

## Malaria

### Issue Brief: Malaria

This issue brief has been prepared to mark the World Malaria Day 2026 at April, 25, 2026. It aims to provide a comprehensive overview of key publications, guidelines, and practical materials on malaria prevention, diagnosis, and treatment. The selected documents reflect current evidence and field-based experiences, supporting healthcare professionals, researchers, and public health authorities in their efforts to control and eliminate malaria. By bringing together accessible and reliable knowledge, this collection contributes to raising awareness and strengthening global and local responses to one of the world's most persistent infectious diseases.

More guidelines & resources can be downloaded in our Malaria Toolbox <https://medbox.org/67E5193173516/toolbox/malaria>

Malaria remains a major global health challenge, particularly in sub-Saharan Africa and parts of Asia and Latin America. Effective treatment relies on timely diagnosis and the use of artemisinin-based combination therapies (ACTs), which have significantly reduced mortality in recent decades. Prevention and control strategies include insecticide-treated bed nets, indoor residual spraying, and seasonal chemoprevention. Despite progress, challenges such as drug and insecticide resistance, climate change, and fragile health systems continue to hinder eradication efforts. Malaria has far-reaching social and economic impacts, disproportionately affecting vulnerable populations, especially children and pregnant women, and placing a substantial burden on healthcare systems worldwide.

### Roadmaps, Action Plans & Reports

#### World malaria report 2025

World Health Organization WHO (2025)

Addressing the threat of antimalarial drug resistance. This year's report spotlights the growing threat of antimalarial drug resistance. Partial resistance to artemisinin derivatives – the backbone of malaria treatments after failures of chloroquine and sulfadoxine-pyrimethamine – has now been confirmed or suspected in at least 8 countries in Africa, and there are potential signs of declining efficacy of some of the drugs that are combined with artemisinin.



<https://www.medbox.org/document/world-malaria-report-2025>  
<https://iris.who.int/server/api/core/bitstreams/be20b8dc-cbfa-42a6-ad17-7679ceb75360/content>

## Global Malaria Programme operational strategy 2024–2030

World Health Organization WHO (2024)

Ahead of World Malaria Day, the WHO Global Malaria Programme published a new operational strategy outlining its priorities and key activities up to 2030 to help change the trajectory of malaria trends, with a view to achieving the global malaria targets. The strategy outlines 4 strategic objectives where WHO will focus its efforts, including developing norms and standards, introducing new tools and innovation, promoting strategic information for impact, and providing technical leadership of the global malaria response.

<https://www.medbox.org/document/global-malaria-programme-operational-strategy-2024-2030>

<https://www.who.int/publications/i/item/9789240090149>



## Prevention of re-establishment of malaria transmission. Global guidance

World Health Organization WHO (2025)

This global guidance was developed to support malaria-free countries and those that are close to malaria elimination to prevent re-establishment. The document outlines key concepts and principles for preventing re-establishment and provides guidance on strategies, interventions, planning and management. Country examples are included to highlight good practices and illustrate practical applications.

<https://www.medbox.org/document/prevention-of-re-establishment-of-malaria-transmission-global-guidance>

<https://iris.who.int/bitstream/handle/10665/381866/9789240112087-eng.pdf?sequence=1>



## Clinical Guidelines

### WHO Guidelines for Malaria

World Health Organization WHO (2025)

13 August 2025. The conditionality of this recommendation is largely driven by the current higher unit cost of pyrethroid-PBO ITNs compared to pyrethroid-only LLINs and therefore the uncertainty of their cost-effectiveness. Furthermore, as PBO is less wash-resistant than pyrethroids, its bioavailability declines faster over the three-year estimated life of an ITN; therefore, the added impact of pyrethroid-PBO ITNs over that of pyrethroid-only LLINs may decline over time. The evidence comes from two sites in eastern Africa with pyrethroid resistance and not from other geographies where

<https://www.medbox.org/document/who-guidelines-for-malaria>

<https://www.severemalaria.org/sites/default/files/content/document/WHO%20malaria%20guidelines%20-%20August%202025.pdf>



## Malaria | MSF Medical Guidelines

Médecins Sans Frontières (MSF) (2024)

The MSF malaria guidelines provide practical, evidence-based recommendations for diagnosing, treating, and preventing malaria, especially in low-resource settings. They cover uncomplicated and severe cases, recommend rapid tests and artemisinin-based therapies, and include special guidance for vulnerable groups like children and pregnant women.

