PMI | U.S. PRESIDENT'S MALARIA INITIATIVE

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LAST UPDATED: 04/07/2023

BURMA 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. Burma began implementation as a PMI focus country in FY2011. Please see the Burma Malaria Operational Plan for more information on PMI's approach and investments.

II. CONTEXT

Table 1: General Demographics and Malaria Situation

Population: 2023 estimate	56,242,997 (Ministry of Labour, Immigration and Population, Township Projection 2014–2031)
Population at risk of malaria	23,776,841*
Malaria prevalence	0.74% (Malaria Indicator Survey 2015 by polymerase chain reaction
Malaria incidence/1,000 population at risk	2.3 nationally (calculated from 2022 World Health Organization reported data)
Peak malaria transmission	May-July

*Burma's at-risk population is calculated based on non-malaria free areas, i.e., townships classified as either strata 2 and 3. Population levels from 2018 were used and adjusted to account for annual increases from 2018 to 2022

STRATIFICATION

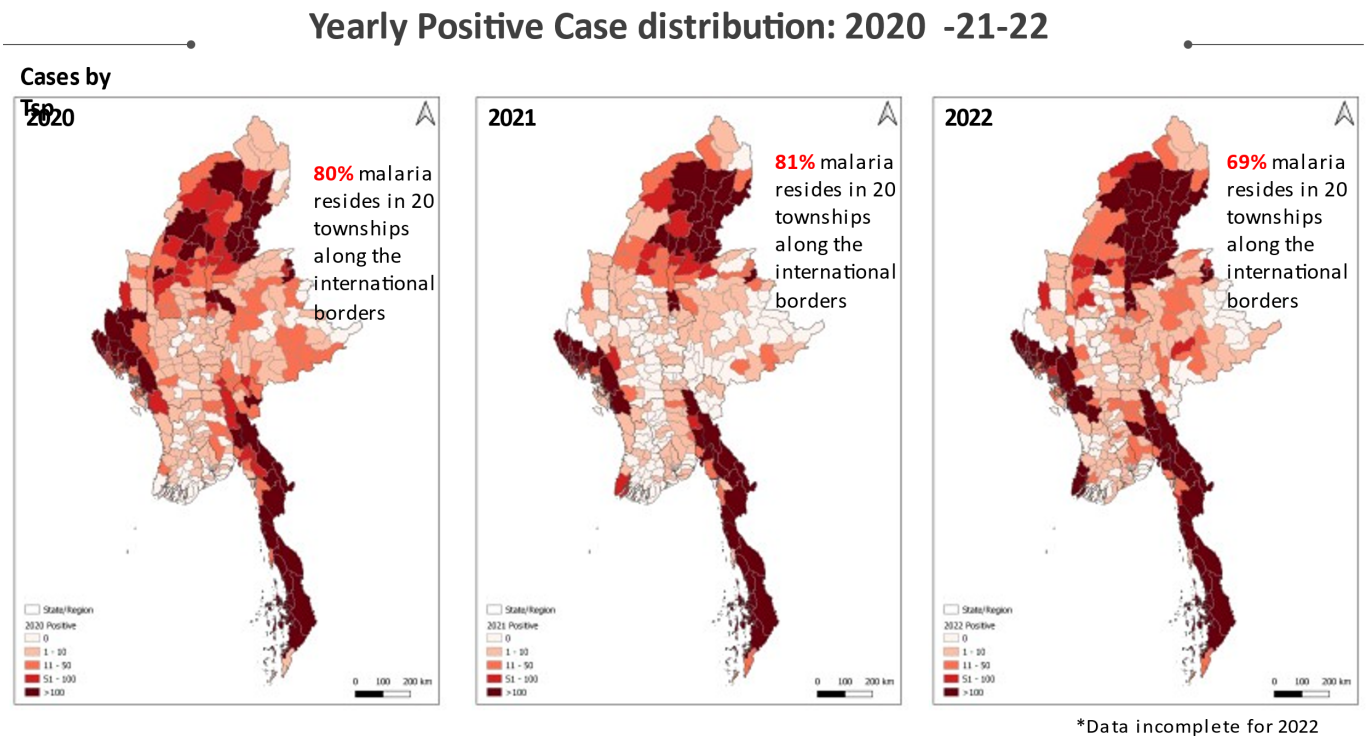
Burma adopted a stratification based on annual parasite incidence at the township level with the criteria in Table 2 below creating stratums.

