


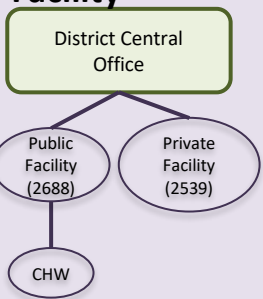


**RHIS Profile:** This document outlines the reporting structures of routine health information systems (RHIS) that include malaria data. In Cameroon, this includes a health management information system, *Système National d'Information Sanitaire (SNIS)*; parallel malaria system, *Système de Gestion des Données du PNL (SGDP)*; and an integrated disease surveillance and response system, *Surveillance Intégrée des maladies et de la Riposte (SIMR)*. DHIS2 has been adopted as the reporting platform for SNIS to enable integration and phase out of the parallel disease reporting system. As of 2018, SNIS has been scaled to most regions and programs, with some areas still undergoing a period of integration. As the SGDP continues to be phased out and integrated into the SNIS, newly revised DHIS2 forms will be introduced. Paper forms will be used at facilities where IT is not available. As integration continues, additional efforts are being made to increase levels of completeness.

**Acronyms:**

DQA: Data Quality Assurance  
 HIU: Health Information Unit  
 MPR: Monthly Progress Report  
 RMCTG: Regional Malaria Control Technical Group  
 RSHI: Regional Service of Health Information  
 SIMR: Surveillance Intégrée des maladies et de la Riposte  
 CIS: Cellule information sanitaire

	Système National d'Information Sanitaire (SNIS)	Système de Gestion des Données du PNL (SGDP)	Surveillance Intégrée des maladies et de la Riposte (SIMR)
	<b>When started:</b> 2015 <b>Scale-up status:</b> Nationwide	<b>When started:</b> 2011 <b>Scale-up status:</b> Nationwide	<b>When started:</b> 2011 <b>Scale-up status:</b> Nationwide
<b>Central</b> 	<b>Reporting format/platform:</b> DHIS2 <b>Managed by:</b> Health Information Unit (HIU) within the CIS (HMIS) Division <b>Dissemination:</b> Semi annual reports to Global Fund, monthly Epidemiologic Bulletin <b>Key Tasks:</b> Data consolidation, data analysis, feedback, creation of data use product, dissemination	<b>Reporting format/platform:</b> Microsoft Access tool- Cam Malaria Data 2.0 <b>Managed by:</b> M&E Unit of PNL <b>Dissemination:</b> Semester report, progress reports, PNL Annual Report, World Malaria Report <b>Key Tasks:</b> Data consolidation, Data quality checks, data analysis, feedback, creation of data use product, dissemination	<b>Reporting format/platform:</b> DHIS2 <b>Managed by:</b> HIU <b>Dissemination:</b> Weekly coordination meeting with partners <b>Key Tasks:</b> Data consolidation, data analysis, feedback, creation of data use product
<b>Regional</b> <ul style="list-style-type: none"> <li>• 10 regions</li> <li>• 19 health districts per region (mean)</li> </ul> 	<b>Reporting format/platform:</b> DHIS2 <b>Managed by:</b> Regional Service of Health Information (RSHI) <b>Reported to:</b> HIU <b>Reporting frequency:</b> Monthly <b>Key Tasks:</b> Data consolidation, Data analysis	<b>Reporting format/platform:</b> Microsoft Access tool- Cam Malaria Data 2.0 <b>Managed by:</b> M&E Unit of RMCTG <b>Reported to:</b> PNL <b>Reporting frequency:</b> Monthly <b>Key Tasks:</b> Data entry, data consolidation, data quality checks, data analysis, feedback	<b>Reporting format/platform:</b> DHIS2 <b>Managed by:</b> RSHI <b>Reported to:</b> HIU <b>Reporting frequency:</b> Weekly <b>Key Tasks:</b> Data validation and analysis, creation of data use product
<b>Health District</b> <ul style="list-style-type: none"> <li>• 189 health districts</li> <li>• 10 health areas per districts (mean)</li> <li>• 30 health facilities per districts (mean)</li> </ul> 	<b>Reporting format/platform:</b> DHIS2 <b>Managed by:</b> Health District Team <b>Reported to:</b> RSHI <b>Reporting frequency:</b> Monthly <b>Key Tasks:</b> Data entry, data analysis	<b>Reporting format/platform:</b> Microsoft Access tool- Cam Malaria Data 2.0 <b>Managed by:</b> District Malaria Focal Point <b>Reported to:</b> Regional Malaria Control Technical Group (RMCTG) <b>Reporting frequency:</b> Monthly <b>Key Tasks:</b> Data entry, data quality checks, feedback	<b>Reporting format/platform:</b> DHIS2 <b>Managed by:</b> District surveillance focal point <b>Reported to:</b> RSHI <b>Reporting frequency:</b> Weekly <b>Key Tasks:</b> Data entry and transmission
<b>Facility</b> 	<b>Reporting format/platform:</b> Paper-based form or DHIS 2 depending on facility; Malaria Progress Report (MPR) – all health indicators <b>Managed by:</b> Head of Health Facility <b>Reported to:</b> Health District <b>Reporting frequency:</b> Monthly <b>Key Tasks:</b> Data collection and compilation	<b>Reporting format/platform:</b> Paper-based form malaria data collection form <b>Managed by:</b> Facility Malaria Focal Point (usually Head of Health Facility) <b>Reported to:</b> Health District <b>Reporting frequency:</b> Monthly <b>Key Tasks:</b> Data collection and compilation	<b>Reporting format/platform:</b> Weekly paper form <b>Managed by:</b> Head of Health Facility <b>Reported to:</b> Health District <b>Reporting frequency:</b> Weekly <b>Key Tasks:</b> Data collection and compilation