<https://www.medbox.org/document/malaria-msf-medical-guidelines>  
<https://medicalguidelines.msf.org/en/viewport/CG/english/malaria-16689758.html>



## Checklist for assessing management of severe malaria

MalariaCare Project (2017)

The document titled "Checklist for Assessing Management of Severe Malaria" is part of the MalariaCare Toolkit. It provides a structured tool for supervisors conducting outreach training and supportive supervision (OTSS) visits in healthcare facilities. The checklist is designed to evaluate and guide the clinical management of severe malaria cases, including diagnostics, treatment planning, complication management, patient monitoring, and the administration of injectable artesunate. It also includes sections for direct observation of clinical procedures and supervisor feedback to help improve healthcare worker performance and adherence to national treatment guidelines.

<https://www.medbox.org/document/checklist-for-assessing-management-of-severe-malaria>  
<https://malariacare.wordpress.com/wp-content/uploads/2017/08/severe-malaria-checklist.pdf>



## The use of rectal artesunate as a pre-referral treatment for severe P. falciparum malaria

World Health Organization WHO (2023)

Information note. In 2021, preliminary results of observational studies from the Community Access to Rectal Artesunate for Malaria (CARAMAL) project did not confirm the mortality impact observed in the controlled trial in 2009. Consequently, in January 2022, WHO released an information note on rectal artesunate (RAS), suggesting immediate risk mitigation measures. To provide clarity on the evidence, WHO subsequently convened independent experts to conduct a formal evidence review of the data from the CARAMAL project, as well as data from other studies evaluating the deployment of pre-referral RAS at programmatic level

<https://www.medbox.org/document/the-use-of-rectal-artesunate-as-a-pre-referral-treatment-for-severe-p-falciparum-malaria>  
<https://apps.who.int/iris/bitstream/handle/10665/351187/9789240042513-eng.pdf>



## Safety of artemisinin and non-artemisinin antimalarials in the first trimester of pregnancy

World Health Organization WHO (2024)

Malaria in pregnancy is a significant health problem in malaria-endemic areas. It not only causes substantial childhood morbidity and mortality but also increases the risks of adverse events for pregnant women and their developing fetuses. Most of the burden in these areas is due to infection with Plasmodium falciparum. Artemisinin-based combination therapy (ACT) has been recommended as first-line treatment for uncomplicated P. falciparum malaria in all populations, including



pregnant women in their second and third trimesters, since 2006. However, for women in their first trimester of pregnancy, WHO recommended as first-line treatment a combination of quinine and clindamycin. Based on a review of the evidence conducted in 2022, WHO now recommends artemether–lumefantrine, the ACT with the most human safety data available, as the preferred treatment for uncomplicated *P. falciparum* malaria in the first trimester of pregnancy. This document presents all relevant evidence on the effects and safety in early pregnancy of artemisinin and partner medicines used in ACTs from both studies in experimental animals and observational studies in humans.

<https://www.medbox.org/document/safety-of-artemisinin-and-non-artemisinin-antimalarials-in-the-first-trimester-of-pregnancy>  
<https://www.who.int/publications/i/item/9789240069404>

### Antimalarial drugs for children

*Medicines for Malaria Venture (MMV) (2025)*

The webpage from Medicines for Malaria Venture (MMV) focuses on efforts to develop and provide child-friendly antimalarial treatments. It highlights the challenges of treating malaria in children, who are among the most vulnerable to the disease, and the need for safe, effective, and easy-to-administer formulations. MMV collaborates with global partners to ensure access to pediatric antimalarial medicines, such as dispersible tablets and rectal treatments, especially in low-resource settings. The page emphasizes the importance of innovation, accessibility, and partnerships in reducing childhood malaria mortality.

<https://www.medbox.org/document/antimalarial-drugs-for-children>  
<https://www.mmv.org/our-work/antimalarial-drugs-children>

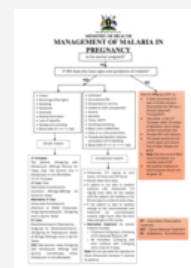


### Management of Malaria in Pregnancy

*Ministry of Health of Uganda (2025)*

Accessed June 2025. This document outlines the Ministry of Health's management guidelines for malaria in pregnancy in Uganda. Pregnant women without malaria symptoms receive intermittent preventive treatment in pregnancy (IPTp) using sulfadoxine-pyrimethamine (SP) as directly observed therapy (DOT), starting from the second trimester with monthly doses until delivery, except for HIV-positive mothers on cotrimoxazole.