Table 2: Number of Townships with API Malaria Risk Stratification

Stratum	Year			
	2019	2020	2021	2022
Free	39	39	39	39
API 0 (Receptive with importation risk)	32	50	110	63
API <1	204	196	139	165
API 1 to 5	36	25	20	30
API >5	19	20	22	33

*Source: Malaria Situation in Myanmar presentation by Dr Nay Yi Yi Linn, Deputy Director NMCP, at Malaria Partners Meeting Bangkok, Thailand March 6, 2023.
API: annual parasite incidence

Figure 1: Incidence Maps



*Source: Malaria Situation in Myanmar presentation by Dr Nay Yi Yi Linn, Deputy Director National Malaria Control Program, at Malaria Partners Meeting Bangkok, Thailand March 6, 2023.

Table 3: Malaria Parasites and Vectors

Principal Malaria Parasites	*Plasmodium falciparum* and *P. vivax*
Principal Malaria Vectors*	*Anopheles dirus* and *An. minimus* are the primary vectors. *An. annularis*, *An. jeyporiensis*, and *An. sundaicus* are among the prevalent secondary vectors. Insecticide resistance monitoring conducted in 2019 in 10 sites revealed all malaria vectors are susceptible to 0.05% deltamethrin.

*See Entomological Monitoring section of the MOP for more details on vector bionomics and insecticide resistance and Indoor Residual Spraying section for details on residual efficacy.

COUNTRY HEALTH SYSTEM

The text below describes the health care structure prior to the coup in February 2021 (see section on Other Contextual Information below). The military coup, and post-coup civil conflicts disrupted Burma's health system functionality (refer to the Malaria Operational Plan FY 2023 for more details). The description below comes from the National Strategic Plan for Malaria Elimination 2021–2025.

Burma is administratively divided into 14 states and regions plus Nay Pyi Taw Territory. There are 74 districts, 330 townships, 398 towns, 32 sub-townships, 3,065 wards, 13,619 village tracts, and 64,134 villages. The public health care system in Burma is highly structured, following the central-state/region-district-township government hierarchy and based on the principles of primary health care, with medical officers overseeing all health-related activities in their designated areas. The townships and villages are the core planning and implementation units for health interventions, including malaria.

The MOH is under the Union Minister of Health and has six functioning departments, each under a director general: Department of Medical Services, Department of Public Health, Department of Medical Research, Department of Food and Drug Administration, Department of Health Professional Resource Development, and Management and Department of Traditional Medicine. The MOH is the major provider of comprehensive health care and has a pluralistic mix of public and private sectors. The Department of Public Health plays a major role in providing comprehensive health care throughout the country, including remote and hard-to-reach border areas.

Non-governmental organizations also provide services. Since 1978, health services have been integrated into basic health services through the primary health care approach.

The National Malaria Control Program (NMCP) is under the Vector-based Disease Control Program (VBDC) and headed by two Deputy Directors—one for malaria and one for dengue hemorrhagic fever, filariasis, and other vector-borne diseases. Since 1978, the VBDC Program has been responsible for control of malaria, dengue, lymphatic filariasis, chikungunya, and Japanese encephalitis. Most of the staff and resources of VBDC at all levels—except in the bigger cities—are focused on malaria. The NMCP works closely with the following government departments in order to implement key activities:

- The Department of Medical Services (responsible for medical supplies and hospital services management) to collect hospital data on malaria morbidity and mortality.
- The National Health Laboratory to implement quality assurance of hospital-based malaria microscopy.
- The Food and Drug Administration Department for registration of antimalarials; quality control of antimalarials; control of counterfeit, sub-standard and unregistered antimalarials' and implementing the ban on oral artemisinin monotherapy.

Township level

The Township Public Health Department is headed by the Township Public Health Officer. Under this Officer, there are two medical officers (one for disease control and one for public health) and one administrative officer. Generally, each Officer is responsible for four to five rural health centers, a station hospital, and four to five sub-rural health centers (each managed by a midwife with a public health supervisor). Microscopy services are available at township hospitals, some station hospitals, and some NGO-run clinics. Microscopists are multi-skilled rather than malaria specific.

