

DEMOCRATIC REPUBLIC OF THE CONGO MALARIA PROFILE

I. ABOUT

Launched in 2005, the [U.S. President's Malaria Initiative \(PMI\)](#) supports implementation of malaria prevention and treatment measures as well as cross-cutting interventions. PMI's 2021–2026 strategy, [End Malaria Faster](#), envisions a world free of malaria within our generation with the goal of preventing malaria cases, reducing malaria deaths and illness, and eliminating malaria in PMI partner countries. PMI currently supports 24 countries in sub-Saharan Africa and three programs across the Greater Mekong Subregion in Southeast Asia to control and eliminate malaria. The Democratic Republic of the Congo (DRC) began implementation as a PMI partner country in FY 2011. Please see the [DRC Malaria Operational Plan](#) for more information on PMI's approach and investments.

II. CONTEXT

Table 1: General Demographics and Malaria Situation

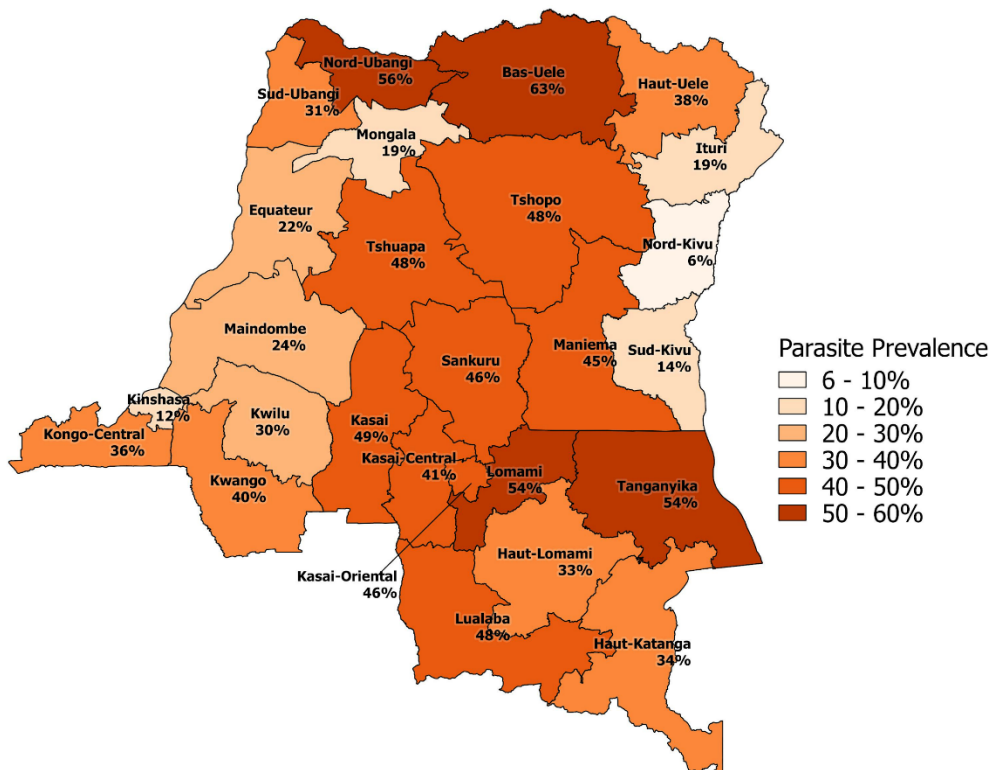
Population	116,822,000 (District Health Information Software 2 [DHIS2], 2021)
Population at risk of malaria	100% of the DRC population is at risk of malaria (DRC National Strategic Plan 2020–2023).
Malaria prevalence	Prevalence In children 6 to 59 months of age is 39 percent for rapid diagnostic tests (RDTs) and 31 percent for microscopy (Multiple Indicator Cluster Survey [MICS] 2017-2018)
Malaria incidence/1,000 population at risk	The incidence was 185 cases per 1,000 population in 2021 (National Malaria Control Program [NMCP] Annual Report 2021)
Peak malaria transmission	Approximately 97 percent of the population lives in zones with stable malaria transmission lasting 8 to 12 months per year. The 9 PMI focus provinces, which sit in the southeastern region of the country, have peak transmission for about 6-8 months from October to April.

STRATIFICATION

The DRC launched the High Burden High Impact initiative on November 14, 2019, to align interventions with malaria burden for the 10 most affected provinces (Kinshasa, Sud Kivu, Nord Kivu, Ituri, Kasai, Tanganyika, Kasai Oriental, Kongo Central, Haut Katanga, and Kasai Central). As a result of the exercise, DRC is investing in the distribution of piperonyl butoxide (PBO) insecticide-treated mosquito net (ITNs) due to widespread insecticide resistance and high malaria burden. Although some interventions, such as seasonal malaria chemoprevention (SMC) and intermittent preventive treatment of infants (IPTi), may only reach pilot phases over the next few years, the stratification exercise predicated that those interventions, along with improved case management in the high burden provinces identified, would avert an additional 14 million cases, corresponding to an estimated 28 percent reduction in cases nationwide. As transmission decreases, there will be an increased need in high quality routine surveillance data to model transmission heterogeneity within provinces.

