

SIERRA LEONE 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. Sierra Leone began implementation as a PMI partner country in FY 2017. Please see the [Sierra Leone Malaria Operational Plan](#) for more information on PMI’s approach and investments.

II. CONTEXT

Table 1: General Demographics and Malaria Situation

Population	8.3 million (UNFPA , 2022)
Population at risk of malaria	100% (WHO, 2021)
Malaria prevalence¹	22% (MIS, 2021)
Malaria incidence/1,000 population at risk	328.2, (WHO , 2020)
Peak malaria transmission	May, October-November

¹ Percentage of children 6-59 months of age who tested positive for malaria according to microscopy results.

MIS: Malaria Indicator Survey; UNFPA: United Nations Fund for Population Activities; WHO: World Health Organization

STRATIFICATION

Figure 1: Map Showing Prevalence of Malaria in Children 6 to 59 Months of Age by Microscopy (Malaria Indicator Survey, 2016)

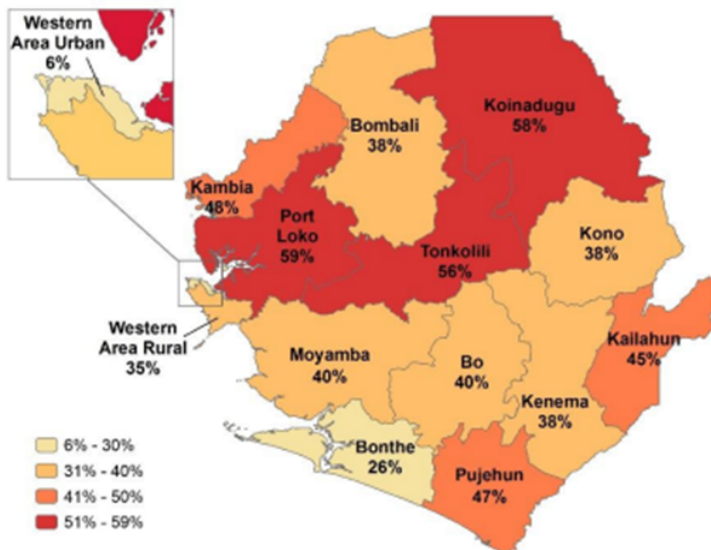


Figure 2: Map Showing Prevalence of Malaria in Children 6 to 59 Months of Age by Microscopy (Malaria Indicator Survey, 2021)

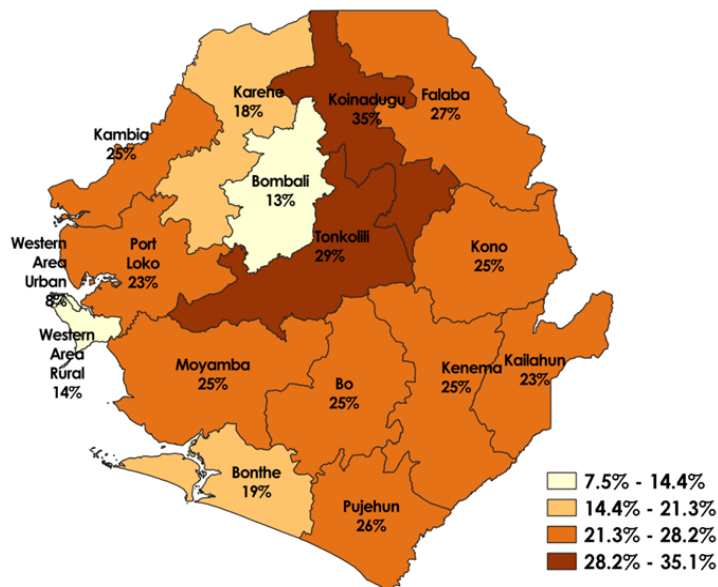


Figure 3: Map Showing Annual Parasite Incidence (District Health Information System, 2020)