During the last two decades, about 40,000 community health workers (CHWs) have been trained, and it is estimated that 50 percent of these are still active. They are volunteers who are neither employed by the government nor paid any salary, which accounts for their relatively high attrition rate. The CHWs are trained to provide health education, treat minor illnesses, and assist in the control of infectious diseases. Amongst these voluntary workers are auxiliary midwives who are trained for deliveries at home.

Another group of volunteers, the Integrated Community Malaria Volunteers (ICMVs), are the mainstay of malaria control activities at the village level. ICMVs are provided three to five days of training on malaria diagnosis, treatment, prevention, and surveillance. They provide malaria diagnosis and treatment at the community level using rapid diagnostic tests and artemisinin-based combination therapy / chloroquine. Some are also engaged in preventive work, such as insecticide-treated mosquito net (ITN) distribution and health education depending on the organization (non-governmental organizations, international non-governmental organizations) that supports and supervises them. The quality of supervision provided for ICMVs varies considerably from one agency to another. The MOH plan was to transition these ICMVs into fully qualified CHWs.

Procurement and Supply Management

The malaria commodity procurement and supply management system is vertical in nature and largely relies upon donor funding and implementing partners to meet the needs of the program. The program is currently accessing quality, safe, and effective pharmaceuticals, supplies, and other program commodities through the procurement mechanisms of partners (Global Fund to Fight AIDS, Tuberculosis, and Malaria [Global Fund] and PMI).

The National Malaria Information System

The NMCP's objective is to expand, modernize, and strengthen the national malaria information system to allow accurate and timely identification of cases, reporting, and geographical presentation of results to guide appropriate response, as follows:

- In transmission-reduction areas, facility-level and community-based reporting units send their reports to higher levels on a monthly basis. Reports of unusual increases of cases are submitted immediately by phone, followed by paper reports.
- In elimination areas, a case-based surveillance and response system is rolled out, and reporting units are required to notify higher levels of any confirmed malaria cases by phone or email within 24 hours. The township focal points together with VBDC staff conduct case investigations, and, if appropriate, focus investigations and response within seven days of notification.
- The vision is to integrate the current Malaria Information System into a District Health Information Software 2 system for HIV, TB and Malaria over the next several years.

Despite significant investment in health information systems by the Global Fund, and with World Health Organization (WHO) support, Burma still does not have a complete and interoperable malaria information system to ensure seamless data management.

OTHER CONTEXTUAL INFORMATION

Military Coup

On February 1, 2021, Burma's military overthrew the elected government in a coup d'état. The coup devastated key sectors in Burma and hampered health service delivery, including malaria prevention, control, and elimination activities. Following the coup d'état, the United States government conducted a foreign assistance review and determined that lifesaving health activities, including malaria services, could continue in Burma. USAID, the United Nations, the Global Fund, and other key partners have reduced engagement with military authorities, including military-appointed staff at the MOH. Over 75 percent of public sector health providers (nearly 20,000 medical workers) went on strike as part of a civil disobedience movement to protest the coup, creating understaffed conditions across public sector facilities. The public health sector-wide strike has limited meaningful engagement with government counterparts and, as a result, PMI has planned for alternative means of malaria programming, relying on its partners to reach beneficiaries at the township and community levels.

Reaching Underserved Ethnic Minorities and Marginalized Populations, Including Internally-Displaced Persons in Conflict and Non-Government Control Areas

Burma has tremendous ethnic diversity, with 135 official major ethnic groups and seven ethnic minority groups living in Karen, Shan, Mon, Chin, Kachin, Rakhine, and Karenni states. Minority ethnic communities are estimated to make up at least one-third of the country's total population and to inhabit half of the land area. Other main groups include the Nagas, who live in north Burma and are estimated to number more than 100,000, constituting another complex family of Tibetan-Burmese language subgroups.[1] These populations live in hard-to-reach and

[1] https://minorityrights.org/country/myanmarburma/

conflict affected areas and have limited access to health services, including malaria.

The UN refugee agency announced as of May 2, 2022, the number of internally displaced people in Burma has doubled since February last year and has crossed the 936,000 mark. Most of these internally displaced people are reported to be from Sagaing Region (240,600), Karen State (96,000), Kachin State (95,200), Kayah State (89,700), Shan State-South (56,300), and Magway Region (50,500).