Figure 1: Prevalence Maps

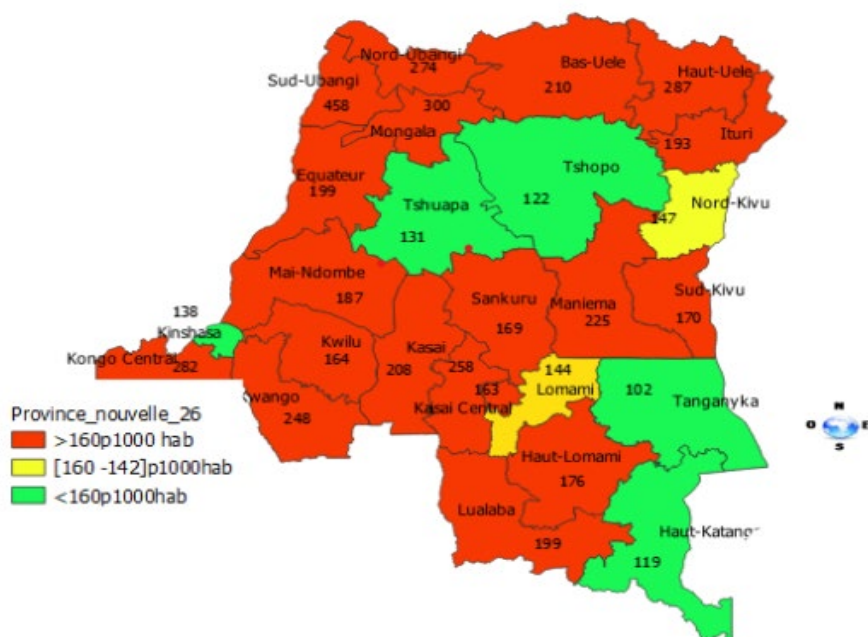
Children 6 to 59 months of age who tested positive for malaria by microscopy.



MICS, 2017–2018

Figure 2: Incidence Maps

Malaria incidence per 1,000 population.



2021 DRC NMCP Annual Report

Table 2: Malaria Parasites and Vectors

<p>Principal Malaria Parasites</p>	<p>The principal malaria parasite is <i>Plasmodium falciparum</i>, followed by <i>Plasmodium malariae</i> and <i>Plasmodium ovale</i>. <i>Plasmodium vivax</i> has also been found in DRC. (DRC National Strategic Plan 2020–2023).</p>
<p>Principal Malaria Vectors*</p>	<p><i>An. gambiae s.l.</i>, <i>An. funestus</i>, and <i>An. paludis</i> are the main malaria vectors in DRC (DRC National Strategic Plan 2020–2023); <i>An. gambiae</i> was resistant to pyrethroids. Moderate deltamethrin resistance of intensity was recorded in 8/12 sites and high in one (Kimpese). Permethrin resistance intensity was low in 5/12 and high at Kimpese. Alpha-cypermethrin resistance intensity was moderate in 6/12 and high in four sites (Kimpese, Kapolowe, Kingasani, and Mbandaka).</p>

* See **Entomological Monitoring** section of the Malaria Operational Plan for more details on vector bionomics and insecticide resistance.

COUNTRY HEALTH SYSTEM

Health System Structure, Role, and Responsibilities

The public health sector of the DRC is organized into three levels: central, provincial, and operational.

1. **The central level** has a normative role and regulatory responsibility. It defines policies, strategies, standards, and national guidelines and provides advisory support, compliance control, and monitoring of implementation in provinces. This level is headed by the Minister of Health and consists of the General Secretariat, Directorates, and departments such as National Control Programs.
2. **The provincial level** is made up of 26 provincial health divisions . They play a technical role by providing supervision and support to health zone staff by translating strategies and policies into guidance and tools to facilitate implementation at the operational level.
3. **The operational level** is charged with implementing the primary health care strategy. It comprises 516 health zones (*zones de santé*) with 393 general referral hospitals, and 8,504 health catchment areas (*aires de santé*) of which 8,266 have health centers called *formations sanitaires* (FOSA).

Health Care Delivery System

In DRC, health care is provided in both public and private structures. The first level of the public health care system consists of health centers open for basic treatment. The next level are the health centers where general physicians practice. The third level contains the referral hospitals, where citizens can receive more specialized treatment. The fourth and highest level is made up of university hospitals. In addition, 402 out of 516 health zones have 6,968 functional community care sites, which cover a population of 10,179,461 across DRC's 26 provinces.

Of the 516 health zones that exist, 393 have general reference hospitals. Faith-based organizations run 34 percent of the general reference hospitals, which are integrated into the public health system. Care-seeking and treatment in the private sector (including non-profit and faith-based facilities, for-profit clinics, pharmacies, and drug shops) is widespread. Most of the non-profit/faith-based facilities report into the routine health information system and abide by the national policies and guidelines. According to the 2013–2014 DHS, among children with fever, 49 percent report seeking care in the public sector and 47 percent in the private sector.

