

LAST UPDATED: 06/30/2023

## SENEGAL 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 27 countries in Sub-Saharan Africa and three programs across the Greater Mekong Subregion in Southeast Asia to control and eliminate malaria. Senegal began implementation as a PMI partner country in FY 2008. Please see the [Senegal Malaria Operational Plan](#) for more information on PMI's approach and investments.

### II. CONTEXT

**Table 1. General Demographics and Malaria Situation**

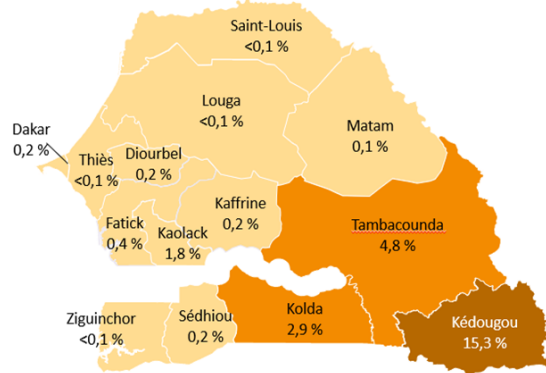
Population	18,275,743 (National Statistics and Demography Agency, 2023)
Population at risk of malaria	100% (World Malaria Report, 2022)
Malaria prevalence	1% national (Continuous DHS [cDHS], 2017) 5% KKT regions (MIS, 2020–2021)
Malaria incidence/1,000 population at risk	31.2 (Senegal Annual Malaria Epidemiological Bulletin, 2021)
Peak malaria transmission	September–December

# STRATIFICATION

Stratification exercises have been completed, but the resulting reports and maps are unavailable.

Figure 1. Prevalence Maps

*Percent children 6-59 months who tested positive for malaria by RDT (2017 cDHS)*



*Percent children 6-59 months who tested positive for malaria by RDT (2020 MIS) at health district level*

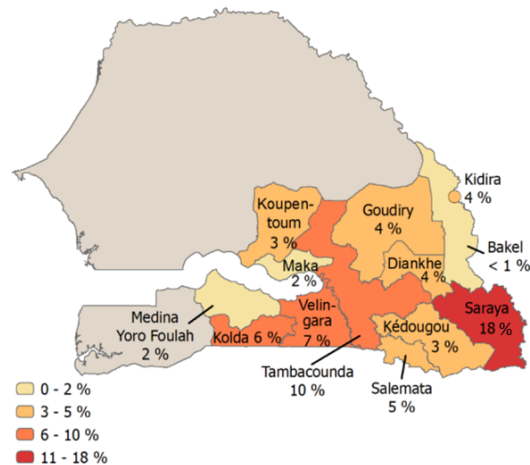
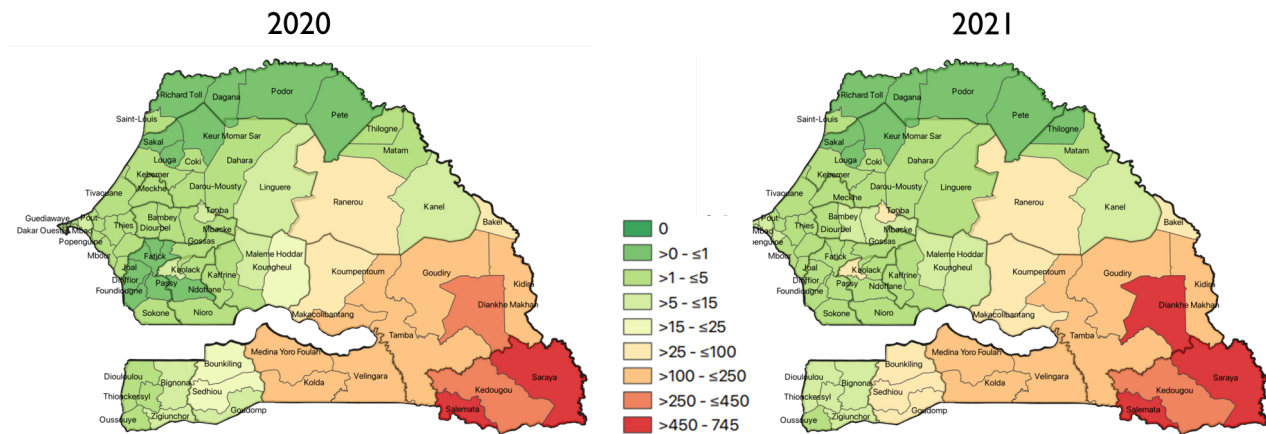


