LAST UPDATED: 06/16/2023

BENIN 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. Benin began implementation as a PMI partner country in FY 2008. Please see the Benin Malaria Operational Plan for more information on PMI's approach and investments.

II. CONTEXT

Table 1: General Demographics and Malaria Situation

Population	12,606,998 Source: INSTAD 2013 (Institut National de la Statistique et de la démographie)
Population at risk of malaria	12,606,998 Source: INSTAD (Institut National de la Statistique et de la démographie)
Malaria prevalence	32.3% (Malaria Indicator Survey, 2022)
Malaria incidence/1,000 population at risk	212 (*Annuaire des statistiques sanitaires,* 2021)
Peak Malaria Transmission	April to October

STRATIFICATION

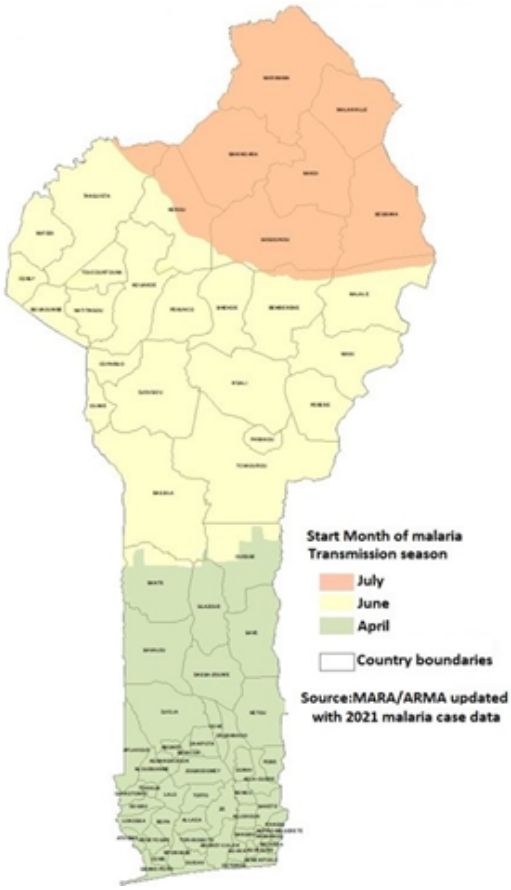
In Benin, malaria transmission is stable, with seasonal and geographic variation closely linked to climate, rainfall patterns, and topography. The geo-climatic characteristics of Benin create an appropriate environment for the development and persistence of malaria. The country is divided in three main regions, the southern, the center, and the northern regions. The southern region is a coastal zone with lakes and lagoons. The climate is sub-equatorial with two rainy seasons (April to July and October to November) and two dry seasons (August to September and December to March). The center region is a plateau region characterized by a Sudan-Guinea climate. The northern region is an area of hills. The climate is Sahelian with a rainy season (May to October) and a dry season (November to April). These geo-climatic

variations in Benin result in three main malaria transmission zones as outlined in the National Malaria Strategic Plan 2017-2021 (Figure 1):

a) The southern zone with a heterogeneous malaria transmission,
b) The center where malaria transmission is holo-endemic, and
c) The northern zone where malaria transmission is seasonal.

The map below shows the month the malaria transmission season starts in each zone.