The malaria program still faces challenges in tackling the malaria situation in non-government-controlled areas where there is limited access to quality public health services. Ethnic minorities in these areas are particularly at risk of malaria for several reasons, which include conflict, population movements, ecology, vulnerability, and difficulties associated with transportation. In addition, health systems are weak and ethnic health organizations (EHOs) often have limited capacity. Although the Karen Department of Health and Welfare and the Kachin Independence Organization have some basic structure and capacity for implementation, others, such as the Mon National Health Committee and the Wa and Kokang EHOs, have no proper structure and system for public health. Currently, development partners support the implementation of malaria prevention and control activities in non-government-controlled areas. Although some progress has been made in getting services to vulnerable ethnic minority populations, further improvements and significant additional effort will be needed to reduce the burden of disease in these areas and bring progress in line with the rest of the country.

III. NMCP STRATEGIC PLAN

Vision

A Malaria Free Myanmar by 2030

Mission

The NMCP aims to achieve malaria elimination by 2030, ensuring equitable and universal access to effective preventive, diagnostic and curative services to all at-risk populations, including those living in hard-to-reach areas (forest goers, mobile populations and migrants), and through surveillance in collaboration with the efforts of communities, defense services and other ministries, national and international non-governmental organizations including EHOs, private sector, United Nations agencies and financial partners.

Goal

To eliminate the indigenous transmission of *Plasmodium (P.) falciparum* malaria by 2026 and put Myanmar on the path to eliminate all human malaria by 2030.

Objectives

1. Achieve zero indigenous *P. falciparum* malaria cases by 2026
2. Reduce all species malaria morbidity by 67 % relative to the 2021 baseline figure and reduce mortality associated with indigenous malaria to zero by 2026
3. Prevent the re-establishment of indigenous transmission of P. falciparum/all species malaria in Townships where transmission has been interrupted.
4. Prevent the emergence/introduction and spread of artemisinin-based combination therapy resistant *P. falciparum* malaria in Myanmar.

Key interventions

1. Early and effective malaria case management.
2. Universal coverage of high-risk populations with appropriate malaria prevention measures.
3. Case-based surveillance for elimination and prevention of re-establishment.

Supporting elements

1. Expanding research for innovation to accelerate malaria elimination and improve delivery of services.
2. Strengthening the enabling environment.

Principles

- Progress towards elimination will be accelerated through the targeted and effective deployment of proven interventions to at-risk populations, and utilization of promising new interventions tailored to the needs of specific high-risk communities.
- Progress towards the development of a sustainable elimination effort will be accelerated and strengthened by building country ownership and leadership and mobilizing multi sectoral partnership action with the participation of communities, the Defense Services and other ministries, implementing partners including EHOs, technical agencies, financial partners and the private sector.
- An adequate malaria case-based surveillance system will be in place nationally to support the identification of transmission foci and provide a system whereby sub-national and eventually national elimination can be verified.
- Improved epidemiology-led entomological surveillance and investigation is required to support evidence- based vector control operations and accelerate elimination.
- In addition to the information system associated with case-based surveillance (case investigation, focus investigation, classification and response).
- Information systems that facilitate logistics management and routine monitoring and evaluation at operational unit-level are required to optimize implementation of malaria interventions.

- Equity in access to services irrespective of gender, reach, ethnicity and affiliation is essential, especially for the most vulnerable and hard-to-reach populations.
- Innovation in tools and implementation approaches specific to risk groups and epidemiological situations will help to maximize progress.

Milestones

By 2021
- Incidence <1 per 1,000 population is attained in all States/Regions.
- At least four States/Regions free from falciparum malaria transmission (Yangon, Bago, Nay Pyi Taw and Magway).

By 2022
- Incidence <1 per 1,000 population is attained in all Townships.
- At least an additional four States/Regions free of falciparum malaria transmission (Mon, Eastern Shan, Southern Shan and Mandalay).

By 2023
- At least an additional three States/Regions free of falciparum malaria transmission (Northern Shan, Kayah, Ayeyarwady).

By 2024
- At least an additional three States/Regions free of falciparum malaria transmission (Chin, Rakhine, Kachin, Tanintharyi).
- Malaria-free status is maintained in Townships where malaria transmission has been interrupted.