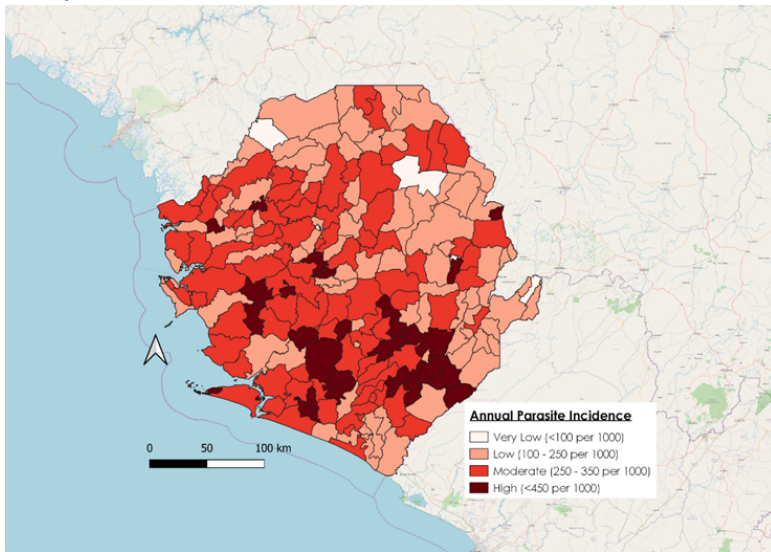


Figure 4: Map Showing Annual Parasite Incidence (District Health Information System, 2021)

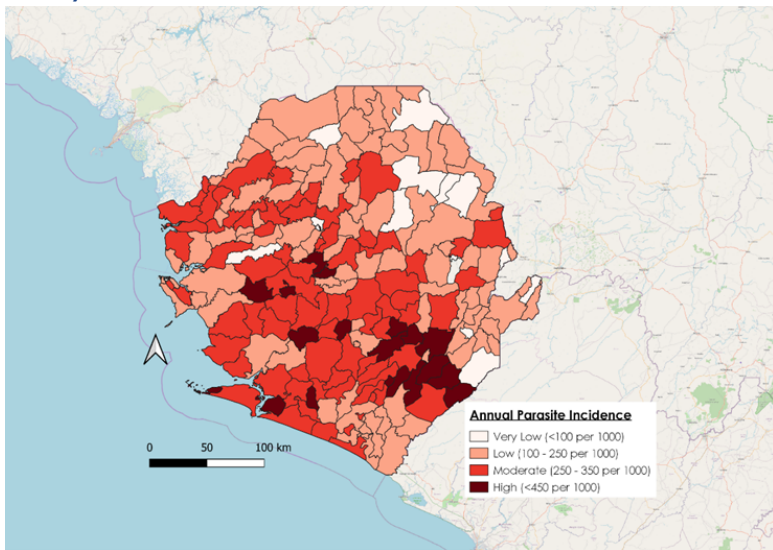


Table 2: Malaria Parasites and Vectors

Principal Malaria Parasites	<i>Plasmodium falciparum</i> (>90%)
Principal Malaria Vectors*	<i>Anopheles gambiae s.l.</i> , <i>Anopheles funestus</i> ; resistance to pyrethroids, organochlorines and carbamates

* See Entomological Monitoring section of the Sierra Leone MOP for more details on vector bionomics and insecticide resistance and indoor residual spraying section for details on residual efficacy.

COUNTRY HEALTH SYSTEM

As part of the public sector reforms, which started in 2003, the Ministry of Health and Sanitation (MoHS) is organized into two main divisions at the central level: medical services and management services. The core functions of the MoHS remain “policy formulation; standards setting and quality assurance; resource mobilization; capacity development and technical support; provision of nationally coordinated services, e.g. epidemic control; coordination of health services; monitoring and evaluation of the overall sector performance and training.”¹ Through the District Health Management Team (DHMT), the districts are responsible for implementing national health policies; plan and manage district health services; carry out the provision of disease prevention, health promotion, curative, health education and rehabilitative services; ensure provision of safe water and environmental sanitation; and organize and lead health data collection, management, interpretation, dissemination and use.

Sierra Leone’s health service delivery system is pluralistic, with the government, faith-based missions, non-governmental organizations (NGO), and the private sector providing services. There are public, private for profit, private non-profit, and traditional medicine practices. The private sector is underdeveloped compared to other countries in the sub-region and provides mainly curative care for inpatients and outpatients on a fee-for-service basis. Private health facilities operate under the authority of individual owners and/or boards of directors and are mainly found in urban areas. Traditional healers and traditional birth attendants (TBAs) are reported to provide a significant amount of health care and are largely unregulated.

Sierra Leone has a three-tier health delivery system composed of primary, secondary and tertiary levels. The first tier is the primary health level, which comprises 1,288 peripheral health units (PHUs) across Sierra Leone. PHUs are further sub-classified into three levels: Maternal and Child Health Posts (MCHPs), Community Health Posts (CHPs), and Community Health Centres (CHCs).