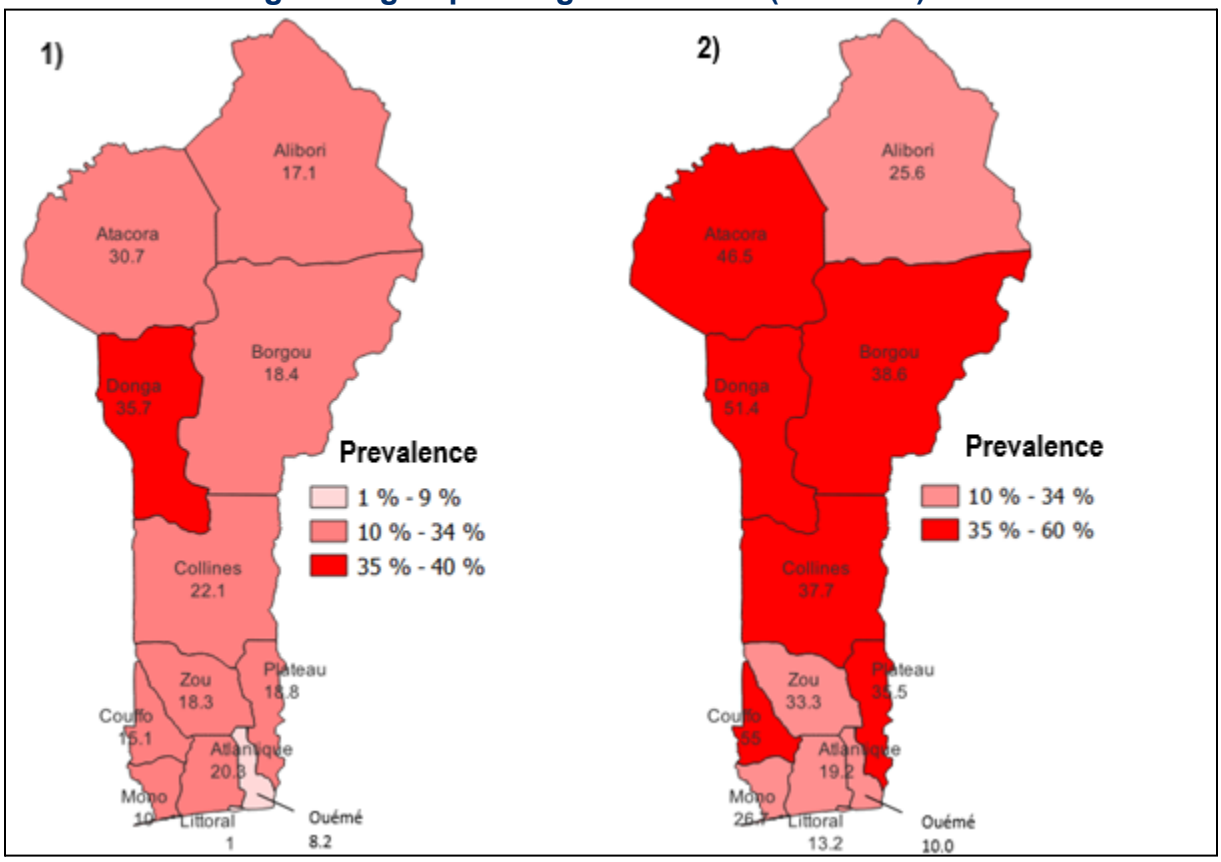
Figure 1. Map of Malaria Transmission Zones in Benin



Source: Mapping Malaria Risk in Africa / *Atlas du Risque de la Malaria en* Afrique (MARA/ARMA) project updated with 2021 malaria case data.

The maps below show pregnant women and children 6 to 59 months of age who tested positive for malaria by RDT (Malaria Indicator Survey [MIS] 2022).