By 2025
- At least an additional two States/Regions free of falciparum malaria transmission (Sagaing, Kayin).
- Malaria morbidity reduced by 67% relative to the 2021 baseline.
- Zero indigenous malaria deaths.

By 2026
- Myanmar is free of falciparum malaria.

By 2027
- Malaria case-based reporting for prevention of re-establishment maintained in all receptive Townships and at State/Region level nationwide.
- Strategies to prevent the re-establishment of malaria transmission in place.

By 2029
- Interruption of transmission of all human species of malaria.

By 2032
- Myanmar is certified free of malaria by the WHO.

IV. KEY MALARIA DATA

EVOLUTION OF KEY SURVEY BASED MALARIA INDICATORS

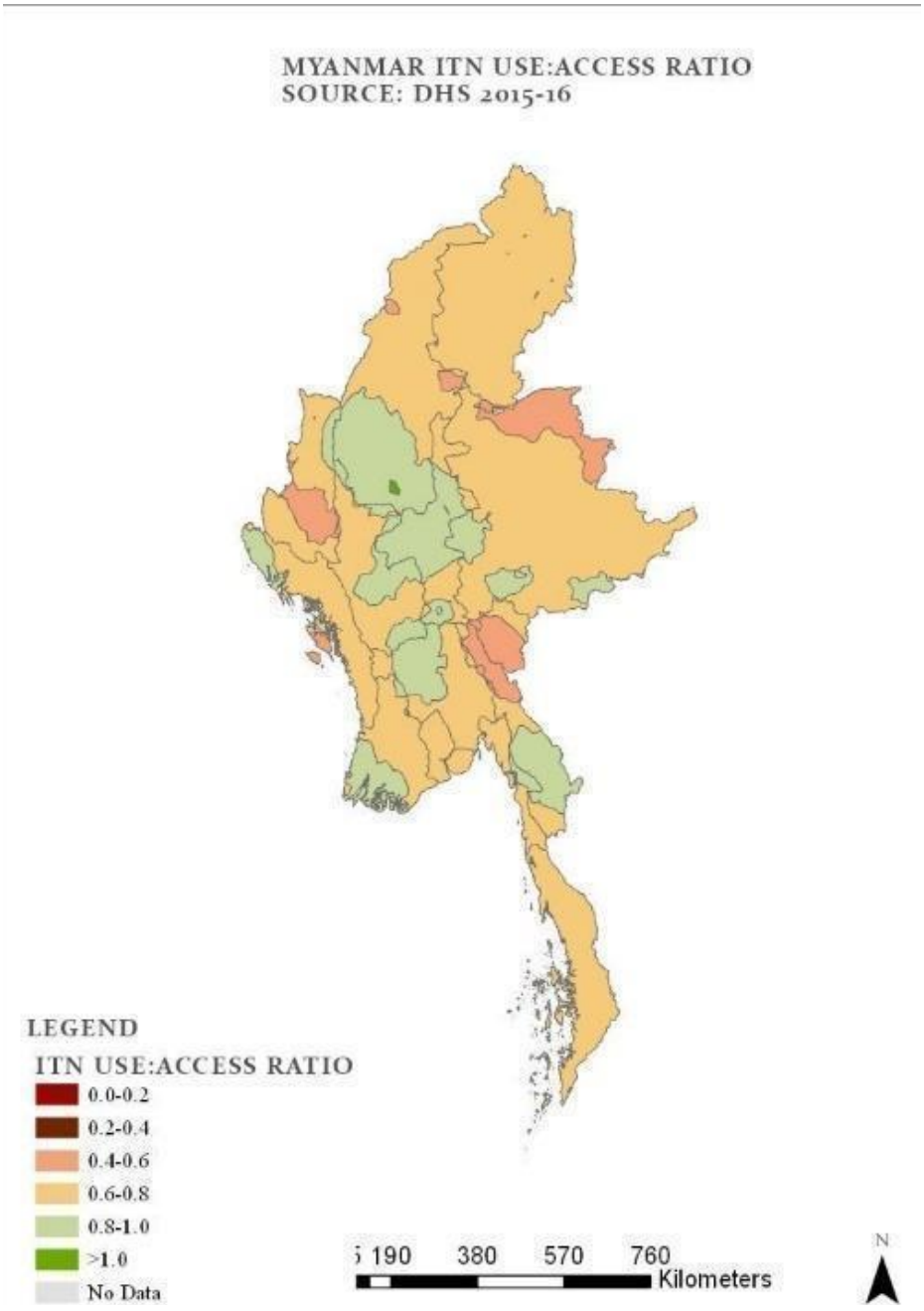
Table 4: Key Survey Indicators

Indicator	2012–2014 Global Fund Implementing Partners	2013–2014 CAP Malaria Project	2015 MIS	2015–2016 DHS
% of Households with at least one ITN	2013: 68%	2013: 98% 2014: 97%	19% (52% D1 65% D4)*	27%
% of Households with at least one ITN for every two people	N/A	N/A	N/A	14%
% of Population with access to an ITN	N/A	N/A	N/A	N/A
% of Population that slept under an ITN the previous night	2013: 86% 2014: 63%	2013: 61% 2014: 82%	10%	16%
% of Children under five years of age who slept under an ITN the previous night	2013: 59% 2014: 45%	N/A	16%	19%
% of Pregnant women who slept under an ITN the previous night	2013: 57% 2014: 42%	N/A	17%	18%
% of Children under five years of age with a fever in the last two weeks for whom advice or treatment was sought	2013: 12% 2014: 8%	N/A	71%	65%
% of Children under five years of age with a fever in the last two weeks who had a finger or heel stick	N/A	N/A	4% (all ages)	3%
% 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	N/A	N/A	N/A	N/A
% of Women who attended 4 ANC visits during their last pregnancy	N/A	N/A	N/A	59
% of Women who received three or more doses of IPTp during their last pregnancy in the last two years	N/A	N/A	N/A	N/A
Mortality rate among children under five years of age per 1,000 live births	N/A	N/A	N/A	50
% of Children under five years of age with parasitemia by microscopy	N/A	N/A	<1%(all ages by PCR)	N/A

% Children <5 with parasitemia by RDT	N/A	N/A	N/A	N/A

ACT: artemisinin-based combination therapy. DHS: Demographic and Health Survey; ITN: insecticide-treated mosquito net; MIS: Malaria Indicator Survey
*D1: Domain 1 included townships with API>5 and D4: Domain 4 included hard-to-reach townships in the sampling frame.

