Democratic Republic of the Congo

Routine Health Information System MALARIA REPORTING STRUCTURES

Current as of: April 2020

RHIS Profile: This document outlines the reporting structures of routine health information systems (RHIS) that include malaria data. In the Democratic Republic of the Congo (DRC), the health management information system (Système National d'Information Sanitaire [SNIS]) and the integrated disease surveillance and response (IDSR) system both routinely report malaria data. The SNIS has existed in DRC since colonial times but started receiving increased financial support through a series of projects starting in 1987. Major steps toward improving its functionality occurred from a coordinated effort with the Ministry of Health in 2003, which required the national level to play a normative, regulatory, and supportive role, with the provinces being responsible for implementation and operation. The SNIS reports malaria surveillance data monthly and transitioned to DHIS2 over a three-year period, 2015–2017. The National Malaria Control Program (NMCP) had developed a parallel system to ensure regular data flow, but it is transitioning away from that with DHIS2 fully rolled out and works in coordination with the SNIS to collect and process malaria

	SNIS	IDSR
	Started: 2003 with GESIS (Access). Normative policy: 2005 (Access). 2014: DHIS2. Scale-up status: DHIS2 began scaling up in 2017, when all health zones (HZs) received training and initial equipment to operate on DHIS2, although Internet connection and computer availability are still problematic. Paper reporting tools are in all health facilities.	Started: 2005 with Excel and EPI INFO Scale-up status: Since 2014, with DHIS2 and EPI INFO. Paper tools in all health facilities, DHIS2 in all HZs.
National	Reporting format/platform: DHIS2 Managed by: SNIS office Dissemination: Monthly to all actors involved (government, partners, and donors) Key tasks: Coordination, configuration of DHIS2, training on DHIS2, monthly tabulation and analysis, current development of validation rules for data on DHIS2, analysis and feedback to the provinces, data quality control, analysis of standard deviations and outliers	Reporting format/platform: DHIS2 and EPI INFO Managed by: Department of Epidemiological Surveillance (Direction de Surveillance Epidémiologique) Dissemination: Weekly Key tasks: Compilation, data quality control, follow-up analysis, retro information, comments, and recommendations. Declare outbreaks, monitor thresholds and trends.
Provincial • 26 provinces • Each province made up of 11 to 35 HZs	Reporting format/platform: DHIS2 Managed by: Health Information, Research, and Communication Office (1 head of office, 1 provincial data manager, 1 responsible for SNIS) Reported to: National level (note that data entry is done at the zone level and the data are directly accessible by all) Reporting frequency: Depending on the frequency of forms entered at the zone level (weekly, monthly, quarterly, and annual) Key tasks: Coordination, training, data analysis, reviews, quality control and feedback to HZs, supervision of HZs, organization of annual reviews of the provinces	Reporting format/platform: DHIS2 and EPI INFO Managed by: Health Information, Research, and Communication Office (1 head of office, 1 provincial data manager, 1 responsible for SNIS) Reported to: National level (data are sent to the epidemiological surveillance department in EPI INFO format because the completeness and timeliness of the weekly report is low) Reporting frequency: Weekly compilation of data obtained in parallel with DHIS2 Key tasks: Compilation, analysis, and validation. Verification of thresholds and reporting of epidemics.
Health Zone • 516 HZs • Each HZ is made up of 10-30 Aire de Santé	Reporting format/platform: DHIS2 Managed by: Health zone chief (MCZ) Reported to: Province, but data are automatically transmitted to national level through DHIS2 Reporting frequency: Depending on the periodicity of the forms (weekly, most often monthly, quarterly, and yearly) Key tasks: Coordination and monitoring; compile, review, and validate data. Enter paper forms from facilities into DHIS2. Monthly data review meetings, retro information, and supervision at health facilities.	Reporting format/platform: DHIS2 and Excel Managed by: MCZ Reported to: Provincial level (two circuits are used to date because of the low completeness and promptness Reporting frequency: Weekly by Monday Key tasks: Compile the data transmitted either by telephone or in paper format, provide feedback to the health facilities
A cluster of health facilities are grouped together in a health area; one facility is the lead and manages data for all health facilities in the health area	Reporting format/platform: Reporting is done using the paper form. Some health facilities equipped with computer and Internet can enter directly into DHIS2. Managed by: Nurse (Infirmier Titulaire de l'Aire de Santé, IT) Reported to: HZ Reporting frequency: According to the defined frequency (weekly, monthly, quarterly, annual) Key tasks: Filling out forms, compiling data from different registers, archiving, holding monthly data analysis meeting Community Level Managed by: Community health worker, Relais Communautaires (RECO) Reported to: IT Reporting frequency: Daily, weekly, or monthly, depending on the type of data Key tasks: Community sensitization, reporting of cases received at the Sites des soins communautaires (SSC) level	Reporting format/platform: Paper-based, transmitted by telephone to HZ central office Managed by: IT Reported to: HZ Reporting frequency: Weekly Key tasks: Compile and report data weekly Community Level Managed by: RECO Reported to: IT Reporting frequency: Daily Key tasks: Community sensitization and reporting of cases

