Zambia

Routine Health Information System
MALARIA REPORTING STRUCTURES
Current as of: June 2019

RHIS Profile: This document outlines the reporting structures of the routine health information systems (RHIS) that include malaria data. In Zambia, RHIS and integrated disease surveillance and response (IDSR) are used by the Ministry of Health (MoH) to report on diseases. In 2014, the RHIS was upgraded to the DHIS2 platform nationwide. All public and mission health facilities (representing 88 percent of all facilities), and some private facilities, report malaria data monthly to the Health Management Information Systems (HMIS) Group within the MoH. Zambia's National Malaria Elimination Program (NMEP) accesses malaria data from the Malaria Rapid Reporting System DHIS2 platform that it has been rolling out to include community level data. At the community level, Zambia has deployed a cadre of community health assistants (CHAs) and community health workers (CHWs) to help track cases of malaria via a mobile reporting system.

Acronyms:
MRRS: Malaria Rapid Reporting System
DHIO: District Health Information Officer
DHO: District Health Office
DHMT: District Health Management Team
DSO: District Surveillance Officer
HIA: health information aggregation
LOC: Laboratory Officer-in-Charge
M&E: monitoring and evaluation
M/NOC: Medical/Nursing Officer-in-Charge
PHO: Provincial Health Office

	RHIS	IDSR	Malaria Rapid Reporting System(MRR)
	When started: Developed 1992; 2009 DHIS 1.4; 2013 DHIS2 **Scale-up status:** Nationwide	**When started:** 2008 **Scale-up status:** Nationwide	**When started:** 2010 **Scale-up status:** 74 percent (86 districts)
National 	**Reporting format/platform:** DHIS2 **Managed by:** MoH M&E Directorate **Dissemination:** Annual statistical reports, annual and monthly reports **Key tasks:** Report analysis and aggregation; MoH M&E and Program Officers provide feedback on the data in DHIS2	**Reporting format/platform:** DHIS2 **Managed by:** Zambia National Public Health Institute **Dissemination:** Annual reports, annual statistical bulletin, policy briefs (submitted quarterly) **Key tasks:** M&E Officer manages and reviews all monthly health indicators that are submitted through DHIS2 sent by all DHMTs and the PHO. Weekly disease surveillance counts are compiled at the MoH through Disease Surveillance Officers.	**Reporting format/platform:** DHIS2 **Managed by:** NMEC Directorate **Dissemination:** weekly and monthly reports **Key tasks:** Report analysis and aggregation; Partners and Program Officers provide feedback on the data in DHIS2
Regional • 10 provinces • Average of 10 districts per province 	**Reporting format/platform:** DHIS2 **Managed by:** Senior Health Information Officer **Reported to:** DHSI2 (web based) **Reporting frequency:** Monthly **Key tasks:** Review and validate data reported in DHIS2 by districts by the 21st of the 2nd month. Provincial Senior Health Information Officers and program officers provide feedback on the data to the DHO and do final aggregation, analysis, and action related to sector interventions.	**Reporting format/platform:** Excel database for weekly; DHIS2 for monthly **Managed by:** Disease Surveillance Unit at PHO **Reported to:** MoH **Reporting frequency:** Weekly and monthly **Key tasks:** Weekly IDSR reports are further analyzed and disseminated to the national level. Provide supervisory and technical support to DHMTs for case investigation and response to weekly reports.	**Reporting format/platform:** DHIS2 **Managed by:** Senior Health Information Officer and the Malaria Elimination Officer **Key tasks:** Review and validate data reported in DHIS2 by districts
District • 116 districts • Average of 21 health facilities per district 	**Reporting format/platform:** DHIS2 **Managed by:** DHIO **Reported to:** DHIS2 (web based) **Reporting frequency:** Monthly by the 21st of the 2nd month **Key tasks:** DHIO validates data, and enters them into DHIS2, reviews and validates the data in DHIS2, and provides feedback to the health facilities.	**Reporting format/platform:** Excel database for weekly; DHIS2 for monthly **Managed by:** DHIO and DSO at the DHMT **Reported to:** Disease Surveillance Unit at PHO **Reporting frequency:** Weekly; monthly by the 21st **Key tasks:** DHMTs clean, tally, and transfer weekly reports into an aggregated IDSR report in Excel, which is then sent through email. Monthly IDSR reports are input into DHIS2 by	**Reporting format/platform:** DHIS2 **Managed by:** District Health Information Officer and the Malaria Elimination Officer **Key tasks:** Review and validate data reported in DHIS2 by Health Facilities

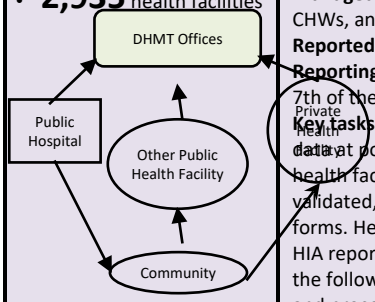
		the DHIO by the 21st. Weekly and monthly reports to PHO.	
Facility Level • **2,935** health facilities  **Community Level** **About 16,500** community health workers	**Reporting format/platform:** Paper-based HIA forms **Managed by:** Health facility staff, CHWs, and CHAs **Reported to:** DHIO **Reporting frequency**: Monthly by the 7th of the 2nd month **Key tasks:** Health personnel collect data at point of service delivery at health facilities. Data are collated, validated, and added to relevant HIA forms. Health Centre-in-Charge sends HIA reports to the DHO by 7th day of the following month for data capture and processing by DHIO. Selected health facilities (HMIS facilities) collect data at point of service delivery. Data are collated, validated, added to relevant HIA forms, and entered in DHIS2.	**Reporting format/platform:** Paper-based for monthly and weekly **Managed by:** LOC, M/NOC, clinicians, and data clerks **Reported to:** DSO at the DHO **Reporting frequency:** Weekly and monthly by the 7th **Key tasks:** LOC transfers laboratory register information for weekly and monthly reports to M/NOC, who then compiles and submits reports on suspected, confirmed, and mortality cases. Data clerks assist clinicians in tallying cases and entering them into reporting forms. Weekly meetings held at facilities to review performance, including data checks.	**Reporting format/platform:** DHIS2-reported through mobile phones **Managed by:** Health facility staff, CHAs and CHWs **Reported to:** DHIS2 **Reporting frequency**: Weekly every Monday **Key tasks:** Health personnel collect data at point of service delivery at health facilities. Data are collated validated and reported every Monday of the following week for facility data **Reporting format/platform:** DHIS2-reported through mobile phones **Managed by:** Data CHWs **Reported to:** DHIS2 Malaria Rapid Reporting System **Reporting frequency**: Monthly by the 7th of the 2nd month **Key tasks:** aggregate and report data Monthly by the 7th of the 2nd month