<https://www.medbox.org/document/management-of-malaria-in-pregnancy>  
<https://library.health.go.ug/file-download/download/public/1181>



## Drug Resistance

### Malaria: Artemisinin partial resistance

*World Health Organization WHO (2025)*

Efficacious antimalarial medicines are critical to malaria control and elimination. Continuous monitoring of their efficacy is needed to inform treatment policies in malaria-endemic countries, and to ensure early detection of, and response to, drug resistance.

<https://www.medbox.org/document/malaria-artemisinin-partial-resistance>  
<https://www.who.int/news-room/questions-and-answers/item/artemisinin-resistance>



## Multiple first-line therapies as part of the response to antimalarial drug resistance *World Health Organization WHO (2024)*

Effective malaria case management requires quick access to diagnostics and antimalarial treatments to reduce illness and death. Artemisinin-based combination therapy (ACT) has been essential to malaria treatment since 2001, as it combines artemisinin for rapid parasite reduction with a partner drug to ensure complete cure. However, resistance to antimalarial drugs, where parasites survive standard doses, threatens malaria control.

<https://www.medbox.org/document/multiple-first-line-therapies-as-part-of-the-response-to-antimalarial-drug-resistance>  
<https://iris.who.int/bitstream/handle/10665/379576/9789240103603-eng.pdf?sequence=1>



## Antimalarial drug resistance and drug discovery: learning from the past to innovate the future

*Theodoridis, L.; and T.G. Carvalho (2025); Elsevier*

International Journal for Parasitology: Drugs and Drug Resistance Volume 28, August 2025, 100602 This review provides innovative insights to circumvent antimalarial drug resistance and diversify malaria therapeutics.

<https://www.medbox.org/document/antimalarial-drug-resistance-and-drug-discovery-learning-from-the-past-to-innovate-the-future>  
<https://pubmed.ncbi.nlm.nih.gov/40680501/>



## Diagnostics & Laboratory

### Diagnostic tests for detecting risk of Plasmodium vivax relapse *World Health Organization WHO (2024)*

Relapsing malaria caused by Plasmodium vivax parasites poses a significant challenge to global malaria elimination efforts. About one third of the population remains at risk of contracting P. vivax malaria, and 85% of P. vivax infections stem from reactivated latent parasites, leading to chronic anaemia and increased morbidity and mortality. In addition to diagnostic tools that can detect the acute, blood-stage of P. vivax, new tools are needed to detect the dormant infections before they reactivate and contribute to morbidity and onwards transmission

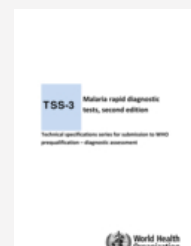
<https://www.medbox.org/document/diagnostic-tests-for-detecting-risk-of-plasmodium-vivax-relapse>  
<https://iris.who.int/bitstream/handle/10665/376457/9789240089846-eng.pdf?sequence=1>



### Malaria rapid diagnostic tests, 2nd ed *World Health Organization WHO (2025)*

Technical specifications series for submission to WHO prequalification: diagnostic assessment; TSS-3

<https://www.medbox.org/document/malaria-rapid-diagnostic-tests-2nd-ed>  
<https://iris.who.int/bitstream/handle/10665/380360/9789240105638-eng.pdf>



## Quality and safety practices for malaria rapid testing services

World Health Organization WHO (2022)

This document is a guide defining requirements for quality and safety for malaria rapid diagnostic testing services to safeguard the quality of the results, the safety of the operators and patients and that of the environment for use by national malaria control programmes, regulators, implementers and rapid diagnostic providers.

<https://www.medbox.org/document/quality-and-safety-practices-for-malaria-rapid-testing-services>

<https://apps.who.int/iris/rest/bitstreams/1472952/retrieve>

## Basic malaria microscopy. Part 1: Learner's guide

World Health Organization WHO (2020)

second edition

<https://www.medbox.org/document/basic-malaria-microscopy-part-1-learners-guide>

[https://iris.who.int/bitstream/handle/10665/44208/9789241547826\\_eng.pdf?sequence=1](https://iris.who.int/bitstream/handle/10665/44208/9789241547826_eng.pdf?sequence=1)

## Basic malaria microscopy. Part II: Tutor's Guide

World Health Organization WHO (2020)

This second edition of the Basic Malaria Microscopy package is a stand-alone product, providing all that is needed to conduct a complete training course

