback to lower levels every quarter	**Reporting format/platform:** Excel, with web-based reporting in some areas **Managed by:** Direction de la Veille Sanitaire, de la Surveillance épidémiologique et Riposte (DVSSER) **Dissemination:** All central directorates doing surveillance, including the National Malaria Control Program (NMCP) **Key Tasks:** Data compilation, verification, analysis, sharing, and use, web consulting, and planned feedback to lower levels every quarter
Regional • 22 regions • Average of 5 districts per region	**Reporting format/platform**: Access-based GESIS **Managed by**: HMIS Regional Manager **Reported to**: SSSD/DEPSI **Reporting frequency**: Monthly by 30th of month **Key Tasks**: Data import, verification, analysis, and transmission	**Reporting format/platform**: Excel (compilation files), with web-based reporting in some areas. **Managed by**: SIMR Regional Focal Point **Reported to**: DVSSER **Key Tasks**: Reception of Excel files for compilation, verification, and analysis, plus web consulting
District • 114 districts • Average of 23 CSB per district	**Reporting format/platform**: Access-based GESIS **Managed by**: HMIS District Manager **Reported to**: Regional Directorate for Public Health (DRSP) **Reporting frequency**: Monthly by 27th of month **Key Tasks**: Data input to Access, verification, analysis, and transmission	**Reporting format/platform**: Excel (for paper or SMS data), web-based reporting in some areas **Managed by**: SIMR District Focal Point **Reported to**: DVSSER, with copy to DRSP **Reporting frequency**: Weekly (Excel), daily (web) **Key Tasks**: Data input and compilation to Excel, verification, analysis, and transmission, plus web consulting
Facility Level • 2,683 CSB 	**Reporting format/platform**: Paper-based Monthly Activity Report for CSB and private providers; paper-based Monthly Community Activities Report for community health workers **Managed by**: CSB Chief; community health worker (AC) **Reported to**: Public Health District Service (SDSP) **Reporting frequency**: Monthly by 15th of month (CSB) or 2nd of month (AC) **Key Tasks**: Data collection, verification, analysis, and transmission and feedback to ACs during monthly meetings.	**Reporting format/platform**: Paper, SMS, smartphone with web application (in some CSB/sentinel sites) **Managed by**: CSB Chief **Reported to**: SDSP (paper, SMS) or central server (tablet, smartphone) **Reporting frequency**: Weekly (paper), daily (electronic) **Key Tasks**: Data collection, verification, analysis, and transmission, plus web consulting, and feedback to ACs during monthly meetings.

Table 1: Key Malaria Indicators by System: Indicate Y or N for each reporting element captured by the system.

		SNIS	SIMR
Number of malaria cases			
	Suspect or fever cases	Y	Y
	Tested (diagnostically)	Y	Y
	Diagnostically confirmed (positive)	Y	Y
	Clinical or presumed or unconfirmed	Y	Y
	Outpatient/inpatient	Y/Y	Y/Y
	Uncomplicated/severe	Y/Y	Y/N
	Age categories (e.g., <5, 5+) / Sex disaggregation (M, F)	Y/Y	N/N
	Pregnant women	Y	N
Number of malaria deaths			
	Age categories (e.g., <5, 5+) / Sex disaggregation (M, F)	Y/N	N/N
	Pregnant women	Y	N
Commodities			
	Availability of RDT / ACT / Quinine or Inj Art / SP	Y/Y/N/Y	N/N/N/N
	Consumption of RDT / ACT / Quinine or Inj Art / SP	Y/Y/N/Y	N/N/N/N
	Completion IPTp 1 / 2 / 3+	Y/Y/Y	N/N/N
Completeness of reporting		Y (90%)	Y (56%)