MCHPs serve villages with populations of less than 5,000. There are 606 MCHPs, which are staffed by maternal and child health aides who provide: antenatal care (ANC), testing for all suspected cases using malaria rapid diagnostic tests (mRDTs), and treatment of malaria, except for severe cases for which they provide a pre-referral treatment (intramuscular artesunate or artemether or rectal artesunate suppository) and refer to CHCs. Additionally, they provide insecticide-treated mosquito nets (ITNs) and intermittent preventive treatment (IPT) to pregnant women and infants. Since the rollout of the revised community health workers (CHW) strategy in June 2022, a network of approximately 8,159 CHWs support MCH aides. CHWs test for malaria using mRDTs and treat people, with the exception of pregnant women, children under five years of age, and severe cases, which are all referred to a PHU. They also provide

¹ Ministry of Health and Sanitation, The Basic Package of Essential Health Services, 2015-2020. (Freetown, Sierra Leone, 2015).

intermittent preventive treatment to pregnant women (IPTp), encourage net use, and refer pregnant women to PHUs for antenatal care (ANC).

The 423 CHPs serve small towns with populations of between 5,000 and 10,000. They are staffed by State Enrolled Community Health Nurses (SECHNs)/midwives and MCH aides. They provide the same types of services that are provided at the MCHPs, but they also refer any suspected treatment failures to CHCs.

The 259 CHCs are located at Chiefdom level and serve populations from 10,000 to 20,000. They are staffed with a midwife, community health officer (CHO), SECHN, MCH aides, an Epidemiological Disease Control Assistant and an Environmental Health Assistant. They test using either mRDTs or microscopy, and treat all malaria cases. If they cannot treat a severe case, they give pre-referral treatment (intramuscular artesunate or artemether or rectal artesunate suppository) and refer to a hospital. They are also responsible for supervising the CHPs and MCHPs within the Chiefdom.

The second tier of the health system is the secondary health system which comprises the district hospitals. Except Falaba, all districts have a hospital which provides secondary care services and serves as a referral hospital for the PHUs. The DHMTs, headed by a District Medical Officer, are responsible for the implementation of the national health policies, planning, coordination and management of health service delivery in collaboration with stakeholders. In addition to the 15 district hospitals, there are 72 owned by government, private, non-governmental and faith based organizations. Hospitals diagnose severe malaria cases through microscopy and treat all cases. They refer severe cases that have complications that they cannot manage to tertiary hospitals.

The tertiary level comprises referral and teaching hospitals situated at regional headquarter towns or the capital, and they serve as the referral level facility for secondary care and run by general practitioners and specialists. There are four regional hospitals based in the provinces and five tertiary facilities in the Western Area districts, which receive referrals from districts and provide outreach support.

As of July 2020, Sierra Leone's national health sector supply chain management body, the National Medical Supplies Agency (NMSA) is responsible for procurement, warehousing and distribution of all commodities with the exception of vaccines. The Directorate of Pharmaceutical Services (DPS) is responsible for all other supply chain functions including forecasting malaria and other health commodities. An informed push distribution system is carried out for all commodities with the exception of malaria commodities, which are beginning to use a pull type of logistical distribution, from the central level to district warehouse on a quarterly basis. Malaria commodities like all other health commodities are then allocated and distributed to PHUs through the informed push system. The country has fully migrated to an eLMIS reporting

through DHIS2, although eLMIS reporting rates lag behind other types of DHIS2 reports. The MOHS has finalized a rollout of mSupply, a warehouse management software system currently used in all district warehouses and some hospital warehouses.

The Health Management Information System (HMIS) in Sierra Leone is organized into four levels: community, health facility, district, and national. At the community and health facility level, malaria data is generated, compiled, and reported in aggregate using the monthly paper-based, summary data forms to the DHMT. Until recently, DHMT staff inputted all submitted data forms on a monthly basis into the DHIS2 data repository. In December 2022, the Directorate of Policy Planning and Innovation (DPPI), devolved data entry to the chiefdom level, which generated a new level in the data management cycle. In this new system, data forms are submitted to the supervising CHC monthly, for entry by CHOs who were trained on data entry. The DHMT is now responsible for data validation, and capacity building. The role of MOHS at the central level remains data validation and granting user right access to DHIS2.