Figure 2. ITN Use:Access Ratio Map



Ownership and access of any type of net is nearly universal across Burma; however, ITN ownership and access lag. Household ownership of ITNs varies by region with Yangon and Naypyitaw having the lowest rates. Use:access ratios for ITNs are below target in many regions and poor in Bago and Kayah regions. Children and women of reproductive age have

slightly higher rates of ITN use than boys 15-20 and older adults, in households that don't have enough ITNs. In households with enough ITNs, males 40-49 have the highest rates of ITN use, and teens and adults over 50 somewhat lower. Populations in urban areas have slightly higher ITN use:access ratios than those in rural areas. The poorest and richest quintiles have the highest ITN use:access ratios, followed by the middle quintiles.

In Table 5 (below), community-level data are integrated into the broader Malaria Information System, and these numbers are inclusive of both community- and health facility-level data.

Table 5: Evolution of Key Malaria Indicators Reported through Routine Surveillance Systems

Indicator	2017	2018	2019	2020	2021	2022
# of All-cause patient consultations	N/A	N/A	N/A	N/A	N/A	N/A
# of Suspect malaria cases[1]	N/A	N/A	N/A	N/A	N/A	N/A
# of Patients receiving diagnostic test for malaria[2]	3,368,697	3,183,758	3,709,622	3,611,814	1,958,385	2,305,258
# of Malaria cases[3]	85,019	76,518	56,411	58,132	79,001	129,614
# of Confirmed cases[4]	85,019	76,518	56,411	58,132	79,001	129,614
# of Presumed cases[5]	0	0	0	0	0	0
% of Malaria cases confirmed[6]	100%	100%	100%	100%	100%	100%
Test positivity rate[7]	2.5	2.4	1.5	1.6	4.0	5.6
# of Malaria cases among children under five years of age[8]	N/A	N/A	N/A	N/A	N/A	N/A
% of Cases in children under five years of age[9]	N/A	N/A	N/A	N/A	N/A	N/A
# of Severe cases[10]	N/A	N/A	N/A	N/A	N/A	N/A
# of Malaria deaths[11]	31	19	14	10	11	13
# of Facilities reporting[12]	N/A	N/A	N/A	N/A	N/A	N/A
% of Data completeness[13]	N/A	N/A	N/A	N/A	N/A	N/A

[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 <5 years of age cases divided by total # of cases;
[10] Hospitalized with malaria;
[11] All ages, outpatient, inpatient, confirmed, and unconfirmed;
[12] Total # of health facilities reporting data into the HMIS/DHIS2 system that year;
[13] # monthly reports from health facilities divided by # health facility reports expected (average for the calendar year).