The Government of the DRC has made noticeable progress in increasing funds for health care. Please see the NMCP Strategic Plan section for more information.

Malaria Case Management

Malaria case management services are provided at different levels of the health care delivery system through national guidelines. PMI supports the procurement of essential diagnostic and treatment commodities, as well as the training and supportive supervision for various cadres of health workers, including lab technicians, facility-based health workers, antenatal care (ANC) providers, and community health workers (CHWs). PMI also supports a microscopy quality assurance program and therapeutic efficacy studies (TES) to monitor antimalarial resistance. At the central level, PMI supports a Case Management Technical Working Group to strengthen the coordination of malaria interventions.

All suspected malaria cases are supposed to be tested by RDT. Microscopy is recommended for cases suspected of treatment failure, to monitor parasite clearance for severe malaria cases, and for identification of parasite species. Microscopy can only be conducted at facilities with proper equipment and trained laboratory staff; this is generally limited to the referral health facility level.

Malaria in Pregnancy (MIP)

Per World Health Organization (WHO) guidelines, the national strategy includes provision of ITNs at the first ANC visit, a minimum of four doses of IPTp starting at 13 weeks gestational age, and effective case management of malaria. PMI supports the implementation of the national MIP strategy in all supported provinces, procuring sulfadoxine-pyrimethamine (SP), training and ensuring supervision of health providers. Efforts to strengthen coordination between NMCP and the Maternal and Reproductive Health program are ongoing.

Health Management Information System (HMIS)

The NMCP places an emphasis on improving the quality of data collected and fed into the DHIS2, building the capacity of health providers, and conducting periodic data reviews meetings at all levels of the health system to ensure regular data analysis and providing interactive feedback.

Supply Chain and Pharmaceutical Management System

The DRC public sector health care supply chain reflects the fragmented geography and infrastructure of the country. On the one hand there are efforts for long-term strengthening of the central system, the *Système National d'Approvisionnement en Médicaments Essentiel* (SNAME), balanced with more operational support at provincial level for storage and distribution. The national system centralizes policy and standards, including the Logistics Management Information System (LMIS) and decentralizes

procurement, storage, and distribution. The SNAME is managed by the *Programme National d'Approvisionnement en Médicaments* (PNAM) under the *Direction de la Pharmacie et du Médicament*, a unit of the Ministry of Health. On an operational level the *Fédération des Centrales d'Approvisionnement en Médicaments Essentiels* (FEDECAME) serves as a national coordinating body, with two structures under it charged with procurement — one in Kinshasa and one in Goma to cover the east and southeast. There is currently no centralized storage although a central warehouse based in Kinshasa is currently being developed. Storage and distribution are decentralized to the provinces with a network of provincial level not-for-profit associations, *centrales de distribution regionale* (CDRs). Currently, not all provinces have a CDR, with some CDRs supporting more than one province, and the capacity of each CDR varies significantly. PMI contracts with CDRs for storage and distribution in PMI-supported provinces. Distribution to zones and/or health facilities is done quarterly; however, in some instances, difficulties in access, in particular during the rainy season, can mean less frequent distribution. PMI-procured products are delivered to each of eight PMI-supported provinces and in some cases (ITNs for non-routine purposes) to Kinshasa. The CDRs typically deliver to the health zone level, apart from five zones in each of two provinces (Haut Katanga and Lualaba) where they are delivered directly to health facilities by private sector third-party logistics providers. CHWs collect products from their supervisory health facility.

Forecasting and supply planning is done at provincial level and forecasts are then rolled up to the national level with separate supply plans for each province.

Since 2018, the PMI/DRC team has been supporting the establishment of an LMIS in DRC. The national HMIS, known as the SNIS, is a DHIS2-based platform used for collecting and entering logistics data from health facilities at all levels. Data — including stock levels and quantities received and issued — are manually recorded at health facility level and then entered into the electronic system at zones. The SNIS is complemented by an interoperable InfoMED system, which captures SNIS data and presents it for decision-making through a variety of reports and decision support graphics. The CDR's warehouse management system data are also captured in InfoMED. While the quality of logistics data is still somewhat uncertain, as the timeliness, completeness, and quality of logistics data reported through DHIS2 and analyzed through InfoMED improves, the use of these data for decision-making increases at all levels of the health system.

OTHER CONTEXTUAL INFORMATION

DRC has continued to struggle with corruption, weak institutions, and an insufficient human capacity and basic infrastructure. Due to the DRC's immense size and development challenges, the USAID Mission must make strategic choices, focus

resources on key issues and geographic areas for maximum impact. PMI operates in the conflict-affected areas of eastern DRC, including South Kivu, northern Katanga, and parts of Kasai Orientale.