OTHER CONTEXTUAL INFORMATION

The epidemic of Ebola Virus Disease (EVD), which peaked in Sierra Leone from June 2014 to November 2015, had a negative effect on all aspects of the nation and its people. The outbreak resulted in nearly 4,000 deaths in Sierra Leone,² including 7 percent of deaths among the total health workforce.³ Ebola weakened an already fragile health system devastated by a decade of civil war, and contributed to Sierra Leone having one of the world's most severe healthcare worker (HCW) shortages with most recent estimates of just 0.074 physicians and 0.753 nursing and midwifery personnel per 1,000 population.⁴ A key marker of a country's health system, Sierra Leone has one of the highest maternal mortality ratios globally, at 443 deaths per 100,000 live births.⁵ The health system was ill-equipped to cope with the massive increase in need for effective health promotion, preventive, diagnostic, and therapeutic services for EVD and other endemic diseases like malaria.

The effect of the EVD epidemic on malaria was significant, largely because the two diseases have similar symptoms and signs, and posed great demand on the weak health system. Reductions in care-seeking at the facility and the community level were observed and have been attributed to several factors including the widespread avoidance of formal testing and treatment by patients due to Ebola-phobia as well as precautionary measures taken by health care workers in the face of inadequate infection prevention and control measures. In addition, mandatory curfews, border closures, and disruption of transportation routes made obtaining

² WHO. Ebola Situation Report. (Geneva, Switzerland, 30 December 2015).

³ Evans DK, Goldstein M, Popova A. Health-care worker mortality and the legacy of the Ebola epidemic. *Lancet Global Health*. (Elsevier, Amsterdam, Netherlands, 2015): DOI:[https://doi.org/10.1016/S2214-109X\(15\)00065-0](https://doi.org/10.1016/S2214-109X(15)00065-0).

⁴ World Bank 2018 (<https://data.worldbank.org/indicator/SH.MED.PHYS.ZS?locations=SL>)

⁵ World Health Organization, Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. (Geneva, Switzerland, 2023):

<https://iris.who.int/bitstream/handle/10665/366225/9789240068759-eng.pdf?sequence=1>.

medical services challenging. Also, the MoHS temporarily suspended malaria testing to minimize exposure to blood, blood products and other body fluids and recommended presumptive treatment during this period. The reduced demand for and availability of healthcare in the Ebola-affected regions exacerbated the severity of illness and number of deaths caused by malaria, and other diseases. The Ebola outbreak likely had the most detrimental effect on children with malaria, with an estimated 1,755 additional deaths among children under five years of age in Sierra Leone.⁶

Five years on from the Ebola outbreak, Sierra Leone faced the COVID-19 pandemic which undermined gains made by the malaria program. The pandemic affected the accessibility and utilization of malaria prevention and control services, with many parallels to EVD including avoidance of formal testing and treatment, border closures, and changes to malaria testing protocols. This is demonstrated by a drop of at least 10 percent in the number of suspected malaria cases, malaria testing, confirmed malaria cases and reported malaria cases from 2019 to 2020. Similarly, the number of ITNs distributed through routine distribution at ANC and Expanded Programme on Immunization (EPI) services dropped by 6 percent and 8 percent, respectively, from 2019 to 2020.

Furthermore, traditional and complementary medicine use is reported to be widespread especially among pregnant women,⁷ and for treating malaria among children and adults due to social, cultural and health system factors.^{8, 9, 10} Traditional and complementary medicine poses both an opportunity and challenge to influence care seeking behaviors. It must be considered when designing and implementing malaria interventions.

Finally, due to topography, tropical monsoon climate, poor state of the region's infrastructure, and loss of protective natural drainage systems from periods of deforestation, Sierra Leone is at high risk of natural disasters, including mudslides. In 2017, a mudslide destroyed hundreds of homes just outside the city of Freetown, killing 1,141 people and leaving more than 3,000 homeless. This event gravely affected Sierra Leone's healthcare system, creating a need for quality healthcare services that far exceeded the nation's ability to serve its citizens.