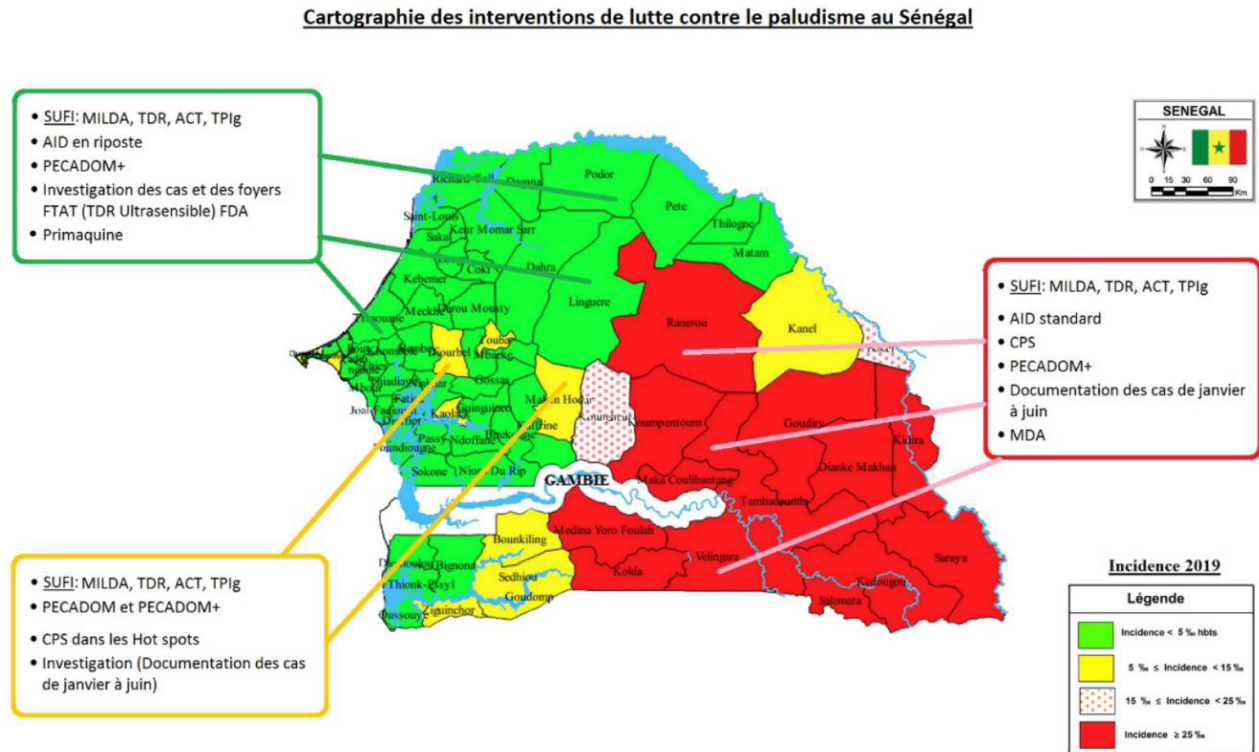
Figure 2. Incidence Maps (Annual 2021 Malaria Epidemiological Bulletin)



Data Source: Annual 2021 Senegal Malaria Epidemiological Bulletin

RDT = rapid diagnostic test.

**Figure 3. Senegal NMCP-Supported Malaria Interventions Across Transmission Zones, 2019**



Green region activities: Insecticide-treated mosquito nets (ITNs), RDTs, artemisinin-based combination therapies (ACTs), intermittent preventive treatment of malaria in pregnancy (IPTp), indoor residual spraying (IRS), PECADOM+, case investigations, primaquine

Yellow region activities: ITNs, RDT, ACTs, IPTp, PECADOM and PECADOM+, seasonal malaria chemoprevention (SMC) in areas of high transmission, case investigations

Red region activities: ITNs, RDTs, ACTs, IPTp, IRS, SMC, PECADOM+, case reporting, mass drug administration

**Table 2. Malaria Parasites and Vectors**

<b>Principal malaria parasites</b>	<i>Plasmodium falciparum</i> (~98%)
<b>Principal malaria Vectors<sup>1</sup></b>	<i>Anopheles gambiae</i> sensu strictu and <i>An. coluzzii</i> are predominant in the humid zones of the south, and <i>An. arabiensis</i> is predominant in the dry seven zones of the north and central regions. Other vectors include <i>An. melus</i> , <i>An. funestus</i> , <i>An. nili</i> , and <i>An. pharoensis</i>

<sup>1</sup> See entomological monitoring section of the MOP for more details on vector bionomics; see the insecticide resistance and indoor residual spraying section for details on residual efficacy.

## COUNTRY HEALTH SYSTEM

Administratively, Senegal is divided into 14 regions and 46 departments. The administration of the health sector is structured along three levels: central (Ministry of Health and Social Affairs,), intermediate (regions), and peripheral (79 health districts, which may be all or part of a department). Health districts are led by the district chief medical officer who, together with the district health management team, oversees care, treatment, and prevention activities. Each health district has at least one health center (a secondary health facility) and health posts staffed by a nurse or midwife, which generally serves as the first point of care for the population. Health posts oversee a number of community-level health huts (see below). Tertiary facilities include hospitals that provide specialized care. These hospitals, which are found at the regional, departmental, and communal level, typically cover approximately 150,000 residents. There are also seven national hospitals in Dakar. In 2021, there were a total of 1,983 health facilities in Senegal, including 1,798 health posts, 147 health centers, and 38 hospitals.