The USAID Mission continues to focus on strengthening the government’s ability to provide and regulate services equitably, thereby deepening its social contract with citizens, increasing their trust, and promoting transparency. USAID also prioritizes greater access to basic services, such as health care and education, and demands institutional accountability, to expand and diversify access to economic opportunities.

Internally Displaced Persons (IDPs) and Refugees

The DRC remains home to one of the more complex and longer humanitarian crises in the world, with tremendous impacts on displaced populations, food insecurity, and problematic management of epidemics. According to the 2022 DRC humanitarian response plan, 27 million people are in need of assistance this year, almost 7.4 million more than in 2021. In addition to being one of the highest malaria burden countries, the United Nation Foundation found that DRC is among the countries with the largest IDPs (United Foundation Report 2022).

Targeting IDPs and refugees is important to accelerate the reduction of malaria mortality and morbidity efforts. Most of the refugees are located in the Northern provinces, while IDPs are seen throughout the country. As part of a rapid response, the Bureau of Humanitarian Affairs provides IDPs with a package of items valued at \$200–\$250 per family, including a bed net. In addition, these populations benefit from mass campaign distribution of ITNs. They also benefit from PMI-supported malaria case management services in health facilities, in line with national guidelines, at subsidized costs in five provinces (Sud Kivu, Tanganyika, Lualaba, Kasai central, and Kasai oriental).

III. NMCP STRATEGIC PLAN

The DRC’s National Strategic Plan 2020–2023 aims to improve the DRC population’s health status by reducing the human and socio-economic burden due to malaria. Its overall objective is to reduce malaria related morbidity by 40 percent and mortality by 50 percent from 2018 levels, particularly among mothers, newborns, children, and adolescents, by strengthening the investment for malaria prevention and treatment, epidemiological surveillance, and by taking the advantage of innovation and research, monitoring the antimalarial drugs TES, setting up a plan for managing resistance to insecticides, and eliciting strong leadership and action from the DRC Government.

Specific objectives to be achieved by 2023 are the following:

- *Strengthen the package, coverage, and quality of essential malaria-related services and care in health facilities and at the community level:* Implement vector control activities with ITN distribution, treatment of breeding sites; ensure malaria chemo-prevention with intermittent preventive treatment for pregnant women (IPTp) in pregnant women and SMC (planned for Haut-Katanga and Lualaba, with a pilot in a rural and urban health zone, prior scaling up), and IPTi in three provinces (Kwango, Kongo Central, and Kwilu) during the first year of the new funding model (NMF3), and then gradually increase the coverage to cover all 22 eligible provinces within five years; test with RDTs or microscopy and treating all malaria confirmed cases with artemisinin-based combination therapy (ACTs) — artesunate-amodiaquine (ASAQ), artemether-lumefantrine (AL) or atovaquone-proguanil; improve the supply of care and services at the referral level (secondary and tertiary health facilities); improve the coverage of epidemiological surveillance and monitoring and evaluation activities, and expand integrated community case management (iCCM) activities and malaria control activities in the community.
- *Strengthen community approaches to social and behavior change in the fight against malaria:* Collaborate with the *Direction des Soins de Santé Primaires* to make functional and strengthen the capacities of community participation structures in the planning and implementation of malaria control activities, strengthen the behavior change communication for malaria control, and promote the community use of health services.
- *Improve malaria-related skills of at least 60 percent of health workers in at least 50 percent of health facilities at all levels and motivate health workers with incentives:* provide training and refresher training in malaria control services updated guidelines, provide integrated supervision of malaria control services, and organize a quality assurance and control system.
- *Improve the availability of quality malaria drugs, laboratory reagents, and other products:* Make antimalarial drugs and specific quality commodities available, ensure malaria commodities stocks management and distribution, reporting of adverse effects of antimalarial drugs, and provide health facilities with specific equipment for malaria control.
- *Improve the availability and flow of quality malaria-related health information:* Improve data timeliness and consistency, regular data analysis and validation at operational and central level, conduct data audits and routine data quality assessment, integrate malaria control data from private FOSAs into the SNIS, and harmonize malaria control data sources.

- *Increase funding for malaria control activities by at least 30 percent and reduce the cost of accessing care by at least 50 percent:* Increase the government's funds allocation to malaria care activities, including in the communities; engage communities in financial risk-sharing for malaria care; and reduce the household burden of financing malaria care.
- *Strengthen malaria control management and leadership at all levels to ensure the availability and use of quality health services:* Strengthen the institutional and technical capacities of the NMCP, benefit from mobilizing leadership from the NMCP, increase material and financial resources for malaria control, and define priorities for actions in malaria control research.
- *Strengthen multi-sectorality by involving other sectors in implementing malaria control strategies:* Improve multi-sectoral collaboration.