⁶ Parpia AS, Ndeffo Mbah ML, Wenzel NS, Galvani AP. Effects of response to the 2014–2015 Ebola outbreak on deaths from malaria, HIV, and tuberculosis, West Africa. *Emerging Infectious Diseases*. (Bethesda, Maryland, March, 2016): <http://dx.doi.org/10.3201/eid2203.150977>

⁷ James PB, Bah AJ, Tommy MS, Wardle J, Steel A. Herbal medicines use during pregnancy in Sierra Leone: An exploratory cross-sectional study. *Women and Birth*. Volume 31, Issue 5, Pages e302-e309. (PubMed Central, October 2018), <https://doi.org/10.1016/j.wombi.2017.12.006>

⁸ Bakshi, Salina & McMahon, Shannon & George, Asha & Yumkella, Fatu & Bangura, Peter & Kabano, Augustin & Diaz, Theresa. (2013). The Role of Traditional Treatment on Health Care Seeking by Caregivers for Sick Children in Sierra Leone: Results of a Baseline Survey. *Volume 127, Issue 1, July 2013, Pages 46-52. Acta tropica*, 2013): <https://www.sciencedirect.com/science/article/abs/pii/S0001706X13000788#!>.

⁹ Ranasinghe S, Ansumana R, Lamin JM, Bockarie AS, Bangura U, Buanie JA, et al. Herbs and herbal combinations used to treat suspected malaria in Bo, Sierra Leone. (*Journal of Ethnopharmacology*. 2015): doi: 10.1016/j.jep.2015.03.028.

¹⁰ Diaz, T., George, A.S., Rao, S.R. et al. Healthcare seeking for diarrhoea, malaria and pneumonia among children in four poor rural districts in Sierra Leone in the context of free health care: results of a cross-sectional survey. (*BMC Public Health*, 2013): <https://doi.org/10.1186/1471-2458-13-157>

Ultimately, civil war, outbreaks of EVD and COVID-19, and natural disasters have left a lasting legacy affecting the capacity of the health system. These disruptions have also influenced the uptake and acceptance of malaria prevention and control interventions.

III. NMCP STRATEGIC PLAN

The Sierra Leone National Malaria Elimination Strategic Plan 2021–2025 (NMESP) supports improvement of the health status of the population and the fight against poverty by reducing the country’s burden due to malaria. The NMCP’s overall vision is “access to malaria control interventions for all” with the mission to “direct and coordinate efforts toward a malaria-free Sierra Leone through effective partnerships.” By the end of 2025, the NMESP’s goal is to contribute significantly to the improvement of the wellbeing of the population by reducing the malaria burden. To reach this goal, the NMESP includes the following objectives:

1. Reduce 2015 malaria mortality rates by at least 75%

The NMCP will reduce mortality rates by supporting the provision of quality diagnostic and treatment services at public, and private facilities as well as through community health workers through:

- A. the procurement and provision of RDTs, microscopy and related supplies, and treatments to all public institutions and RDTs at no cost to private facilities;
- B. regular training and supportive supervision for all health care workers at all public and private facilities as well as community health workers, emphasizing adherence to test results and for hospital staff the management of severe malaria;
- C. the establishment of a quality assurance/quality control system for malaria diagnosis; and
- D. regular monitoring of the safety and efficacy of antimalarials.

2. Reduce 2015 malaria case incidence by at least 75%

The NMCP will reduce incidence by supporting the provision/implementation of quality malaria preventative interventions including:

- A. universal access to ITNs through a mass campaign in 2023, supplemented and maintained through routine distribution through ANC and EPI services and primary schools;
- B. indoor residual spraying and larval source management using entomological monitoring data from 7 districts; and
- C. intermittent preventive treatment for pregnant women and infants.

3. 90% of the population practices at least 3 recommended malaria prevention and control behaviors

The NMCP will increase the practice of malaria prevention and control behaviors by developing and implementing a multi-pronged, integrated approach to address identified challenges for behavior change in collaboration with partners working together to address cross-cutting social behavior change issues by:

- A. Creating an enabling environment by empowering communities and households to demand services and accountability, engaging in high level advocacy to mobilize domestic support, and creating a policy context which emphasizes the importance of accounting for health care utilization patterns when implementing malaria control;
- B. Increasing demand, access and uptake of malaria services by updating the malaria communication strategy to structure communications and approaches across partners to mobilize and strengthen community capacity and change social norms, engage individuals and households, and develop enabling policies; and
- C. Strengthening behavior change through community dialogues, interpersonal communication, film shows, community theater, and other social mobilization interventions.

4. Strengthen malaria surveillance and use of malaria information to improve decision-making for programme performance

The NMCP will strengthen malaria surveillance by improving routine reporting through DHIS2 with a focus on building the capacity of the DHMTs. The NMCP will:

- A. strengthen required infrastructure as well as the technical capacity of health workers at all levels to attain complete, accurate, and timely routine data collection and reporting through the DHIS2;
- B. train health care workers in data use for decision making and support capacity building for geographical information systems for use in malaria mapping and programming;
- C. support the implementation of annual representative health facility assessments, other surveys, and routine monitoring including therapeutic efficacy studies and entomological monitoring; and
- D. facilitate operational research for policy making.