The public health care system is complemented by a growing private sector primarily (70 percent) concentrated in urban areas.

Although not a formal part of the health system, Senegal's health care pyramid rests on a foundation of approximately 2,283 functional health huts (in 2022) that are established and managed by local communities and cover approximately 50 percent of the country's population. A functional health hut is defined as one that has a trained community health worker (literacy is preferred but not required), regular supervision by the chief nurse of the health post, and the basic structure and equipment needed to provide services. Malaria case management has been offered at health huts for many years, and free RDTs and ACTs were introduced in 2008. Community health workers (CHWs) offer an integrated package of preventive and curative services or referral for more advanced medical care. Additional community health staff includes *matrones* (trained birth attendants), and *relais* (health educators and communicators).

Since 2008, a new type of health worker, the village malaria worker (*dispensateur de soins à domicile*, or DSDOM), has been providing testing with RDTs and treatment with ACTs through the home-based management of malaria program (*prise en charge à domicile*, or PECADOM), now active in 4,143 villages nationwide, where health services are difficult to access (as of 2021). Management of pneumonia and diarrhea were added to the package in 2012. Also in 2012, an active model of the home-based management of malaria was implemented, called PECADOM Plus. During the high malaria transmission period, the community health worker visits every household in the village on a weekly basis, actively looking for suspected cases and providing RDT diagnosis and subsequent treatment or referral, as needed. In 2021, PECADOM Plus was implemented in the 16 districts in the south and southeast areas of the country, and the plans of the National Malaria Control Program (NMCP) to expand to central districts, for a total of 40 districts. The NMCP has also developed a customized PECADOM

Plus model for informal Koranic schools, called *PECADaara*, to address a high number of cases among their residential students, considered a vulnerable population. By 2021, 320 *PECADaara* sites were active in seven districts. The NMCP further developed other customized PECADOM models, such as *PECAEcole* for conventional schools and *PECAFerlo* for northern elimination areas, which specifically includes nomadic pastoralists (transhumants) as a population at risk.

Both health huts and DSDOMs are linked to their supervising health post by the commodity supply chain and the health information system (i.e., they receive supplies from and submit data to the health post). In 2014, the Ministry of Health adopted the National Strategic Plan for Community Health to improve linkages between the community level and the formal health system, to increase ownership by communities, and to improve coordination of activities to make Senegal a model for community health.

The health system has a network of regional pharmacies that supply the districts of the corresponding regions. These regional pharmacies receive supplies from the national pharmacy.

There are three reporting systems in Senegal that include malaria data: the health management information system (HMIS); integrated disease surveillance and response system (IDSR); and the malaria surveillance, monitoring, and evaluation system. The HMIS is on the District Health Information System 2 (DHIS2) platform. The reporting system uses a combination of paper registers for collecting information and electronic entry and reporting through DHIS2 from facility to district to the national level. The NMCP widely disseminates routine bulletins through email that include information on the coverage of intervention activities (e.g., SMC and vector control), entomological monitoring activities, and epidemiologic data from sentinel sites. There is also an annual malaria epidemiological bulletin that summarizes key indicators, routine and surveillance data, outcomes, and coverage of key antimalarial campaigns.

## **OTHER CONTEXTUAL INFORMATION**

Senegal's health system is frequently debilitated by health workers' and data strikes. In 2022, a nationwide strike by the nurses and midwives association significantly impacted access to health services and health data.

### III. NMCP STRATEGIC PLAN

Senegal's goal is to reach elimination by 2030 as stated in the country's 2021–2025 National Strategic Plan (NSP). With this vision in mind, three main objectives are stated in the current NSP:

- Reduce the incidence of malaria by at least 75 percent compared with 2019;
- Reduce malaria mortality by at least 75 percent compared with 2019; and
- Interrupt local transmission in at least 80 percent of eligible districts.

To achieve these objectives, several areas of implementation have been identified, including vector control, malaria in pregnancy, drug-based prevention, surveillance and response, case management, and program management. The plan includes the following targets:

- Achieve 80 percent of the population sleeping under an insecticide-treated net (ITN);
- Protect 90 percent of the population with indoor residual spraying in target areas;
- Protect at least 80 percent of pregnant women with intermittent preventive treatment of malaria in pregnancy (IPTp);
- Protect 98 percent of children from 3 to 120 months of age with seasonal malaria chemoprevention in the target zones;
- Introduce molecular analyses in the investigations of all districts in pre-elimination zones;
- Ensure MDA coverage of 95 percent of the population in the areas of concern;
- Have at least 80 percent of embassies, airports, hotels, and port officials share information on traveler malaria chemoprophylaxis according to NMCP guidelines to reinforce the drug prevention strategy for travelers coming into the country;
- Detect, within one week, 100 percent of epidemics and emergencies with an early warning system; and
- Control 100 percent of epidemics and emergencies within one week of detection.