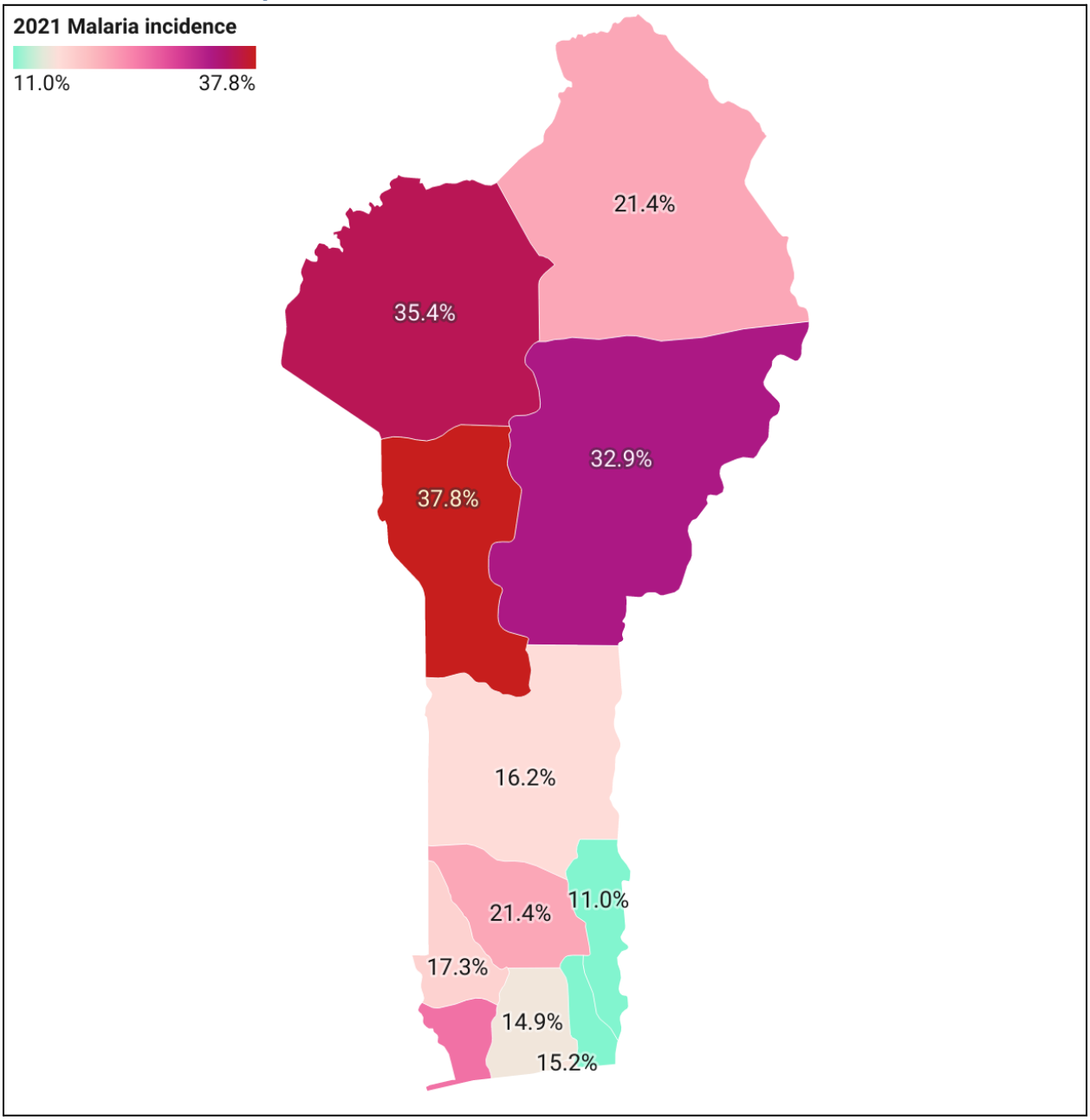
Figure 2: Map Showing Prevalence of Malaria Detected Among Women and Children 6–59 Months of Age Using Rapid Diagnostic Tests (MIS 2022)



Map 1: Breakdown (%) by department of pregnant women with positive RDT.
Map 2: Distribution (%) by department of children from 6–59 months with positive RDT.

The map below is the annual incidence of confirmed malaria in 2021 reported in the Annuaire statistique du Ministère de la Santé, 2021.

Figure 3: Incidence Map



Source : Annuaire des statistiques sanitaires 2021 / Benin Ministère de la Santé.

Table 2: Malaria Parasites and Vectors

Principal Malaria Parasites	*Plasmodium falciparum (98%)*
Principal Malaria Vectors*	The primary vector is *Anopheles gambiae* s.l. with sibling species consisting of *An. coluzzi* (91%). *Anopheles gambiae* s.s. (8%). and *Anopheles coluzzi/gambiae* s.s. hybrids (1%). Secondary vectors detected are *Anopheles funestus* s.l. Pyrethroid resistance in *Anopheles gambiae* s.l. has been reported for all pyrethroids with PBO partially restoring susceptibility. *Anopheles gambiae* s.l has also been found to be resistant to bendiocarb. *Anopheles gambiae* s.l. have been found to be fully susceptible to pirimphos methyl and chlorfenapyr.

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

COUNTRY HEALTH SYSTEM

The national health system has a pyramidal structure comprising three different levels: central, intermediate, and peripheral. The peripheral level of Benin's health system includes 34health zones. The peripheral level also includes community health workers (CHW), who interface between health facilities and populations by promoting health at the local level. Benin has a new CHW policy which will be rolled out in phases starting in July 2023. The new policy establishes two types of community-level health worker. The first, *relais communautaire* (RC), will conduct prevention and promotional health services, including home visits and social and behavior change activities. RCs will assess children under five years of age for fever and refer febrile children to the second cadre of community-level worker, *agent de santé communautaires qualifiés* (ASCQ), or qualified health worker. ASCQs are nurses or midwives who will test children for malaria using a rapid diagnostic test (RDT), treat those who are positive with artemisinin-based combination therapies (ACTs), refer children with severe disease to health facilities, and supervise RCs.

The intermediate level includes 12 departments of the country and is responsible for coordination between the central and peripheral.