5. Ensure timely and adequate supply of quality-assured malaria commodities to public and private health facilities at all levels.

The NMCP will strengthen the supply chain by:

- A. Ensuring accurate and timely forecasting and supply planning of malaria commodities by collaborating with the NMSA and DPS;
- B. advocating for efficient warehousing, storage and sustainable distribution system across the supply chain; and

- C. strengthening the capacity of health care workers involved in commodity management at national, district, health facility and community levels through supportive supervision, training quarterly review meetings, and the scale-up of mSupply.

6. Strengthen and maintain capacity for programme management, coordination, and partnership to achieve malaria programme performance at all levels

The NMCP will enhance its operation capacity by:

- A. conducting a capacity needs assessment and using the results to advocate for addressing staffing and infrastructure gaps, facilitating monthly coordination meetings with partners, supporting DHMT/PHU In-Charges meetings, and conducting regular integrated supportive supervision;
- B. advocating to elevate the position of the NMCP and mobilize additional resources; and
- C. strengthening the coordination role of the NMCP by conducting malaria partner mapping, holding regular meetings, organizing cross-border malaria activities and meetings, and spearheading a strong partnership with the private sector specifically to address effective malaria treatment and prevention strategies.

7. Improve mobilization of resources and maximize the efficient use of available resources for greater public health influence

The NMCP's financing strategy is based on a mixed model: combining funding from the Government of Sierra Leone, Public-Private Partnerships and sustained development partner funding. The NMCP will:

- A. increase government spending and improve efficiency of government resource allocation for malaria programming;
- B. strengthen accountability measures related to funding for malaria to ensure appropriate allocation of malaria funding at the district level; and
- C. assess and adopt innovative financing mechanisms and increase private sector engagement and contributions to malaria control.

IV. KEY MALARIA DATA

EVOLUTION OF KEY SURVEY BASED MALARIA INDICATORS

Table 3: Key Survey Indicators

Indicator	2016, MIS	2019, DHS	2021, MIS
% of Households with at least one ITN	60	60	61
% of Households with at least one ITN for every two people	16	21	25
% of Population with access to an ITN	37	47	43
% of Population that slept under an ITN the previous night	39	51	45
% of Children under five years of age who slept under an ITN the previous night	44	59	76
% of Pregnant women who slept under an ITN the previous night	44	64	87
% of Children under five years of age with a fever in the last two weeks for whom advice or treatment was sought	44	59	75
% of Children under five years of age with a fever in the last two weeks who had a finger or heel stick	44	64	68
% 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	97	32	91
% of Women who attended four ANC visits during their last pregnancy	N/A	79	N/A
% of Women who received three or more doses of IPTp during their last pregnancy in the last two years	31	36	52
Mortality rate per 1,000 live births among children under five years of age	N/A	122	N/A
% of Children under five years of age with parasitemia by microscopy	40	N/A	22
% of Children under five years of age with parasitemia by RDT	53	N/A	39

ACT: Artemisinin-based combination therapy; DHS: Demographic and Health Survey; IPTp: intermittent preventive treatment of malaria during pregnancy; ITN: insecticide-treated mosquito net; MIS: Malaria Indicator Survey; RDT: rapid diagnostic test.