IV. KEY MALARIA DATA

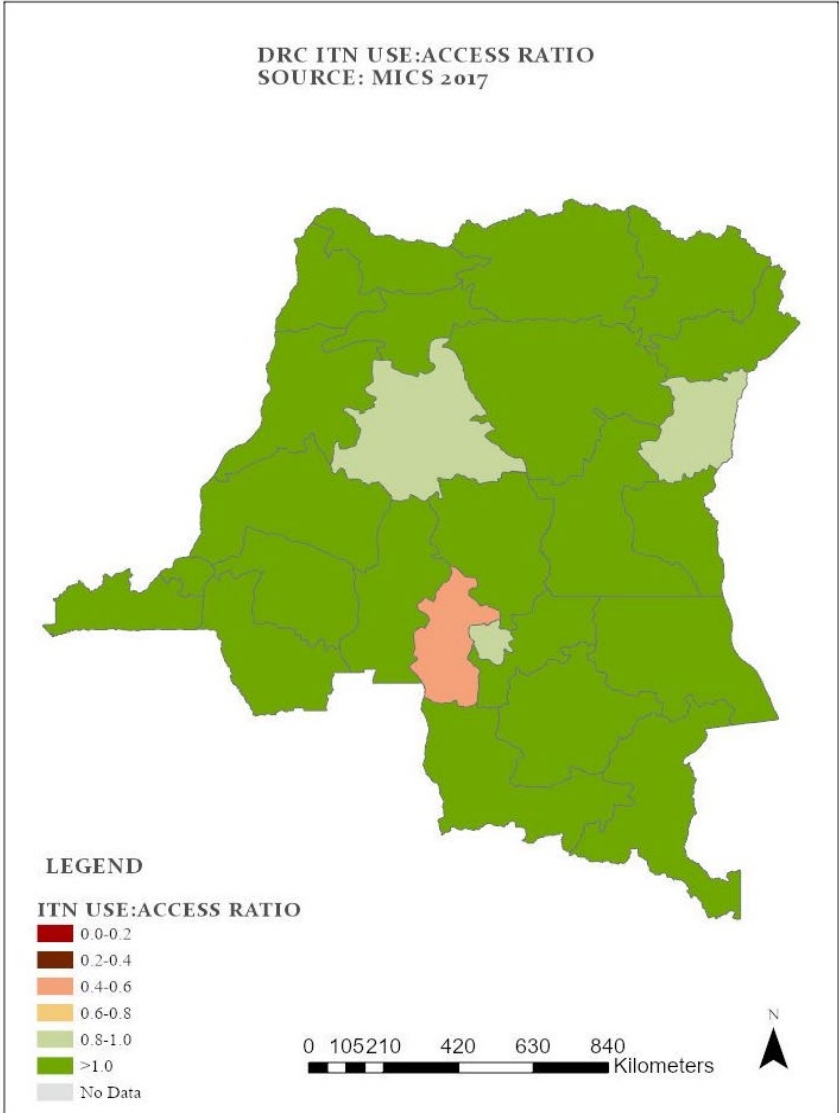
EVOLUTION OF KEY SURVEY-BASED MALARIA INDICATORS

Table 3: Key Survey Indicators

Indicator	2010 MICS	2013/14, DHIS	2017/18 MICS
% Households with at least one ITN	51	70	63
% Households with at least one ITN for every two people	N/A	25	26
% Population with access to an ITN	30	47	44
% Population that slept under an ITN the previous night	N/A	50	48
% Children <5 years of age who slept under an ITN the previous night	38	56	51
% Pregnant women who slept under an ITN the previous night	43	60	52
% Children <5 years of age with a fever in the last two weeks for whom advice or treatment was sought	60	55	46
% Children <5 years of age with a fever in the last two weeks who had a finger or heel stick	17	19	22
% Children receiving an ACT among children <5 years of age with a fever in the last two weeks who received any antimalarial drug	2	17	42
% Women who attended 4 ANC visits during their last pregnancy	21	15	31
% Women who received three or more doses of IPTp during their last pregnancy in the last two years	N/A	6	13
Children <5 years of age mortality rate per 1,000 live births	158	104	70
% Children <5 years of age with parasitemia by microscopy	N/A	23	31
% Children <5 years of age with parasitemia by RDT	N/A	31	39

DHS: Demographic and Health Survey; MICS: Multiple Indicator Cluster Survey; MIS: Malaria Indicator Survey

Figure 3: ITN Use:Access Ratio Map



Evolution of Key Malaria Indicators Reported through Routine Surveillance Systems

Community-level data are integrated into the broader HMIS, and these numbers are inclusive of both community- and health facility-level data.