The central level has a strategic role in the design and decision-making of health sector development policy. The minister's office, the general secretariat, the central technical departments and the agencies ensure overall coordination. At the central level, the National University Hospital Center is the top of the health care infrastructure pyramid.

Health system capacity and distance to care

Health facility coverage in Benin has improved from 89 percent in 2005 to 96 percent in 2021 suggesting a good health system capacity[1]. However, this good health facility coverage is not equitably distributed across the country. In urban areas like Cotonou, the average distance to health care centers is 0.3 km. However, in rural areas, users experience difficulties accessing

[1] Annuaire des Statistiques Sanitaires, 2021. (Cotonou, Benin, March, 2022).

health care centers.The average distance the population travels for health care is 7.6 kilometers to private centers and 7.8 kilometers to public centers.

Health care costs and affordability

The National Malaria Control Program (NMCP) with PMI and the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund) support free treatment for malaria in pregnant women, children under five years of age, and all severe malaria cases. Recently, the Government of Benin overhauled the country's social protection systems to facilitate access to health care and accelerate progress towards universal health coverage. This program is currently being rolled out and is implemented under the President's flagship program. Insurance for Human Capital Enhancement (*Assurance pour le renforcement du capital humain,* or ARCH), which includes a health insurance scheme (*assurance maladies,* or AM) targeting the poor. The ARCH-AM program expands access to quality health services, provides financial risk protection for the population, and reduces fragmentation in the health financing system (Strategic Purchasing Africa Resource Centre, 2021: *Achats stratégiques pour la santé au Bénin).* By making health insurance mandatory in Benin from January 2023, the Government of Benin intends to increase the population's access to healthcare in the following years.

Deployment of RDTs and microscopy

Benin's national malaria policy recommends testing and treatment of malaria at all levels of the national health system using RDTs or microscopy. RDTs are available at all levels and are primarily used at peripheral health facilities that do not have a laboratory and systematically at the community level by qualified health workers.

Facilities providing case management and malaria in pregnancy (MIP) services

Uncomplicated malaria can be treated in the community and at all levels of the health pyramid, while severe malaria can only be treated in health facilities with qualified staff who have the required skills, appropriate laboratory, and facilities for hospitalization. Children under six months of age are not treated at the community level and are referred to health facilities.

Malaria prevention in pregnancy includes distributing insecticide-treated mosquito nets (ITNs) to all pregnant women attending antenatal care (ANC) and providing sulfadoxine-pyrimethamine (SP) as intermittent preventive treatment (IPTp) administered at each ANC visit under the supervision of a health worker at all levels of the health system. For MIP treatment, the national malaria control policy recommends treatment at equipped facilities for hospitalization using quinine for the treatment of malaria in the first trimester and the use of ACTs beginning at the 2nd trimester.

Health supply chain and pharmaceutical management system

The pharmaceutical sub-sector of Benin is under the direction of the Benin Agency for Pharmaceutical Regulation. It encompasses a private and a public sector, including two local drug manufacturers (Pharmaquick and Copharbiotec), five wholesale distributors, and 355 pharmacies with 141 depots.

The reception and distribution of commodities for the public sector is coordinated by the NMP and the *Societe Beninoise pour l'Approvisionnement en Produits de Santé*. The pharmaceutical and diagnostic commodities are stored in *Societe Beninoise pour l'Approvisionnement en Produits de Santé*'s warehouses at the central level before being transferred to regional warehouses which deliver them to health zone warehouses. To ensure the availability of malaria commodities at service delivery points, PMI provides technical assistance to improve the early warning and reporting system that ensures the regular replenishment of health facilities. Also, PMI supports the distribution of routine LLINs to health zone warehouses using freight forwarders to carry out in-country distribution.

Benin has adopted a common basket system to manage and distribute all donor-procured commodities. A pull strategy is used from the central level to the health zone warehouses except for products intended for the community level; for these, the push system is used to allocate quantities of malaria commodities to zone warehouses. The same principle is applied from the health zone warehouses to health facilities and RCs.

The private sector operates in the areas of import, production and distribution of pharmaceutical products. It also involves the activities of non-governmental organizations and other faith-based organizations receiving donations which unfortunately escape the regulatory provisions in place.

NMCP and Family Health Department collaboration

The NMCP collaborates with the Ministry of Health's Directorate of Maternal and Child Health at central, intermediate, and peripheral health system levels to strengthen ANC services, including MIP services. IPTp is provided through ANC at health facilities. Currently, the NMCP is exploring approaches for the provision of the first dose of IPTp at community level and referring women to health facilities for the subsequent doses.