**Table 1: Key Malaria Indicators by System**

		System		
		SNIS	SGDP	SIMR
<b>Number of malaria cases</b>				
	Suspect or fever cases	Y	Y	N
	Tested (diagnostically)	Y	Y	N
	Diagnostically confirmed (positive)	Y	Y	Y
	Clinical or presumed or unconfirmed	Y	Y	N
	Outpatient/inpatient	N/Y	Y/Y	N/N
	Uncomplicated/severe	Y/Y	Y/Y	N/N
	Age categories (e.g., <5, 5+) / Sex disaggregation (M, F)	Y/N	Y/N	N/N
	Pregnant women	Y	Y	N
<b>Number of malaria deaths</b>				
	Age categories (e.g., <5, 5+) / Sex disaggregation (M, F)	Y/N	Y/N	N/N
	Pregnant women	Y	Y	N
<b>Commodities (Availability or stock out / Consumption)</b>				
	RDT	Y/Y	Y/Y	N/N
	ACT	Y/Y	Y/Y	N/N
	Severe malaria treatment	Y/Y	Y/Y	N/N
	SP	Y/Y	Y/Y	N/N
<b>IPTp 1 / 2 / 3(+)*</b>		Y/Y/Y	Y/Y/Y	N/N/N
<b>Completeness of reporting</b>		N	Y	Y

\*Cameroon captures IPTp4+

**Data Quality Activities:**

**Routine data quality reviews/audits:**

- **SNIS:** DQA is done as part of monthly reporting. Further DQA analysis is conducted separately by each program. Supportive supervision is done by all programs within the SNIS – based on funding availability. The PNLN provides supportive supervision every quarter and semester to the regional and central levels, respectively.
- **SGDP:** Controls within the access database identify inconsistencies which are then generated into a report and sorted by level. In 2017, a DQA was conducted at the central and regional level using the WHO Excel template. Supportive supervision practices mirror those within the SNIS. Supervisions are financed by Global Fund.
- **SIMR:** DQA is done through the monthly calculation of report completeness.

**Malaria bulletin:** There is no monthly SNIS bulletin; the last SGDP epidemiologic bulletin was made in 2017; ongoing SIMR monthly bulletins exist at the regional level.

**Data availability:** PNLN, regional and district focal points have access to DHIS2. Regional and district level data managers have access to all information, but they can only edit data for their area (region or district). Partners have access through email database.

**Data use:** SNIS and SIMR data not used by PNLN due to low completeness. The lowest level of analysis is the district. SGDP data are used by PNLN for commodity forecasting and distribution, grants reporting, targeting interventions as well as the for the WHO World Malaria Report. The lowest level of analysis is the region. SIMR data is used by other programs (Expanded Program on Immunization [EPI], Directorate of Control of Diseases of Epidemics and Pandemics [DLMEP]) for targeting interventions.

**Additional Context :**

Data completeness through DHIS2 has been dramatically improved since January 2018, with the migration of malaria data transfers in DHIS2. It should be noted that PNLN has technical staff (Statisticians) in all 10 regions of the country, who are specialized in data management. Furthermore, since January 2018, the Minister of Public Health has instructed all DHIS2 staff for timely submission of routine information.

The PNLN, with Global Fund support, is conducting DHIS2 training at the central, national and district levels with the objective to achieve at least 80% of completeness. PMI is also providing support to SNIS and DHIS2 via technical assistance. Recently, additional efforts was done to make registers and reporting materials available to health facilities. Further, 1,800 health facilities (40%) have been trained on data reporting via smartphones. SNIS malaria community level reporting is captured at the health facility level and reported in the monthly facility report. At the end of each month the community health workers submit their data to the l'aire de santé where the data will be validated and compiled by health facility under the supervision of district level NGOs and implementing partners. The 2539 Private sector health facilities reporting on malaria are captured by the SNIS. There is no community level reporting within SIMR. Guidelines on DQA have been expanded with support from WHO. Principal partners are WHO and Global Fund.

Priorities for system strengthening involve the training of health facility workers via smartphone systems, production and distribution of reporting forms, harmonization of registers and training staff in data analysis and use.

Malaria surveillance guidelines exist but as a stand-alone document.