Data quality activities:
SNIS: The World Bank's PAUSENS Project established a data quality improvement mechanism in 18 districts in 2016. At the end of each month, district teams meet to verify data from monthly reports (using an error checking guide) before entering into Access. The NMCP conducted preparatory workshops, group reviews with hospital managers, and CSB visits (to check records and monthly reports) in a sample of districts in 2015 for the routine data quality assessment. DEP/SSSD does not carry out supervision, but NMCP conducts integrated supervision in 11 regions per semester. With the support of PMI / USAID MEASURE Evaluation, a quarterly meeting on the quality of malaria data is organized by the NMCP with the participation of all partners involved in M & E (NMCP, DVSSE, DEP, IPM, NGO).
SIMR: No systematic data quality verification. DVSSER carries out supervision when funding is available from WHO's CERF Project.
CSB Chiefs in supported areas and community health partners meet regularly at the level of township. Regular monitoring and data verification meetings are held at the district level. At the central and regional levels, the meetings mostly focus on program review.
Malaria report: No current monthly report on malaria, but the first NMCP bulletin was published in August 2017. Also, DVSSER publishes weekly electronic reports on general disease surveillance (most recent edition February 2019). Institut Pasteur de Madagascar (IPM) publishes a monthly newsletter on the sentinel surveillance network for fevers (*L'Epi veille*). With the transitioning of sentinel fever sites to the MoH in 2018, the newsletter production was stopped. In addition, NMCP shares a weekly malaria epidemiological profile with key partners, which has now becomes a regular exercise.
Availability of data:
SNIS: NMCP has direct access to the data, sent by e-mail. At the district level, focal points and partners can access data using GESIS or Access and use the query function to generate specific indicators and reports. Malaria reports completeness and promptness can be assessed directly from the GESIS by the NMCP database team.
SIMR: NMCP has direct access to the data, via the DVSSER webpage. District focal points can access data through paper reports and the DVSSE webpage. Key partners can request access and can reply electronically via the DVSSER webpage if they have a login. In the perpectives for integrated diseases surveillance, former sentinel fever sites (108 community sentinel sites for surveillance, 54 CSBs, and 18 District hospitals) were transitioned to the MoH in April 2018. Quarterly meetings to discuss IDSR data with key PMI's implementing partners are put in place with support from MEASURE Evaluation through DVSSER leadership since 2017.
Data use:
SNIS: NMCP uses data to review strategies, plan activities, and manage health inputs. CSBs analyse their data and generate charts for displaying.
SIMR: DVSSE analyzes data and informs the Directorates concerned accordingly, directly, in its newsletter, or via its webpage. The lowest level of data analysis is at CSBs.

Additional Context
SNIS: Routine malaria data needs are addressed by the SNIS. The main challenges are the timely availability of high-quality, reliable, and comprehensive health information; the uptake of data from the private sector and the hospital sector; and the culture of sending, analyzing, and using data for decision making. The latter is often attributed to the lack of systematic feedback and resulting perceived uselessness of reporting and SNIS in general. There are also challenges in completeness of reporting in the community system in areas not supported by USG backed community health projects. Another challenge emerging with the advent of the electronic data collection system is interoperability: both between SNIS and SIMR and between the MSP and other partners' systems. With the prospect of DHIS2 deployment, interoperability between GESIS, DVSSE/IDSR, and NGO's health platforms should be a priority.
Partners involved in strengthening SNIS: World Bank/PAUSENS Project, UNICEF/PASSOBA Project, USAID (ACCESS/MAHEFA/MCSP/MEASURE Evaluation), WHO, UNFPA, and Global Fund. Their support focuses on strengthening the technical platform. However, the coordination of this aid requires leadership, vision, and good governance from the MSP. Currently, the MSP is implementing a roadmap for HMIS strengthening.
SIMR: The use of electronic surveillance via web has improved the availability of timely data and might be expanded, pending the MSP's vision, accounting for technical feasibility, geographic coverage and, above all, sustainability by providing for the gradual withdrawal of donors. The main partners in SIMR are WHO and the Indian Ocean Commission. As with SNIS, the main challenges are data completeness, timeliness, and quality; integration; and implementation of other surveillance components (hospital, mortality, and biological). A plan to strengthen epidemiological surveillance is in draft form and Fever sentinel sites were transitioned from IPM to the MoH in 2018.

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