Health Management Information System (HMIS)

Benin's National HMIS (*Système National d'Information et de Gestion Sanitaire*) produces routine data on health facilities' activities at all levels of the health pyramid and is supplemented by the subsystems of the health sector.

OTHER CONTEXTUAL INFORMATION

Benin has more than 31 years of stable democratic culture and strong institutions. However, recent political developments, particularly in 2019 and 2022, led to electoral conflicts, intimidation, and arrests that pushed the country's democratic advancements back. In addition, Benin experiences violent extremism in the north due to insecurity and transnational organized crime in nearby Burkina Faso, Niger, and Nigeria. The country is also highly exposed to diverse natural hazards, including flooding, strong wind, coastal erosion, and forest fires. Benin's government is currently implementing important reforms to better mitigate disaster risks, updating sector policies and guidelines, and incorporating funding mechanisms for economical resilience.

Like other countries around the world, Benin experienced the COVID-19 pandemic but suspended internal restrictive measures in March 2022.

Though Benin conducts a lot of research and is home to strong scientific research institution such as the Center for Entomological Research of Cotonou (CREC), the NMCP, Global Fund, Bill & Melinda Gates Foundation, and other partners also face several persistent programmatic challenges, including insufficient funding and suboptimal quality and unavailability of validated information needed for appropriate malaria programmatic decision-making. Though the GOB doubled the budget allocated to malaria last year, the NMCP relies almost entirely on Global Fund and PMI resources for implementation. However, the relationship between PMI and NMCP is excellent and malaria stakeholders are optimistic that significant operational quality improvement and innovations will lead to a decreased burden of disease by building on recent progress and positive enabling factors.

III. NMCP STRATEGIC PLAN

Goal

According to the Integrated National Strategic Plan for the Elimination of HIV/AIDs, Tuberculosis, Malaria, Viral Hepatitis, and STIs, 2024-2030, "Benin has an integrated and efficient governance platform for the national response to priority diseases and epidemic-prone diseases that ensures synergy and efficiency in the fight against these diseases with a view to their effective elimination."

Overall objective

Contribute to the elimination of malaria by 2030.

Specific objectives

- Reduce by 100 percent by 2030, new malaria-related infections.

- Reduce by 100 percent by 2030, mortality and morbidity linked to malaria.
- Ensure integrated and effective governance of the national response to malaria.

Strategies

The strategies that have been adopted to reach the program's goals include:

- Integration of a mechanism for the continuous improvement of the living environment, basic hygiene, and sanitation (health policy).
- Support the continued usage of ITNs by optimizing their free distribution and strengthening in the long run the continuous distribution by multipurpose community health workers who will be assigned to households to reach universal coverage. Strengthen also the continued distribution of ITNs during ANCs, EPIs, and in schools.
- Reintroduction and extension of IRS after rigorous evaluation of its epidemiological effectiveness and testing in all eligible health zones.[2]
- Promotion of the double barrier in areas of high endemicity (ITNs, window screens, fences).
- Introduction of a malaria prevention and control module in health worker training schools.
- Introduction and scale-up of malaria vaccine for children under five years of age.
- Implementation of seasonal malaria chemoprevention for children under five years of age in all eligible areas.
- Scaling up community IPTp by empowering multipurpose community health workers.
- Implementation of an active search for cases of fever followed by screening and treatment by community health workers during high transmission seasons.
- Introduction of a new combination based on artemisinin derivatives to replace ASAQ, which is subject to many adverse effects.