Table 1: Key Malaria Indicators by System

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

	System			
Indicators	SNIS	IDSR		
Number of suspected malaria cases				
Suspect/fever cases	Υ	Υ		
Tested (diagnostically)	Υ	N		
Diagnostically confirmed (positive)	Υ	Υ		
Clinical/presumed/unconfirmed	Y	N		
Outpatient/inpatient	Y	N		
Uncomplicated/severe	Y	N		
Age categories (e.g., <5, 5+)/Sex disaggregation (M, F)	Y/N	Y/N		
Pregnant women	Y	N		
Number of malaria deaths				
Age categories (e.g., <5, 5+)/Sex disaggregation (M, F)	Y/N	Y/N		
Pregnant women	Υ	N		
Commodities (Availability or stockout/Consumption)				
RDT	Υ	N		
ACT (AL, ASAQ)	Υ	N		
Severe malaria treatment	Υ	N		
SP	Υ	N		
IPTP 1/2/3(+)	Y	N		
Completeness of reporting	Y	Υ		

Data Quality Activities:

Routine data quality reviews and audits: Both the NMCP and the SNIS carried out various quarterly data quality checks from the national and provincial levels. The NMCP is in the process of harmonizing data quality assessment tools used by various partners in hopes of promoting one tool for all partners to use nationally. In the nine U.S. President's Malaria Initiative (PMI)-supported provinces, PMI supports provincial advisors to support the NMCP in initial analyses of malaria data for decision making and to conduct quarterly data quality audits.

Review meetings: Data review meetings are held monthly at all levels of the health pyramid. The quarterly NMCP meeting includes all NMCP partners. An annual review is held once a year at the national level for malaria data and other SNIS data. At the provincial level, two reviews are scheduled per year, one each semester. At the level of the HZ, the data analysis meetings are held monthly.

Supervision: With the support of MEASURE Evaluation, the NMCP organizes joint quarterly supervision in the provinces. The provinces supervise the HZs on a quarterly basis, and the HZs supervise the health facilities on a monthly basis, which in turn organize supervision visits to the community (RECO and SSC).

Monthly or quarterly malaria bulletin: Currently, DRC does not produce a regular bulletin, but discussions around producing a quarterly bulletin are ongoing. A quarterly bulletin is produced by the NMCP, but it is a general bulletin containing general information concerning the NMCP and does not focus on data.

Data availability: The NMCP at the national, provincial, and HZ levels has access to the routine malaria data through DHIS2. In addition, some facility-level staff and partners at various levels have been provided access to DHIS2 and the related data.

Data use: Data are primarily used in reporting and to monitor trends on an annual basis. The degree with which this occurs at various levels is highly variable. Monthly HZ meetings review the data, identify issues, and develop follow-up actions, but how this is conducted varies among the HZs. Provinces analyze data from HZs to assess trends and send feedback if necessary. Relevant decisions at each level of the health pyramid are taken after data analysis.

Additional Context:

- In DRC, the majority of facilities are private, and most of these report into DHIS2.
- A cluster of health facilities are grouped together to form a health area, a sub-unit of the HZ. One of the facilities has a designated head nurse, "Infirmier Titulaire," and it serves as the lead health facility for the health area, hosting and presiding over the monthly data review meetings.
- The constant addition and closure of health facilities, due to the large number of private facilities, remains a challenge because these cannot be added and subtracted from the DHIS2 platform on a rolling basis; thus, the denominator of expected reports may not always be accurate.
- The SNIS introduced revised data collection tools in January 2017, but until now, trainings on the new tools have not occurred, and some issues have been observed (for example, no place for malaria deaths on the hospital reporting form).
- Despite providing all 516 HZ offices with VSATs (Very Small Aperture Terminal) antenna for data transmission and connectivity, considerable challenges
 remain for getting DHIS2 fully functional across the country and ensuring regular connectivity.
- The NMCP and the Ministry of Health developed a 2018–2020 health management information system/DHIS2 multi-donor project to harmonize efforts across the country, which will be updated in 2020.
- The NMCP developed a National Strategic Plan 2020–2024 with all partners, in which DHIS2 is promoted as the only way of receiving and analyzing data. All partners should appropriate DHIS2 for data analysis and use.
- There is a growing network of community health workers in DRC, but ensuring regular capture of these data into DHIS2 remains a challenge.
- SNIS canevas updates take place to correct the variables to be collected.
- Surveillance is done in two ways: (1) weekly data analysis to detect possible malaria epidemic outbreaks, and (2) monthly analysis of sentinel site data to determine trends in key malaria indicators. No support is provided for surveillance data analysis.