Table 4.1: Evolution of Key Malaria Indicators Reported through Routine Surveillance Systems in DRC (All Provinces)

Indicator	2017	2018	2019	2020	2021
# All-cause patient consultations	42,027,214	47,542,502	52,363,520	55,721,091	54,107,028
# Suspect malaria cases ¹	26,679,813	28,692,269	32,090,801	33,022,283	32,255,995
# Patients receiving diagnostic test for malaria ²	24,405,948	25,486,440	29,162,093	30,199,299	29,820,807
Total # malaria cases ³	22,183,706	23,250,194	25,093,356	25,673,369	25,289,018
# Confirmed cases ⁴	17,871,314	19,174,961	21,646,125	22,332,379	22,027,083
# Presumed cases ⁵	4,312,392	4,075,233	34,47,231	3,340,990	3,261,935
% Malaria cases confirmed ⁶	80.6%	82.5%	86.3%	87.0%	87.1%
Test positivity rate (TPR) ⁷	74.5%	77.2%	76.0%	75.1%	74.5%
Total # children <5 years of age malaria cases ⁸	8,681,318	9,290,693	10,587,221	10,735,450	9,970,900
% Cases in children <5 years of age ⁹	39.1%	40.0%	42.2%	41.8%	39.4%
Total # severe cases ¹⁰	1,819,961	1,905,162	2,061,486	2,154,798	2,126,079
Total # malaria deaths ¹¹	24548	13,585	13,094	18,788	22,368
# Facilities reporting ¹²	15762	16,325	16,902	17657	19054
% Data completeness ¹³	87.0%	90.2%	93.5%	97.9%	98.5%

[See notes below Table 4.2.]

Table 4.2: Evolution of Key Malaria Indicators Reported through Routine Surveillance Systems (in DRC PMI-Supported Provinces)

Indicator	2017	2018	2019	2020	2021
# All-cause patient consultations	14,954,305	16,376,722	17,152,043	19,597,326	18,923,134
# Suspect malaria cases ¹	9,579,600	9,969,888	10,288,062	11,283,675	10,816,464
# Patients receiving diagnostic test for malaria ²	8,759,179	8,754,041	9,119,643	10,530,223	9,743,854
Total # malaria cases ³	8,440,941	8,268,799	8,472,772	9,201,918	8,756,058
# Confirmed cases ⁴	6,511,140	6,550,380	6,885,024	8,095,396	7,370,452
# Presumed cases ⁵	19,29,801	1,718,419	1,587,748	1,106,522	1,385,606
% Malaria cases confirmed ⁶	77.1%	79.2%	81.3%	88.0%	84.2%
Test positivity rate (TPR) ⁷	75.7%	77.8%	78.2%	78.2%	77.4%
Total # children <5 years of age malaria cases ⁸	3,437,230	3,344,464	357,6011	4,167,305	3,636,085
% Cases in children <5 years of age ⁹	40.7%	40.4%	42.2%	45.3%	41.5%
Total # severe cases ¹⁰	632,064	721,110	763,371	807,285	792,465
Total # malaria deaths ¹¹	7,109	5707	5,334	5,812	7,175
# Facilities reporting ¹²	5,462	5565	5,658	6,000	6,526
% Data completeness ¹³	86.1%	88.0%	89.5%	95.3%	96.9%

1 Number of patients presenting with signs or symptoms possibly due to malaria (Any patient with fever or history of fever in the last 24 hours, showing no signs of the severe form of disease); 2 RDT or microscopy, all ages, outpatient and inpatient; 3 Total reported malaria cases; all ages, outpatient and inpatient, confirmed and unconfirmed cases; 4 Diagnostically confirmed; all ages, outpatient and inpatient; 5 Clinical/presumed/unconfirmed; all ages, outpatient and inpatient; 6 # confirmed cases divided by total # cases; 7 Confirmed cases divided by # patients receiving a diagnostic test for malaria (RDT or microscopy); 8 Outpatient and inpatient, confirmed and unconfirmed; 9 Total # children <5 years of age cases divided by total # of cases; 10 Any patient with fever or history of fever in the past two days with at least one sign of severity and/or dysfunction of at least one vital organ and with a positive RDT or GE); 11 All ages, outpatient, inpatient, confirmed, and unconfirmed; 12 Total # of health facilities reporting data into the HMIS/DHIS2 system that year; 13 # monthly reports from health facilities divided by # health facility reports expected (average for the calendar year)

Table 5.1: Disaggregated Community-Level Data through Routine Surveillance Systems in DRC (All Provinces)

Indicator	2019	2020	2021
# Patients receiving diagnostic test for malaria from a CHW	2,180,918	2,162,408	2,108,595
Total # of malaria cases reported by CHWs ¹	1,672,171	1,653,173	1,600,758
% of CHW reported cases (among total malaria cases) ²	6.7%	6.4%	6.3%

1 Includes all ages, confirmed and unconfirmed.

2 Total # malaria cases reported by CHWs/Total # malaria cases in previous table.

Table 5.2: Disaggregated Community-Level Data through Routine Surveillance Systems in DRC PMI-Supported Provinces

Indicator	2019	2020	2021
# Patients receiving diagnostic test for malaria from a CHW	294,928	358,085	296,944
Total # of malaria cases reported by CHWs ¹	241,725	293,221	240,068
% of CHW reported cases (among total malaria cases) ²	2.9%	3.2%	2.7%