IV. KEY MALARIA DATA

EVOLUTION OF KEY SURVEY-BASED MALARIA INDICATORS

Table 3: Key Survey Indicators

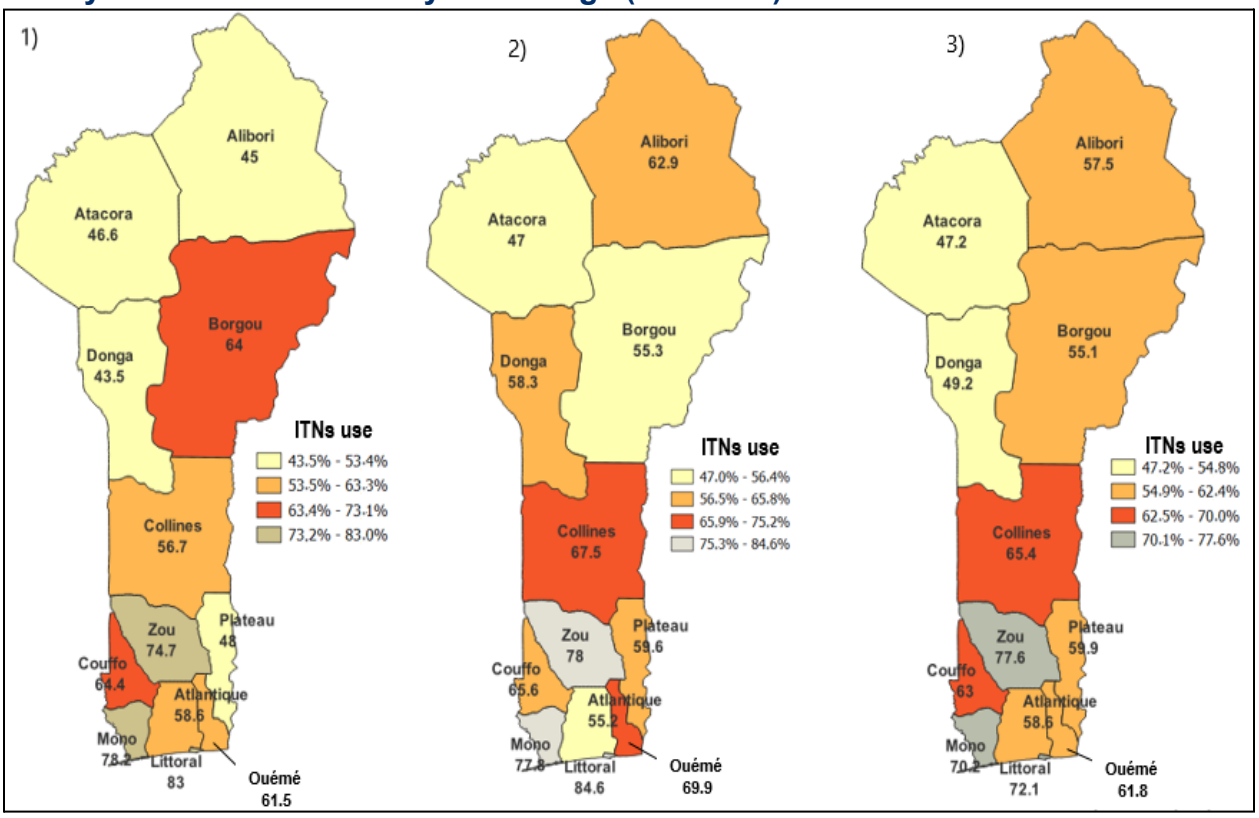
Indicator	[2011–12 DHS]	[2014 MICS]	[2015 MIS]	[2017–18 DHS]	[2022 MIS]	[2022 MICS]
% of Households with at least one ITN	80	75	88	92	64.6	58.4
% of Households with at least one ITN for every two people	45	35	29	61	26.9	31.2
% of Population with access to an ITN	64	55	n/a	77	49.2	44.8

[2] PMI stopped funding IRS in Benin in 2021.

% of Population that slept under an ITN the previous night	63	60	68	71	62.7	45.7
% of Children under five years of age who slept under an ITN the previous night	70	73	81	78	60.5	50.4
% of Pregnant women who slept under an ITN the previous night	75	47	80	80	62.6	50.9
% of Children under five years of age with a fever in the last two weeks for whom advice or treatment was sought	58	44	n/a	53	41.8	33.6
% of Children under five years of age with a fever in the last two weeks who had a finger or heel stick	17	19	26	18	12.7	18.6
% of Children receiving an ACT among children under five years of age with a fever in the last two weeks who received any antimalarial drug	32	13	n/a	37	19.9	38.4
% if Women who attended 4 ANC visits during their last pregnancy	58.2	58.7	n/a	52.1	n/a	52.6
% of Women who received three or more doses of IPTp during their last pregnancy in the last two years	9	13	12	14	11.5	25.2
Mortality rate per 1,000 live births among children under five years of age	70	115	n/a	96	n/a	80
% of Children under five years of age with parasitemia by microscopy	28	n/a	39	37	n/a	n/a
% Children under five years of age with parasitemia by RDT	25	n/a	37	36	32.3	n/a

ACT: Artemisinin-based combination therapy; ANC: antenatal care; DHS: Demographic and Health Survey; IPTp: intermittent preventive treatment for pregnant women; MICS: Multiple Indicator Cluster Survey; MIS: Malaria Indicator Survey

Figure 4. Use of Insecticide-treated Mosquito Nets by Households, by Pregnant Women, and by Children Under Five years of Age (MIS 2022)



1) Breakdown by department (%) of households using ITNs.
2) Breakdown by department (%) of pregnant women who used ITNs the night before the survey.
3) Breakdown by department (%) of children under five years of age who used ITNs the night before the survey.