Table 1: Key Malaria Indicators by System

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

Indicators	System	
	HMIS/MRRS	IDSR (DHIS2/Excel)*
Number of malaria cases		
Suspect (calculated) or fever cases	Y (calculated as sum of tested and clinical)	N/Y
Tested (diagnostically)	Y	N/N
Diagnostically confirmed (positive)	Y	N/Y
Clinical or presumed or unconfirmed	Y	N/Y
Outpatient/inpatient	Y/Y	N/N
Uncomplicated/severe (inpatient used as proxy for severe malaria)	Y/N	N/N
Age categories (e.g., <5, 5+)/Sex disaggregation (M, F)†	Y (<1, 1-4, 5+)/N	N/N
Pregnant women	Y	N/N
Number of malaria deaths		
Age categories (e.g., <5, 5+)/Sex disaggregation (M, F)	Y (<1, 1-4, 5+)/N	N/N
Pregnant women	Y	N/N
Commodities		
Availability of RDT/ACT/Quinine or Inj Art/SP	Y to all but in the eLMIS	N/N
Consumption of RDT/ACT/Quinine or Inj Art/SP	Y to all but in the eLMIS	N/N
Completion of IPTp 1/2/3/4+	Y	N
Completeness of reporting	Y	N

*The IDSR in the DHIS2 does not capture malaria data. The Excel template captures suspected and confirmed malaria cases and malaria deaths with no disaggregation.

†Sex disaggregation in event capture for hospitals only

Data Quality Activities

Routine data quality reviews and audits: NMEP supports the following: monthly district malaria data review meetings; quarterly malaria supervisory visits to provinces and their respective districts; routine data quality audits, monitoring, and mentoring focused on improving planning and decision making. NMEP conducts and follows up on data quality audits in selected districts, facilities and communities. Supervisory visits for IDSR are done during disease outbreaks only to make the best use of limited resources. Weekly and monthly IDSR reports are mostly from public facilities, despite efforts to integrate private facilities.

Malaria report: Monthly reports and dashboards (DHIS2) and quarterly web-based malaria scorecards (since 2016). From 2017 onwards, monthly dashboards (from Tableau) are sent to stakeholders. This covers all the ten provinces of the country but not all the 116 districts and is expanding as the community case management expands. No current monthly malaria bulletin or newsletter. In 2010, Zambia had an ongoing quarterly monitoring and evaluation (M&E) newsletter, which provided substantial data on malaria program progress and the current epidemiologic situation. The last issue available from the Zambian National Malaria Elimination Centre (NMEC) website is Issue 6 from July 2011.

Availability of data: DHIS2 database and monthly surveillance reports are available from Communities and above.

Data use: NMEC uses HMIS data for stratification and review strategies, plan activities, and manage health inputs.

Additional Context

HMIS: To support community surveillance, additional malaria surveillance systems have been developed. The Malaria Rapid Reporting system (mobile reporting system), which uses the DHIS2 platform, has been scaled up rapidly from 2017 to 2019 countrywide, enabling quick access and response to surveillance data by decision makers. Confirmed cases and commodity data are reported to the NMEC through DHIS2. PATH's Malaria Control and Elimination Program in Africa (MACEPA), Global Fund/Churches Health Association of Zambia (CHAZ), Isdell Flowers, and the President's Malaria Initiative (PMI) have supported training and deployment of CHWs, which are providing integrated community case management nationally and reactive case detection at scale in low burden areas.

IDSR: Zambia's National Health Strategic Plan 2017-2021 proposes developing an electronic IDSR component in DHIS2 to ensure timely and accurate generation of health information for surveillance systems.

Challenges: While NMEC staff are committed to malaria elimination activities, their role is primarily to provide technical support. Provinces supervise districts which supervise health facilities which supervise community health workers. Additional support to supervising staff will improve provincial, district, and community-level activities and effectively coordinate partners.

Partners: PMI supports national-level HMIS strengthening through capacity building for central-level M&E staff for DHIS2, national-level coordination with partners such as MACEPA and CHAI on their M&E activities, M&E technical working group meetings, and technical assistance to enhance standardization and reporting of data in HMIS, including standardization of platforms for collection of community-level and active case detection data across provinces and other partner projects.

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CDC
U.S. President's Malaria Initiative
PMI Measure Malaria
MEASURE Evaluation
Republic of Zambia; Ministry of Health
National Malaria Elimination Centre

Recent updates:

Please use this space to note any changes to routine reporting in response to gaps identified from the previous versions of the RHIS profile. This may include initiatives to address data quality, reporting structures and timeliness of reporting, or supervision.

Examples:

Expansion of DHIS2 geographic coverage
Adoption or discontinued use of malaria bulletin
Updates to supervision efforts and priorities