Figure 5. Insecticide-Treated Mosquito Net Use:Access Ratio Map

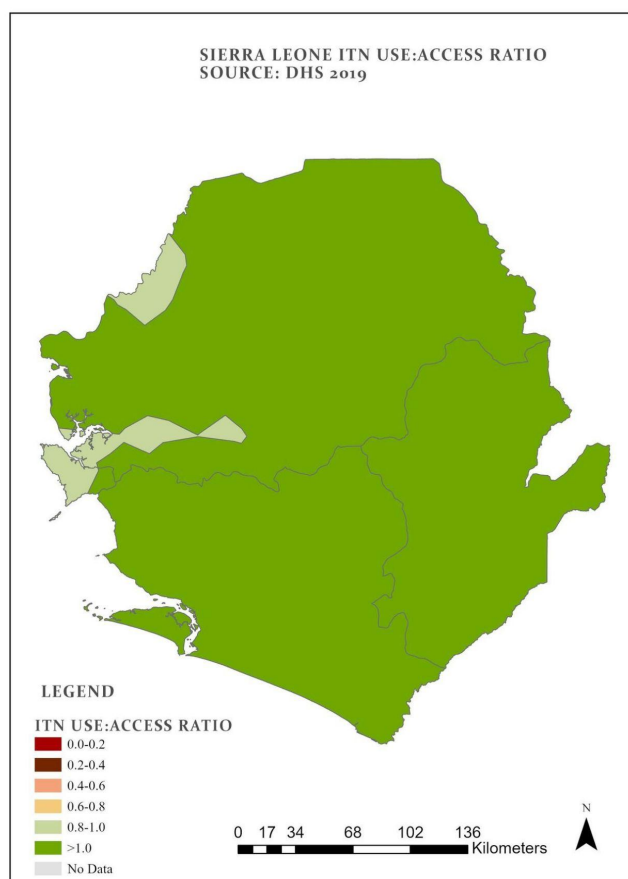


Table 4: Evolution of Key Malaria Indicators Reported through Routine Surveillance Systems

Indicator	2018	2019	2020	2021	2022
# of All-cause patient consultations	4,327,552	4,473,722	3,889,975	3,810,975	4,208,137
# of Suspected malaria cases ¹	4,011,921	3,939,150	3,501,655	3,200,199	2,983,291
# of Patients receiving diagnostic tests for malaria ²	3,996,065	3,905,728	3,427,391	3,172,572	2,835,317
# of Malaria cases ³	2,436,413	2,450,764	2,147,976	2,028,621	1,862,156
# of Confirmed cases ⁴	2,400,159	2,391,708	2,078,749	1,976,929	1,771,868
# of Presumed cases ⁵	36,254	59,056	69,227	51,692	90,288
% of Malaria cases confirmed ⁶	99%	98%	97%	97%	95%

Test positivity rate ⁷	60%	61.2%	60.7%	62.3%	62.5%
# of Malaria cases among children under five years of age ⁸	1,395,797	1,419,554	1,136,306	973,371	940,021
% Cases in children under five years of age ⁹	57%	58%	53%	48%	50%
# of Severe cases ¹⁰	34,834	41,939	34,148	36,410	42,070
# of Malaria deaths ¹¹	1348	2,771	1,648	3,056	1,634
# of Facilities reporting ¹²	1,279	1,365	1,430	1,370	1,484
% of Data completeness ¹³	99%	94%	93%	96%	96%

¹ Number of patients presenting with signs or symptoms possibly due to malaria (fever);

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 # of 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 # of children under five years of age divided by total # of cases;

¹⁰ Total # outpatient and inpatient, confirmed and unconfirmed;

¹¹ All ages, outpatient, inpatient, confirmed, and unconfirmed;

¹² Total # of health facilities reporting data into the HMIS/DHIS2 system that year;

¹³ # of Monthly reports from health facilities divided by # of health facility reports expected (average for the calendar year)

Table 5: Disaggregated Community-Level Data

Indicator	2020	2021 ¹	2022 ²
# of Patients receiving diagnostic test for malaria from a CHW	435,156	118,910	52,992
Total # of malaria cases reported by CHWs ³	296,744	80,038	35,388
% of CHW reported cases (among total malaria cases) ⁴	14%	4%	2%

¹ The MoHS was revising the CHW strategy beginning in 2021, which affected the level of community health services provided in comparison to previous years.

² The revised CHW strategy was rolled out in mid-late 2022, affecting the level of community health services provided in comparison to previous years.

³ Includes all ages, confirmed and unconfirmed.

⁴Total # of malaria cases reported by CHWs/Total # of malaria cases in the previous table.

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 (%)
Bo (PermaNet® 3.0)	1st: 6.3	5.2	99.1 (N=335)	79
	2nd: 12.0	14.9	98.4 (N=244)	89.5
Moyamba (Olyset Plus®)	1st: 6.3	11.6	91.3 (N=276)	78.6
	2nd: 12.0	24.8	86.4 (N=214)	81.6

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
2016	Bo	AL, ASAQ	100%
2016	Bombali	AL, ASAQ	100%
2016	Kenema	AL	100%