Community-level data are integrated into the broader HMIS, and these numbers are inclusive of both community data - and health facility-level data about children under five years of age (2019-2022).

Table 4: Evolution of Key Malaria Indicators Reported through Routine Surveillance Systems

Indicator	2018	2019	2020	2021	2022
# of All-cause patient consultations	4,472,873	5,560,281	4,904,138	5,776,664	6,182,680
# of Suspected malaria cases[1]	2,772,052	3,574,850	3,567,825	3,963,295	4,156,080
# of Patients receiving diagnostic test for malaria[2]	2,365,936	3,490,176	3,446,512	3,664,385	4,054,460
# of Malaria cases[3]	2,142,391	2,825,016	2,627,723	2,936,087	2,849,490
# of Confirmed cases[4]	1,755,597	2,629,232	2,510,009	2,641,242	2,749,861
# of Presumed cases[5]	386,794	215,411	117,714	294,845	99,629

% of Malaria cases confirmed[6]	82.3%	93.1%	95.5%	90.0%	96.5%
Test positivity rate[7]	74.2%	75.33%	72.83%	72.08%	67.82%
# of children under five years of age malaria cases[8]	819,022	1,150,559	1,126,419	1,169,957	1,068,071
% of Cases in children under five years of age [9]	38%	41%	43%	40%	37%
# of severe cases[10]	171,990	221,420	166,982	191,854	197,440
# of malaria deaths[11]	2,251	3,501	2,938	2,966	3,204
# of Facilities reporting[12]	1,338	1,375	1,512	1,800	1781
% of Data completeness[13]	97%	97%	98%	99%	99.5%

[1] Number of patients presenting with signs or symptoms possibly due to malaria;
[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 under five years of age cases divided by total # of cases;
[10] Number of confirmed cases with at least one clinical or biological sign of severity hospitalized and under observation;
[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).

Only data for children under five years of age are reported at the community-level by CHW and are available in DHIS2.

Table 5: Disaggregated Community-Level Data

Indicator	2020	2021	2022
# of Children under five years of age receiving diagnostic test for malaria from a CHW[3]	368,611	257,462	90,051
# of malaria cases in children under five years of age reported by CHWs[1]	333,447	227,397	80,162
% of CHW reported cases (among total malaria cases)[2]	12.7%	7.7%	2.8%

[1] Includes all ages, confirmed and unconfirmed.
[2] # of Malaria cases reported by CHWs/Total # malaria cases in the previous table.

[3] Benin's national Community Health Policy changed during this period resulting in some departments and communes ending their CHW programs in 2022. This data reflects this change and the transition period between the old and new policies.

V. Other Implementation Information

Table 6: 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 (%)
Adingnigon/PermaNet 3.0	T18	8.3	93.9	100
Massè/Yorkool	T18	9.2	87	--
Adja-Ouèrè/Yorkool	T18	8	94.6	73.3

Table 7: 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
2018-2019[1]	Bohicon	AL	96.3%
2018-2019[1]	Kandi	AL	96.7%
2020-2021[2]	Djougou	AL	96%
2020-2021[2]	Pobe	AL	99%

PCR: polymerase chain reaction; AL: artemether-lumefantrine.
[1] Kpemasse A. Dagnon F. Saliou R. et al. Efficacy of Artemether-Lumefantrine for the Treatment of Plasmodium falciparum Malaria in Bohicon and Kandi. Republic of Benin. 2018-2019. The American Journal of Tropical Medicine and Hygiene. 2021 Jul;105(3):670-676. DOI: 10.4269/ajtmh.21-0086. PMID: 34255739.
[2] Kpemasse A. Dagnon F. Saliou R. et al. Efficacy of Artemether-Lumefantrine for the Treatment of Uncomplicated Plasmodium falciparum malaria in Djougou and Pobè. Benin Republic. ASTMH Abstract Submission 2022.