The NSP also includes some innovative approaches, especially to reach high-risk populations in specific zones (e.g., nomadic areas, mining sites, and koranic schools), digitization of community data, an MDA pilot project in Tambacounda, and the creation of integrated coordination units to strengthen surveillance and response.

In addition, Senegal developed a malaria elimination acceleration action plan for 2022–2025 to boost the NSP's elimination objective. In the short term, the elimination objectives will be aligned with those of the NSP 2021–2025, including interrupting malaria transmission in at least 80 percent of eligible districts and reducing malaria morbidity and mortality by at least 75 percent compared with 2019. Over the long term (2030), the country plans to move toward an effective interruption of local transmission throughout the country. Surveillance in particular will be strengthened, and all public and private structures at the community level will adhere to

the case notification and investigation in malaria elimination settings. A phasing approach is being developed to illustrate the targets through the 2030 elimination threshold.

As part of the action plan, Senegal is implementing malaria case investigation and response in areas with an incidence of less than 5 cases per 1,000 population. In response, the country uses focal test and treat or focal drug administration approaches, preferably with dihydroartemisinin piperaquine, plus single low-dose primaquine. In addition, the Senegal NMCP is introducing mass drug administration with dihydroartemisinin-piperaquine plus single low-dose primaquine in select districts with moderate transmission to accelerate the reach of pre-elimination status.

**Table 3. Targets for Malaria Elimination Plan**

Year	Number of Districts Targeted		
	Control Incidence $\geq 15$ ‰	Pre-Elimination 5 ‰ Hbts $\leq$ incidence $< 15$ ‰	Elimination $< 5$ ‰ Hbts
2019	28	47	4
2025	14	37	28
2028	0	19	60
2030	0	0	79

Hbts: human-baited traps.

## IV. KEY MALARIA DATA

PMI began supporting the implementation of an annual continuous DHS (cDHS) in 2012. As the country strategy continues to push toward elimination in the northern areas of the country with a low malaria burden, a district-level MIS in 2020–2021 was supported by the Global Fund in the regions of the country with the three highest burden levels (Kedougou, Kolda, and Tambacounda, or KKT) to provide more granular coverage estimates for those regions while also producing national estimates for the key indicators listed in Table 4.