1 Includes all ages, confirmed and unconfirmed.

2 Total # malaria cases reported by CHWs/Total # malaria cases in previous table.

V. OTHER IMPLEMENTATION INFORMATION

Table 6: Summary of Completed Therapeutic Efficacy Studies

Year	Site	Treatment arm(s)	Efficacy (PCR-corrected adequate clinical and parasitological result) for each drug at each site
2017-2018 ¹	Kabondo	AL	98% (95, 100)
2017-2018 ¹	Kapolowe	AL	94% (89, 99)
2017-2018 ¹	Kimpese	AL	96% (92, 100)
2017-2018 ¹	Mikalayi	AL	86% (79, 93)
2017-2018 ¹	Rutshuru	AL	96% (92, 100)
2017-2018 ¹	Kabondo	ASAQ	100% (100, 100)
2017-2018 ¹	Kapolowe	ASAQ	100% (100, 100)
2017-2018 ¹	Kimpese	ASAQ	99% (98, 100)
2017-2018 ¹	Mikalayi	ASAQ	96% (91, 99)
2017-2018 ¹	Rutshuru	ASAQ	91% (85, 98)
2017-2018 ¹	Kabondo	DP	100% (99, 100)
2017-2018 ¹	Kapolowe	DP	93% (87, 99)
2017-2018 ¹	Kimpese	DP	100% (99, 100)
2017-2018 ¹	Mikalayi	DP	84% (75, 93)
2017-2018 ¹	Rutshuru	DP	95% (90, 100)

PCR = polymerase chain reaction; AL = artemether-lumefantrine; ASAQ = artesunate-amodiaquine; DP = dihydroartemisinin-piperaquine

For ACTs with a failure rate > 10% (including both upper and lower bounds of the 95 percent confidence interval), alternative ACTs should be considered or, at the very least, confirmatory studies should be performed.

¹ Moriarty LF, Nkoli PM, Likwela JL, Mulopo PM, Sompwe EM, Rika JM, Mavoko HM, Souza S, Jones S, Ntamabyaliro NY, Kaputu AK, Lucchi N, Subramaniam G, Niang M, Sadou A, Ngoyi DM, Tamfum JJM, Schmedes SE, Plucinski MM, Chowell-Puente G, Halsey ES, Kahunu GM. Decreased efficacy of artemisinin-based combination therapies in Democratic Republic of the Congo and investigation of molecular markers of antimalarial resistance. *Am. J. Trop. Med. Hyg.*, 105(4), 2021, pp. 1067–1075

VI. KEY POLICIES

Table 7: Policies in DRC

<u>National Strategic Plan</u> (January 2020)	
<u>National Surveillance, Monitoring, and Evaluation Plan</u> (January 2020) (Integrated in the National Strategic Plan)	
<u>National Digital Health Strategy</u> (2020–2024)	
National Social Behavior Change/Communication Strategy (February 2022)	
National Supply Chain Strategy/Master Plan (2017-2020)	
National Vector Control Strategy and/or Integrated Vector Management Plan (May 2022)	
Malaria Case Management Policy (May 2021)	
What is/are the first-line treatment(s) for uncomplicated <i>P. falciparum</i> malaria*?	ASAQ, AL, Artesunate-Pyronaridine (Pyramax) Note: Pyramax is approved for use in DRC but has not yet been procured by the government or donors.
What is/are the second-line treatment(s) for uncomplicated <i>P. falciparum</i> malaria*?	Quinine-clindamycin
What is/are the first-line treatment(s) for uncomplicated <i>P. vivax</i> malaria?	N/A
What is the first-line treatment for severe malaria?	Injectable Artesunate
In pregnancy, what is the first-line treatment for uncomplicated <i>P. falciparum</i> malaria in the <u>first trimester</u> ?	Quinine tablet + Clindamycin for 7 days (Use of ACTs in first trimester is not currently recommended in DRC.)
In pregnancy, what is/are the first-line treatment(s) for uncomplicated <i>P. falciparum</i> malaria in the <u>second and third trimesters</u> ?	First-line ACTs (see above)
What is/are the first-line treatment(s) for <i>P. vivax</i> malaria during pregnancy?	N/A
In pregnancy, what is the first-line treatment for severe malaria?	1st trimester: Quinine infusion followed by quinine tablets combined with clindamycin hydrochloride 2nd & 3rd trimester: Injectable artesunate followed by ACT