Table 6: Disaggregated Community-Level Data

Indicator	2019	2020	2021	2022
# Patients receiving diagnostic test for malaria from a CHW	2,407,274	2,212,123	1,461,387	1,784,380
Total # of malaria cases reported by CHWs[1]	46,545	47,775	62,588	116,240
% of CHW reported cases (among total malaria cases)[2]	83%	82%	92%	90%

[1] Includes all ages, confirmed and unconfirmed.
[2] Total # malaria cases reported by CHWs/Total # malaria cases in the previous table.
CHW: community health worker.

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 sub-nationally.*	Sub-nationally		
3. Are foci investigated? *If yes, please note whether this occurs nationally or sub-nationally.*	Sub-nationally		
Elimination scope	**2020**	**2021**	**2022**
4. Total number of townships in the country (admin 2)	330	330	330
5. Number of townships that have been verified as having eliminated malaria?*	39	40	40
6. Among districts *not* verified as having eliminated malaria, how many townships are targeted for elimination efforts?	223	235	227
6A. Among townships targeted for elimination by PMI efforts, how many have *active elimination activities*?**	3	3	14

** Toungup, Ramree, and Munaung townships in Rakhine State.
* Malaria elimination - interruption of local transmission, i.e. no local malaria cases for three years. This refers to NMCP-led subnational verification only. It is not referring to 'elimination certification,' which can only be granted by WHO for an entire country.
**Elimination activities include, but are not limited to 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, etc.)

V. Other Implementation Information

Table 8: Results of Durability Monitoring

Site/Net Type Tamu Township, Sagaing/	Survey and Time Since Distribution (months)	Attrition to Wear and Tear (%)	Nets in Serviceable Condition (%)	Optimal Insecticidal Effectiveness in Bioassay (%)
DawaPlus 2.0	36-month follow-up	8.5%	78.2%	3.3%
PermaNet 2.0	36-month follow-up	7.8%	84.6%	10.0%

Standard durability monitoring was done on two ITN brands (PermaNet 2.0 and DawaPlus 2.0) distributed via a mass campaign in 32 villages of Tamu Township in December 2015. A baseline durability monitoring assessment was conducted in June 2016, the 12-month assessment was carried out in December 2016, the 24-month assessment in December 2017, and this 36-month assessment was done in December 2018. In summary, the 36-month assessment of cohort nets was successful, with only 13 households lost to follow-up. Most of the cohort ITNs (81.7 percent) were still surviving in physically functioning condition. However, insecticidal effectiveness, according to bioassays, was less than optimal. The chemical residue analysis from 36-month data collection had a mean of 1.10 g/kg deltamethrin on the DawaPlus 2.0 nets (55 percent decrease from loading dose of 2.0 g/kg) compared to 0.97 g/kg for the PermaNet 2.0 (69 percent decrease from loading dose of 1.4g/kg).

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
2019	Tamu, Sagaing Region	Pf: AL, DP	AL 100%: DP 100%
2020	Buthidaung, Rakhine	Pf: AL, DP: Pv: CQ	AL 100% DP 98%: CQ 96%

* Reference: The Ninth Meeting of the Greater Mekong Subregion Therapeutic Efficacy study network virtual meeting, September 15-16, 2021.
AL: artemether-lumefantrine; CQ: chloroquine; DP: dihydroartemisinin-piperaquine; *Pf: Plasmodium falciparum; Pv.: Plasmodium vivax.*