## EVOLUTION OF KEY SURVEY-BASED MALARIA INDICATORS

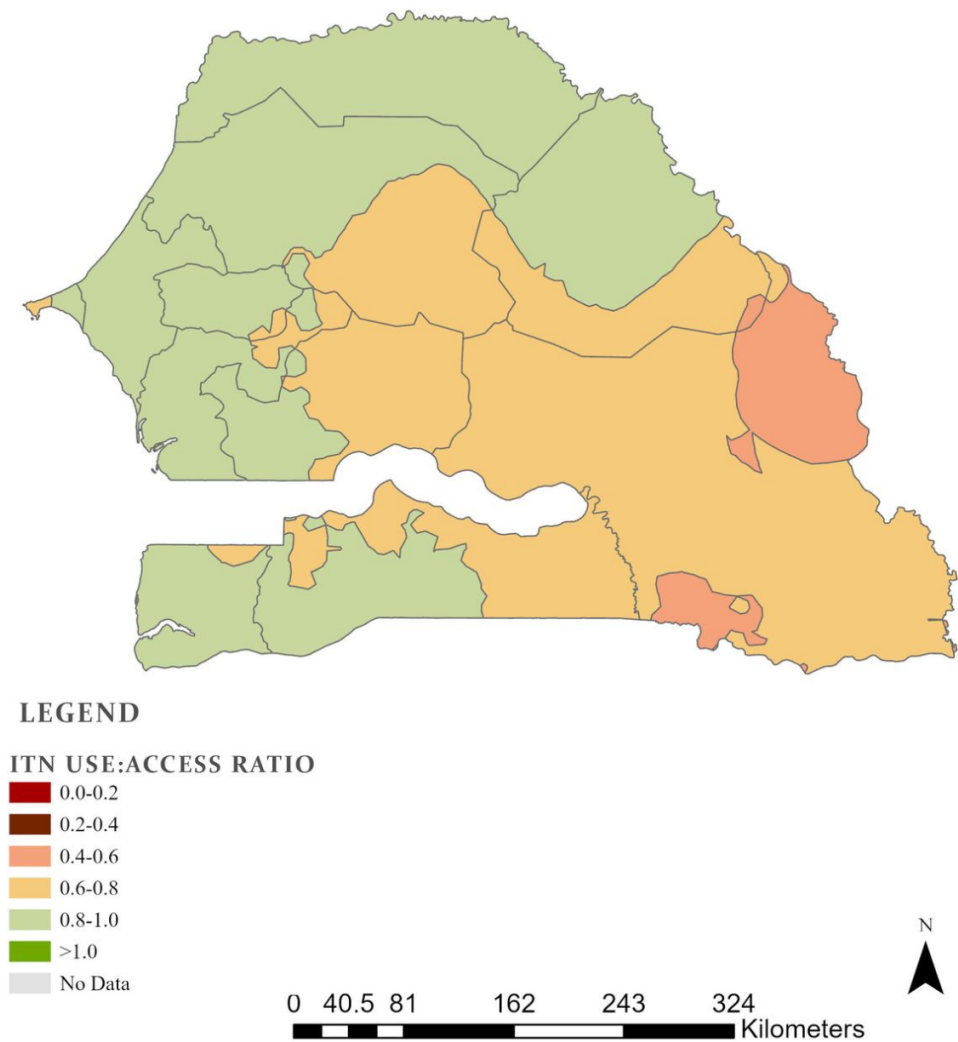
**Table 4. Key Survey Indicators**

Indicator	2005, DHS	2010, DHS	2019, cDHS	2020-21, MIS
% of households with at least one ITN	20	63	82	75
% of households with at least one ITN for every two people	3	17	57	34
% of population with access to an ITN	10	38	74	58
% of population that slept under an ITN the previous night	6	29	63	46
% of children under five years of age who slept under an ITN the previous night	7	35	65	47
% of pregnant women who slept under an ITN the previous night	9	37	68	53
% of children under five years of age with a fever in the last two weeks for whom advice or treatment was sought	40	49	50	63
% of children under five years of age with a fever in the last two weeks who had a finger or heel stick	n/a	10	16	22
% of children receiving an ACT among under five years of age with a fever in the last two weeks who received any antimalarial drug	n/a	41	n/a	n/a
% of women who attended four ANC visits during their last pregnancy	n/a	50	56	n/a
% of women who received three or more doses of IPTp during their last pregnancy in the last two years	n/a	13	20	38
Under-five mortality rate per 1,000 live births	121	72	37	n/a
% of children under five years of age with parasitemia by microscopy	n/a	3	n/a	n/a
% children under five years of age with parasitemia by RDT	n/a	3	n/a	KKT regions only: 5.3

ANC: antenatal care; cDHS: continuous DHS: Demographic and Health Survey; MICS: Multiple Indicator Cluster Survey; MIS: Malaria Indicator Survey



Figure 4. ITN Use-to-Access Ratio Map



Source: DHS 2019.

**Table 5. 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.

Indicator	2018	2019	2020	2021	2022
# of all-cause patient consultations	10,950,250	11,689,076	11,693,409	13,874,728	10,974,514
# of suspect malaria cases <sup>1</sup>	2,096,124	2,010,398	2,206,842	2,632,540	2,223,156
# of patients receiving diagnostic test for malaria <sup>2</sup>	2,090,323	2,005,860	2,199,171	2,621,617	2,189,349
Total # of malaria cases <sup>3</sup>	536,745	359,246	452,984	547,773 <sup>14</sup>	363,468
# of confirmed cases <sup>4</sup>	530,944	354,708	445,313	536,850	363,468
# of presumed cases <sup>5</sup>	5,801	4,538	7,671	10,923	0 <sup>16</sup>
% of malaria cases confirmed <sup>6</sup>	99%	99%	98%	98%	100%
Test positivity rate (TPR) <sup>7</sup>	25	18	20	20	17
Total # of malaria cases in children under five years of age <sup>8</sup>	90,098	37,941	47,035	56,765 <sup>14</sup>	38,203
% of cases in children under five years of age <sup>9</sup>	17%	11%	10%	10%	10%
Total # of severe cases <sup>10</sup>	13,350	9,352	9,179	12,842	10,612
Total # of malaria deaths <sup>11</sup>	555	260	373	399	270
# of facilities reporting <sup>12</sup>	1591	1645	1945	1984	2064
% of data completeness <sup>13</sup>	98%	99%	96%	98%	74% <sup>15</sup>