Is pre-referral treatment of severe disease recommended at peripheral health facilities? If so, with what drug(s)?	Yes, rectal artesunate or intramuscular injectable artesunate
Is pre-referral treatment of severe disease with rectal artesunate recommended for CHWs?	Yes (though implementation is inconsistent)
Community Health Policy	
What is the # of CHWs currently providing iCCM?	The DRC currently has 4,364 CHWs providing services in 3,115 community care sites.
What is the country's target for number of CHWs providing iCCM?	The country's estimated target for CHWs is 43,180. Country norms recommend 2 CHWs per community care site with an estimated need for 21,590 sites, but often there is only one CHW per site.
What percent of the country's target is met?	10%
Does the country have a policy that enables the routine, regular payment of salaries/stipends for CHWs?	No
Do CHWs have the authority to test and treat all ages for malaria?	Yes (though this is not operationalized in all areas)
Prevention of Malaria in Pregnancy Policy (2017-2020)	
At what gestational age is the first dose of IPTp-SP to be given to pregnant women according to the national guidelines for malaria and MCH?	Between 13th and 16th weeks
Do the national ANC guidelines reflect the WHO 2016 recommendation of 8 ANC scheduled contacts (plus one additional contact for early initiation of IPTp at 13-16 weeks)? If not, how many ANC contacts are recommended?	Yes
What is the status of training ANC providers on the WHO recommended 8+ contacts?	ANC Providers have been and continue to be trained on WHO recommended 8+ contacts.
Have HMIS/DHIS2 and ANC registers been updated to include 8+ contacts?	No. Existing HMIS/DHIS2 tools collect only data for 4 contacts

Are IPTp data collected as single months where the January 2022 data represent the number of doses administered in January 2022, or cohort data, representing the cumulative data from pregnancies which began 6 months prior?	Providers collected IPTp data as single months where the January 2022 data represent the number of doses administered in January.
Is ANC/IPTp provided by facility staff conducting ANC outreach to communities?	Yes
Can CHWs deliver IPTp and if so, which specific cadres and beginning with which dose?	A pilot has been implemented in the three health zones of three Global Fund supported provinces. Recommendations have been made to go to scale, but the guidelines haven't yet been updated.

VII. PARTNER LANDSCAPE

Table 8 below summarizes contributions by key partners and the government. The DRC government invests substantial funding into the national-to-local infrastructure and service delivery that benefits malaria programs and many others. However, it is not always possible to attribute funding for malaria specifically from the government.

The Against Malaria Foundation (AMF) has signed an agreement with the DRC Ministry of Health for a total of 53.3 million bednets for provincial mass campaigns between 2020–2022 (17.2 million bednets for 2020, 23.2 million for 2021, and 12.9 million for 2022). AMF's commitment, which was recently extended through calendar year 2023, is critical to enable DRC to meet the ITN needs to achieve universal bednet coverage to reduce malaria transmission in the DRC.

Table 8: Partner Landscape

Partner	Key technical interventions	Geographic coverage	Funding amount or in-kind contribution	Timeframe
Global Fund / SANRU	<ul style="list-style-type: none"> • Vector Control • Case management • Support for nationwide mass campaign in 2021 • Procurement of national needs for SP • Monitoring and evaluation and research • Cross-cutting human Training and supportive 	National for ITN campaign 17 of 26 provinces	\$125, 267 478	Current grant covers 2021 to 2023
Global Fund /CAGf	<ul style="list-style-type: none"> • Case investigation • Sentinel site supervision • entomological investigation • Sentinel site review 	Country-wide	\$8,380 000	Current grant covers 2021 to 2023
AMF	<ul style="list-style-type: none"> • Procurement of ITNs 	All provinces	\$32,000 000	N/A
WHO	<ul style="list-style-type: none"> • Advocacy campaign 	Country-wide	\$328,000	2022 - 2024
PATH	<ul style="list-style-type: none"> • Training • Surveillance, Monitoring 	Haut Katanga	\$1,198 000	Ongoing
CHAI	<ul style="list-style-type: none"> • Develop and disseminate national directive of entomological surveillance and a system of electronic reporting • Develop entomological training material and training selected health facilities in entomological surveillance 	26 provinces and selected health facilities	~\$173,000	N/A
London School of Tropical Medicine and Hygiene (LSTM)	<ul style="list-style-type: none"> • Entomological monitoring • Larval sites in Iwiro region and mining site of Luhihi, Feeding behavior 	Sud Kivu Province	~\$74,000	Not yet started

Partner	Key technical interventions	Geographic coverage	Funding amount or in-kind contribution	Timeframe
	on primates and sensitivity to plant products			
NIH/KSPH/University of North Carolina	<ul style="list-style-type: none"> Longitudinal study of vectors in Maluku Health Zone 	N/A	N/A	N/A
MITTSUI Corporation	<ul style="list-style-type: none"> Test on new insecticides 	N/A	N/A	N/A
Tropical Medicine,/Universite de Mbandaka	<ul style="list-style-type: none"> Monitoring of vector population in Mbandaka, Monitoring of insecticide resistance of An. coluzzi in Kindele 	Mbandaka Kindele	N/A	N/A
Tenke Fungurume Mining	<ul style="list-style-type: none"> IRS, larval surveillance and insecticide resistance monitoring and aerial spraying, ITN distribution 	Health Zone Fungurume	\$215790	ongoing
Oxford University	<ul style="list-style-type: none"> Humbug: Developing mosquito management tools for developing countries 	Kinshasa	N/A	N/A
Government of DRC	<ul style="list-style-type: none"> Vector Control Case management Support for nationwide mass campaign in 2021 Procurement of national needs for SP Monitoring and evaluation and research Cross-cutting human training 	Country-wide	1,427,000	Ongoing