VI. Key Policies

Table 10: Policies in Burma

National Strategic Plan (2021-2026)	
National Surveillance, Monitoring, and Evaluation Plan (2021-2025)	
Strategic Action Plan for Strengthening Health Information (2017–2021)	
Guideline on Mobile Used in Malaria Surveillance for Malaria Control and Elimination (January 2018)	
National Social Behavior Change Strategy (2017)	
Malaria Microscopy Standard Operating Procedure (2017)	
National Supply Chain Strategy (2015–2020,)	
National Vector Control Strategy and/or Integrated Vector Management Plan (part of NSP)	
Guidelines and Standard Operating Procedures for Entomological Monitoring and Surveillance (2017)	
Malaria Case Management Policy (2015)	
Quality Assurance and Quality Control Manual for Malaria Microscopy (2017)	
What is/are the first-line treatment(s) for uncomplicated *P. falciparum* malaria*?	AL for 3 days + single dose of PQ (0.75 mg/kg) at Day 0
What is/are the second-line treatment(s) for uncomplicated *P. falciparum* malaria*?	AS+MQ (or) DHA+PPQ for 3 days (+PQ at Day 0)
What is/are the first-line treatment(s) for uncomplicated P. vivax malaria?	CQ + PQ 0.25mg/kg/day for 14 days for radical treatment
What is the first-line treatment for severe malaria?	IV Artesunate. If Artesunate is not available, then IM Artemether should be used in preference to quinine. It is essential to continue and complete treatment with a full course of ACT once the patient can tolerate oral therapy.
In pregnancy, what is the current first-line treatment for uncomplicated P. falciparum malaria in the first trimester?	Quinine plus Clindamycin is to be given for 7 days
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, There is a plan to revised the malaria case management policy and it hasn't discussed at technical working group as yet
In pregnancy, what is/are the first-line treatment(s) for uncomplicated *P. falciparum* malaria in the second	AL to be given for 3 days

and third trimesters?	
What is/are the first-line treatment(s) for *P. vivax* malaria during pregnancy?	CQ
In pregnancy, what is the first-line treatment for severe malaria?	IV artesunate
Is pre-referral treatment of severe disease recommended at peripheral health facilities? If so, with what drug(s)?	Pre-referral dose of IM injection Artesunate or Artemether, IM Quinine or Artesunate suppository (10 mg/kg) in young children <6 years of age.
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?	8,516 (VBDC Annual Report 2019 December)
What is the country's target for number of CHWs providing iCCM?	9,000
What percent of the country's target is met?	94.6%
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
Prevention of Malaria in Pregnancy Policy (N/A)	
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?	N/A
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 the updated guidelines support 8 ANC scheduled contacts.
What is the status of training ANC providers on the WHO recommended 8+ contacts?	Some training was provided but not for all providers.
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?	N/A
Is ANC/IPTp provided by facility staff conducting ANC outreach to communities?	ANC is provided through outreach visits by midwives.

Can CHWs deliver IPTp and if so, which specific cadres and beginning with which dose?	N/A

*Please include treatments for gametocyte carriage and transmission reduction (i.e., single low dose primaquine) in settings of malaria elimination or settings with evidence of artemisinin-resistance if these are also in a country's guidelines.
AL: artemether-lumefantrine; ANC: antenatal care; AS+MQ: artesunate and mefloquine; CHW: community health worker; CQ+PQ: chloroquine and primaquine; DHIS2: District Health Information Software 2. iCCM: integrated community case management; IPTp: intermittent preventive treatment during pregnancy; NSP: National Strategic Plan; SP: sulfadoxine-pyrimethamine; VBDC: Vector-borne Disease Control Program; WHO: World Health Organization.

VII. PARTNER LANDSCAPE

Table 11: Partner Landscape

Partner	Key technical interventions	Geographic coverage	Funding Amount or in-kind contribution	Timeframe
Global Fund (RAI3E) implemented by the United Nations Office for Project Services	• Vector Control support through nationwide mass and continuous ITN distribution • Case Management support nationwide including training and supervision • Malaria Surveillance support • Procurement of malaria commodities	National coverage of 330 Townships Coordinated coverage of villages within 36 PMI supported Townships	$90,100,000	Current grant covers from January 2021-December 2023
Access to Health Fund managed by the United Nations Office for Project Services	• Essential package of health services • Strengthening the health system	Deliver service packages in nine states and regions (Kachin, Rakhine, Shan, Kayin, Chin, Yangon, Sagaing, Kayah)	$249,000,000	Annually, 2019–2023