<sup>1</sup> Number of patients presenting with signs or symptoms possibly due to malaria (fever); <sup>2</sup> RDT or microscopy, all ages, outpatient and inpatient; <sup>3</sup> Total reported malaria cases; all ages, outpatient and inpatient, confirmed and unconfirmed cases; <sup>4</sup> Diagnostically confirmed; all ages, outpatient and inpatient; <sup>5</sup> Clinical/presumed/unconfirmed; all ages, outpatient and inpatient; <sup>6</sup> Number of confirmed cases divided by total number of cases; <sup>7</sup> Confirmed cases divided by number of patients receiving a diagnostic test for malaria (RDT or microscopy); <sup>8</sup> Outpatient and inpatient, confirmed and unconfirmed; <sup>9</sup> Total number of cases in children under five years of age divided by total number of cases; <sup>10</sup> Severe cases = total number hospitalized for malaria; <sup>11</sup> All ages, outpatient, inpatient, confirmed, and unconfirmed; <sup>12</sup> Total number of health facilities reporting data into the HMIS/DHIS2 system that year; <sup>13</sup> The number of monthly reports from health facilities divided by the number health facility reports expected (average for the calendar year); <sup>14</sup> The increase in the number of malaria cases can partly be attributable to the improvement of data completeness, the enrollment of private facilities that were not reporting their data to the HMIS, and improved case detection with an increase in community-based case management sites; <sup>15</sup> Data completeness is significantly lower due to ongoing data strikes in the country; <sup>16</sup> Presumed cases is captured during malaria quarterly data review which was not possible this year due to the ongoing data strikes in the country.

**Table 6. Disaggregated Community-Level Data**

Indicator	2019	2020	2021	2022
# of patients receiving diagnostic test for malaria from a CHW	258,827	334,485	336,384	209,141
Total # of malaria cases reported by CHWs <sup>1</sup>	80,241	119,760	121,514	61,208
% of CHW reported cases (among total malaria cases) <sup>2</sup>	22%	26%	22%	17%

<sup>1</sup> Includes all ages, confirmed and unconfirmed; <sup>2</sup> Total number of malaria cases reported by CHWs divided by total number of malaria cases (see previous table).

**Table 7. Elimination Context: Policy and Scope**

Malaria Policy and Implementation	Response		
1. Is malaria elimination part of the current malaria strategy?	Yes		
2. Are individual malaria cases investigated? If yes, please note whether this occurs nationally or subnationally.	Yes (subnational)		
3. Are foci investigated? If yes, please note whether this occurs nationally or subnationally.			
Elimination scope	2020	2021	2022
4. Total number of districts in the country (admin 2)	79	79	79
5. Number of districts that have been verified as having eliminated malaria? <sup>1</sup>	0	0	0
6. Among districts <b>not</b> verified as having eliminated malaria, how many districts are targeted for elimination efforts?	51	43	37
6A. Among districts targeted for elimination efforts, how many have <b>active elimination activities</b> ? <sup>2</sup>	10	37	37

<sup>1</sup> Malaria elimination is the interruption of local transmission, i.e. no local malaria cases for three years. This refers to NMP-led subnational verification only. It is not referring to elimination certification, which can only be granted by WHO to an entire country; <sup>2</sup> Elimination activities include reactive ITN and/or IRS, reactive case detection, reactive or focal drug administration, procurement and/or strategies for single-dose primaquine for *P. falciparum* or radical cure primaquine for *P. vivax*, SBC for hard-to-reach or migrant populations, case investigation, foci classification, and other concerns.

## V. Other Implementation Information

PMI is currently supporting durability monitoring of the two types of ITNs distributed during the 2022 mass campaign: standard permethrin-based ITNs and permethrin + piperonyl butoxide ITNs. The results from the baseline survey are presented in Table 8.

**Table 8. Results of Durability Monitoring**

Site/Net Type	Survey and Time Since Distribution (months)	Attrition to Wear and Tear (%)	Nets in Serviceable Condition (%)	Optimal Insecticidal Effectiveness in Bioassay (%)
Olyset® (permethrin)	Baseline (4.6)	4.8%	89.0% (N=571)	N/A
Olyset® Plus (permethrin + piperonyl butoxide)	Baseline (4.6)	3.5%	87.3% (N=583)	N/A

Prior to the ongoing study, the last round of standard durability monitoring was conducted in 2017 and 2018 on nets that were distributed in 2014 and 2015. In that study, seven standard pyrethroid net brands (Interceptor and MAGNet: alpha-cypermethrin; LifeNet, Netprotect, PermaNet 2.0, and Yorkool LN: deltamethrin; Olyset Net: permethrin) were monitored at five sites (Kaolack, Kaffrine, Thies, Diourbel, and Fatick). Since this study, widespread pyrethroid resistance has been reported in Senegal. Three net types—Interceptor, PermaNet 2.0, and LifeNet—had survival rates above 80 percent after 24 months. At 36 months, PermaNet 2.0 maintained a survival rate of 79.5 percent. Two net types (PermaNet 2.0 and Interceptor) were more often retained by households than other brands, with a median retention time above three years (three and a half years for PermaNet 2.0 and four years for Interceptor). Despite good retention, Interceptor had weak physical integrity, and its median survival due to wear and tear was less than three years (median survival time of 2.4 years). For additional information on this study refer to the [durability monitoring report](#).