VI. Key Policies

Table 8: Policies in Benin

National Malaria Strategic Plan (2020)	
National Surveillance, Monitoring, and Evaluation Plan (Undergoing development. Current reference is the PSNIE, 2024-2030 (Plan Stratégique National Intégré orienté vers l'Élimination du VIH/SIDA or Integrated National Strategic Plan Orientated towards Elimination of HIV/AIDS. Tuberculosis. Malaria. Viral Hepatitis. STIs and Epidemic Potential Diseases)	
National Social Behavior Change/Communication Strategy (2021)	
National Supply Chain Strategy/Master Plan (Supply Chain National Strategic Plan. 2016-2020; *Politique Pharmaceutique Nationale. 2017–2021*)	
Malaria Case Management Policy (2020)	
What is/are the first-line treatment(s) for uncomplicated *Plasmodium falciparum* malaria*?	AL and AP

What is/are the second-line treatment(s) for uncomplicated *P. falciparum* malaria*?	Only ACTs can be used to treat uncomplicated malaria in Benin.
What is the first-line treatment for severe malaria?	IV or IM
In pregnancy, what is the current first-line treatment for uncomplicated *P. falciparum* malaria in the first trimester?	ACTs
Given the WHO policy change to recommend AL as treatment for uncomplicated malaria in the first trimester, does the MOH 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? (please include any plans for training providers on the new policy)	Yes. AL is the first line treatment for uncomplicated malaria for all trimesters of pregnancy and is already included in the policy. Providers have received training on the new policy.
In pregnancy, what is/are the first-line treatment(s) for uncomplicated *P. falciparum* malaria in the second and third trimesters?	ACTs
In pregnancy, what is the first-line treatment for severe malaria?	IV
Is pre-referral treatment of severe disease recommended at peripheral health facilities? If so, with what drug(s)?	RAS
Is pre-referral treatment of severe disease with rectal artesunate recommended for community health workers?	No
Community Health Policy (2020)	
What is the # of CHWs currently providing iCCM?	CHWs do not currently provide iCCM. (The new CHW recruitment process will be completed by May 2023)
What is the country's target for the number of CHWs providing iCCM?	12.000 with the New Policy
What percent of the country's target is met?	N/A (Transition phase – Shift from Former Policy to new pilot phase starting in 52 communes. May cover 67% of the target)
Does the country have a policy that enables the routine, regular payment of salaries/stipends for CHWs?	Yes
Do CHWs have the authority to test and treat all ages for malaria?	No
Prevention of MIP Policy (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?	16 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?	No
What is the status of training ANC providers on the WHO recommended 8+ contacts?	No
Have HMIS/DHIS2 and ANC registers been updated to include 8+ contacts?	No
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 six months prior?	Yes
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?	No

ACT: artemisinin-based combination therapies; AL: artemether-luméfantrine; ANC; antenatal care; AP: artesunate-pyronaridine; CHW: community health worker; HMIS/DHIS2:Health Management Information System/District Health Information Software 2; iCCM: integrated community care management; IM: artemether; IPTp: intermittent preventive treatment of malaria in pregnancy; IV: injectable artesunate; MIP: malaria in pregnancy; RAS: Rectal artesunate; SP: sulfadoxine-pyrimethamine.

VII. PARTNER LANDSCAPE

Table 9: Partner Landscape

Partner	Key technical interventions	Geographic coverage	Funding amount or in-kind contribution	Timeframe
Global Fund	• Support for nationwide mass campaign in 2023 • Procurement of national needs for SP, RDTs, ACTs • Training and supportive supervision in 12 departments • Support for SMC campaign	• Nationwide for ITN campaign • 2 departments for other activities • 2 departments for SMC campaign	$43.4M (average annual = $14.47M)	Current grant covers 2021–23 (inclusive)
Government of Benin	• Support for nationwide mass campaign in 2023 • Supportive supervision in 02 regions for CPS (Plasmodium falciparum sporozites) campaign	• Nationwide • 12 departments	About $5.6M	Over 3 years (2021–23)
UNICEF	• Support for nationwide mass campaign	• Nationwide		(Procured 894,877 standard ITNs, 2023)
Bill & Melinda Gates Foundation	• Digitization of ITN and SMC campaigns • Support of technical assistance • Support for monitoring and evaluation	• Nationwide (for evaluation)	$130,000	Annually (2022–24)
World Health Organization	• Support of continuous training for health workers • Support for national guideline elaboration and case management protocol	• 34 Districts of 34	About $100,000	Annually