AL: Artemether-lumefantrine; ASAQ: Artesunate-amodiaquine

VI. Key Policies

Table 8: Policies in Sierra Leone

National Malaria Elimination Strategic Plan (2021-2025)	
National SM&E Plan (2016-2020)	
National Digital Health Strategy (2018-2023)	
National Digital Health Roadmap (2023-2025) Draft	
National Social Behavior Change/Communication Strategy (2017-2022)	
National Vector Control Strategy and/or Integrated Vector Management Plan (May, 2019)	
Malaria Case Management Policy (September, 2020)	
What is/are the first-line treatment(s) for uncomplicated <i>P. falciparum</i> malaria*?	Artemether-lumefantrine

What is/are the second-line treatment(s) for uncomplicated <i>P. falciparum</i> malaria*?	Artesunate-amodiaquine
What is the first-line treatment for severe malaria?	Parenteral artesunate
In pregnancy, what is the current first-line treatment for uncomplicated <i>P. falciparum</i> malaria in the <u>first trimester</u> ?	Currently, the first line treatment is oral quinine plus clindamycin. However, the MOH plans to update the treatment guidelines to include using artemisinin-based combination therapy (artemether-lumefantrine) in the first trimester.
Given the WHO policy change to recommend artemether-lumefantrine 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)	The current MIP guidelines have not yet been updated to reflect the WHO policy change. PMI is involved in conversations with the NMCP to update the current guidelines before the end of 2023.
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> ?	Artemether-lumefantrine
In pregnancy, what is the first-line treatment for severe malaria?	Parenteral artesunate
Is pre-referral treatment of severe disease recommended at peripheral health facilities? If so, with what drug(s)?	Yes, artesunate (injectable or rectal for children under 6), or if not available artemether or quinine.
Is pre-referral treatment of severe disease with rectal artesunate recommended for community health workers?	The use of rectal artesunate is included for children under six years of age in the case management guidelines, but it is not currently being implemented (PMI will be involved in any consideration of expanding to the community level)
Community Health Policy (2021)	
What is the # of CHWs currently providing iCCM?	8159
What is the country's target for the number of CHWs providing iCCM?	8702
What percent of the country's target is met?	93.76%
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?	Yes. CHWs in hard-to-reach areas can test and treat all ages except for children under two months of age. CHWs in easy-to-reach

	areas currently refer to a PHU for treatment.
Prevention of Malaria in Pregnancy Policy (September, 2017)	
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 13-16 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?	Yes, WHO recommended eight contacts are reflected in the updated ANC Guidelines
What is the status of training ANC providers on the WHO recommended 8+ contacts?	Completed
Have HMIS/DHIS2 and ANC registers been updated to include 8+ contacts?	Yes
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 6 months prior?	IPTp data can be collected and reported both as monthly doses administered as well as cohort data following a pregnant woman via a patient number/code used for each ANC, delivery and postnatal care visit.
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? How many districts are targeted for c-IPTp implementation?	Yes, the first dose of SP is administered at the PHU, with subsequent doses provided by CHWs. Only CHWs in hard-to-reach communities will conduct c-IPTp. All districts with CHWs based in hard to reach areas will be included in c-IPTp (approximately 14 districts).

ANC: antenatal care; CHW: community health worker; c-IPTp: community-based intermittent preventive treatment for pregnant women; iCCM: integrated community case management; IPTp: intermittent preventive treatment for pregnant women; MIP: malaria in pregnancy; MOH: ministry of health; SP: Sulfadoxine-pyrimethamine.

VII. PARTNER LANDSCAPE

Table 9: Partner Landscape

Partner	Key technical interventions	Geographic coverage	Funding amount or in-kind contribution	Timeframe
Government of Sierra Leone	<ul style="list-style-type: none"> Staffing 	<ul style="list-style-type: none"> National 	\$1,475,108	2023
Global Fund	<ul style="list-style-type: none"> Support for nationwide mass campaign in 2023 including procurement of the majority of ITNs and support for campaign Procurement of the majority of ITNs for routine distribution Procurement of national needs for SP Procurement of RDTs, ACTs, and injectable artesunate Training and on-site coaching and mentorship for case management, IPTp and IPTi at facility and community level Social behavior change interventions Financial incentives, training and supportive supervision for CHWs 	<ul style="list-style-type: none"> National, with the exception of the financial incentives for CHWs which is only for 10 districts 	\$58,153,985 \$73,235,736*	Current grant covers mid-2021 to mid-2024 Next grant covers mid-2024 to mid-2027
GAVI	<ul style="list-style-type: none"> Financial incentives for CHWs 	<ul style="list-style-type: none"> 3 districts 	\$1,000,000	2023

*To be updated after final funding levels are approved.