**Table 9. 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
2021 <sup>1</sup>	Kolda	AL	100%
2021 <sup>1</sup>	Kolda	ASAQ	100%
2021 <sup>1</sup>	Kaolack	AL	100%
2021 <sup>1</sup>	Kaolack	ASAQ	98%
2022 <sup>2</sup>	Kolda	AL	95%
2022 <sup>2</sup>	Kolda	ASAQ	100%
2022 <sup>2</sup>	Kedougou	AL	95%
2022 <sup>2</sup>	Kedougou	ASAQ	100%

PCR = polymerase chain reaction; AL = artemether-lumefantrine; ASAQ = artesunate-amodiaquine; <sup>1</sup> Ndiaye, D., Sene D. *Rapport Sur La: Surveillance de l'efficacité et de la tolérance des combinaisons Artemether Lumefantrine et Artesunate-Amodiaquine dans la prise en charge du paludisme non compliqué à Plasmodium falciparum au Sénégal*. 2021.

<sup>2</sup> 2022 TES Preliminary Report

Both AL and ASAQ have therapeutic efficacies above the 90 percent threshold recommended by the World Health Organization and are well tolerated in Senegal.

## VI. Key Policies

**Table 10. Policies in Senegal**

<b><u>National Strategic Plan</u></b> (2021–2025)
<b>National SM&amp;E Plan</b> (2021)
<b><u>National Digital Health Strategy</u></b> (2018–2023)
<b>National Social Behavior Change/ Communication Strategy</b> (2016)
<b>National Supply Chain Strategy/Master Plan</b> (2021)
<b>National Vector Control Strategy and/ or Integrated Vector Management Plan</b> (2017–2020)
<b>Malaria Case Management Policy</b> (2021)
<b>Methodological Guide for ITNs Routine Distribution</b> (2021)
<b>National Advocacy Plan for Malaria Control</b> (2022)
<b>Acceleration Plan for Malaria Elimination in Senegal</b> (2022)
<b>National Plan for Management of Malaria Vector Resistance to insecticides in Senegal</b> (2022)

What is/are the first-line treatment(s) for uncomplicated <i>P. falciparum</i> malaria?	According to the national guidelines, Senegal does not have first- or second-line treatment for uncomplicated <i>P. falciparum</i> malaria. Artesunate-amodiaquine, artemether-lumefantrine, and DHA-PQ can all be used. Currently, DHA-PQ is reserved for case investigations. Primaquine (single low dose) is also used in pre-elimination settings for the treatment of gametocyte carriage and transmission reduction either with index cases than with secondary cases detected after focal test and treat strategy.
What is/are the second-line treatment(s) for uncomplicated <i>P. falciparum</i> malaria?	See above
What is the first-line treatment for severe malaria?	Injectable artesunate
In pregnancy, what is the current first-line treatment for uncomplicated <i>P. falciparum</i> malaria in the <b>first trimester</b> ?	Oral quinine
Given the WHO policy change to recommend AL as treatment for uncomplicated malaria in the first trimester, does the Ministry of Health plan to update the policy on treatment of MIP in the first trimester? And if so, what is the status of this policy change and implementation of the new policy?	Yes; the NMCP will discuss incorporating the policy change at an upcoming meeting on revising the malaria guidelines.
In pregnancy, what is/are the first-line treatment(s) for uncomplicated <i>P. falciparum</i> malaria in the <b>second and third trimesters</b> ?	As above, ASAQ, AL, and DHA-PQ can all be used as first-line treatments
In pregnancy, what is the first-line treatment for severe malaria?	Injectable artesunate
Is prereferral treatment of severe disease recommended at peripheral health facilities? If so, with what drug(s)?	Rectal artesunate suppository
Is prereferral treatment of severe disease with rectal artesunate recommended for community health workers?	Yes
<b><u>Community Health Policy</u></b> (2014–2018)	
What is the # of CHWs currently providing iCCM?	4,500
What is the country's target for the number of CHWs providing iCCM?	4,885

What percent of the country's target is met?	92% for 2023
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, except for children under two months old and pregnant women
<b>Prevention of Malaria in Pregnancy Policy (Integrated into Malaria Case Management Policy)</b>	
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?	16 weeks
Do the national ANC guidelines reflect the WHO 2016 recommendation of eight ANC scheduled contacts (plus one additional contact for early initiation of IPTp at 13–16 weeks)? If not, how many ANC contacts are recommended?	Not yet integrated in the guidelines but is taken into account in the visit booklet.
What is the status of training ANC providers on the WHO recommended eight or more contacts?	ANC providers are not trained on the WHO recommended eight or more contacts
Have HMIS/DHIS2 and ANC registers been updated to include eight or more contacts?	No
Are ANC/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 six months prior?	IPTp data are collected as single months
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?	Yes, CHWs can deliver IPTp from the second dose of SP.

AL: artemether and lumefantrine; ANC: antenatal care; AS-MQ: artesunate-mefloquine; AS-PYR: artesunate-pyronaridine; CHW: community health worker; DHIS2: District Health Information System-2; HMIS: health management information system; iCMM: integrated community case management; IPTp: intermittent preventive treatment for pregnant women; PQ: primaquine; SP: sulfadoxine-pyrimethamine.



## VII. PARTNER LANDSCAPE

PMI and the Global Fund are the major partners supporting malaria programming in Senegal. The German Technical Cooperation (GIZ) did fund specific activities in recent years, but that support ended in 2021. Negotiations are underway with the Islamic Development Bank (IDB) for a new grant starting in 2024. The Bill & Melinda Gates Foundation funds multiple activities related to malaria.

**Table 11. Partner Landscape**

Partner	Key Technical Interventions	Geographic Coverage	Funding Amount or In-kind Contribution	Time Frame
Global Fund	<ul style="list-style-type: none"> <li>• Support for mass campaign in 2025</li> <li>• Coordination and management</li> <li>• Training</li> <li>• Support for malaria acceleration plan</li> <li>• Support for iCCM</li> <li>• Supportive supervision</li> <li>• Cross-border activities</li> </ul>	<ul style="list-style-type: none"> <li>• ITN campaign in Kedougou, Kolda, Tambacounda, Kaolack, and Kaffrine regions. The remaining regions are planned under the PAAR (except Dakar and Thies regions)</li> <li>• Supportive supervision in 13 regions (not Kedougou)</li> <li>• Plans to accelerate malaria elimination, including iCCM in districts with high and moderate transmission</li> </ul>	\$30,000,000	Grant covers 2024 to 2026 <sup>1</sup>
Government of Senegal	<ul style="list-style-type: none"> <li>• Procurement of SP</li> <li>• Health sector staff and infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• National</li> </ul>	\$33.2 million <sup>2</sup>	2024–2026
Islamic Development Bank	<ul style="list-style-type: none"> <li>• Procurement of ITNs</li> <li>• Support for elimination activities in eligible districts: MDA, case investigations, IRS</li> </ul>	<ul style="list-style-type: none"> <li>• Northern Senegal</li> </ul>	\$6.8 million	2024–2026
Bill & Melinda Gates Foundation	<ul style="list-style-type: none"> <li>• MACEPA IV: Data and surveillance, subnational targeting, increased coverage of prevention and treatment interventions, case investigation, cross-border interventions</li> </ul>	<ul style="list-style-type: none"> <li>• Senegal and The Gambia</li> </ul>	\$12,000,000	2020–2023

	<ul style="list-style-type: none"> <li>Emergency Operations Centers</li> </ul>	<ul style="list-style-type: none"> <li>National (5 regional centers)</li> </ul>	\$3,315,815	2020–2023
	<ul style="list-style-type: none"> <li>Integrating genomic data into malaria surveillance and decision making strategy</li> </ul>	<ul style="list-style-type: none"> <li>National</li> </ul>	\$3,100,000	2023–2026
	<ul style="list-style-type: none"> <li>Malaria molecular surveillance</li> </ul>	<ul style="list-style-type: none"> <li>National</li> </ul>	\$4,500,000	2023–2026
	<ul style="list-style-type: none"> <li>Zero Malaria Starts With Me campaign (including business leadership initiative)</li> </ul>	<ul style="list-style-type: none"> <li>National</li> </ul>	\$2,760,000	N/A
PR China via WHO	<ul style="list-style-type: none"> <li>Community-based malaria response in areas with high burden</li> </ul>	<ul style="list-style-type: none"> <li>Saraya District</li> </ul>	\$50,000	2022–2024
Bayer	<ul style="list-style-type: none"> <li>Community champions: advocacy, community engagement, communication</li> </ul>	<ul style="list-style-type: none"> <li>Tambacounda region (all districts)</li> </ul>	\$350,766	2022–2024
Compagnie Sucriere Senegalaise	<ul style="list-style-type: none"> <li>Malaria case management for employees</li> <li>Storage and transportation of ITNs for the NMCP</li> </ul>	<ul style="list-style-type: none"> <li>Richard Toll District</li> </ul>	In-kind	ongoing
Association Sopey Naby	<ul style="list-style-type: none"> <li>Community mobilization/education on malaria</li> <li>Advocacy for resource mobilization</li> </ul>	<ul style="list-style-type: none"> <li>Primarily Thienaba District</li> </ul>	In-kind	ongoing

<sup>1</sup> The grant is still in development (not yet approved); <sup>2</sup> Government of Senegal contributions per the GC7 financial landscape. DHIS2: District Health Information System 2; iCMM: integrated community case management; IRS: indoor residual spraying; ITN: insecticide-treated net; SP: sulfadoxine-pyrimethamine; MDA: mass drug administration; NMCP: National Malaria Control Program.