<https://www.medbox.org/document/basic-malaria-microscopy-part-ii-tutors-guide>

[https://iris.who.int/bitstream/handle/10665/44208/9789241547918\\_eng.pdf?sequence=2](https://iris.who.int/bitstream/handle/10665/44208/9789241547918_eng.pdf?sequence=2). Accessed



## Chemoprevention/ preventive Treatment

### Seasonal malaria chemoprevention with sulfadoxine–pyrimethamine plus amodiaquine in children: a field guide

World Health Organization WHO (2023)

2nd edition. This second edition builds on the experience of more than 10 years of SMC deployment, and reflects changes introduced in the WHO guidelines for malaria, 3 June 2022. The goal of this publication is to share these best practices to improve SMC implementation, coverage, and monitoring and evaluation. Examples of materials and tools as well as links to resources are included to support managers and health workers in their efforts to conduct successful SMC activities and prevent malaria among vulnerable children.

<https://www.medbox.org/document/seasonal-malaria-chemoprevention-with-sulfadoxine-pyrimethamine-plus-amodiaquine-in-children-a-field-guide>

<https://iris.who.int/bitstream/handle/10665/368123/9789240073692-eng.pdf?sequence=1>



## Community deployment of intermittent preventive treatment of malaria in pregnancy with sulfadoxine-pyrimethamine: a field guide

World Health Organization WHO (2024)

The document outlines essential steps and provides guidance to countries on the adoption and deployment of c-IPTp so that it is integrated into the existing health system. It draws upon best practices and lessons learned from pilot implementation experiences in eight African countries and targets stakeholders at the national level that are involved in the provision of maternal and child services, including national and local policymakers and implementers of malaria, maternal health, child health, reproductive health and community health programmes, and nongovernmental and other organizations.

<https://www.medbox.org/document/community-deployment-of-intermittent-preventive-treatment-of-malaria-in-pregnancy-with-sulfadoxine-pyrimethamine-a-field-guide>

<https://iris.who.int/bitstream/handle/10665/375714/9789240086272-eng.pdf?sequence=1>



## Optimizing seasonal malaria chemoprevention (SMC) implementation

MMV Medicines for Malaria Venture (2025)

Where malaria transmission is seasonal, notably in Africa's Sahel region, children of all ages most at risk of severe malaria are protected through SMC. This intervention consists of full antimalarial treatment courses of sulfadoxine-pyrimethamine and amodiaquine (SPAQ), administered monthly (28 days) during the high-transmission period (typically the rainy season), generally for up to five months per year. SMC can be deployed relatively easily across a large population and is highly cost-effective at only USD \$0.30-0.40/dose,<sup>3</sup> making it an important tool for malaria control

<https://www.medbox.org/document/optimizing-seasonal-malaria-chemoprevention-smc-implementation>

<https://www.mmv.org/our-work/access-medicines/seasonal-malaria-chemoprevention>



## Vaccination

### Malaria Vaccine: Questions and Answers on Vaccine Supply, Price and Market Shaping

UNICEF (2024)

Two malaria vaccines are currently WHO prequalified and recommended<sup>1</sup> for use to prevent *P. falciparum* malaria in young children, the RTS,S/AS01 vaccine, currently manufactured by GlaxoSmithKline (GSK), and the R21/Matrix-M vaccine, manufactured by Serum Institute of India Pvt (SII)

<https://www.medbox.org/document/malaria-vaccine-questions-and-answers-on-vaccine-supply-price-and-market-shaping>

<https://www.unicef.org/supply/media/21901/file/Malaria-vaccine-Q-A-May-2024-update.pdf>



## Malaria vaccines (RTS,S and R21)

World Health Organization WHO (2025)

Questions and answers

<https://www.medbox.org/document/malaria-vaccines-rtss-and-r21>  
<https://www.who.int/news-room/questions-and-answers/item/q-a-on-rtss-s-malaria-vaccine>



## Essential Training Packages for Malaria Vaccine Introduction

World Health Organization WHO (2025)

Brief Introduction Malaria Vaccine Training. For countries planning malaria vaccine introduction, WHO has developed training packages of slide sets on key topics for health workers in English and French that can be downloaded and customized to meet specific country needs:

<https://www.medbox.org/document/essential-training-packages-for-malaria-vaccine-introduction>  
<https://www.who.int/publications/m/item/essential-training-package-for-malaria-vaccine-introduction>



## Key messages on malaria vaccination for health workers and caregivers

World Health Organization WHO (2024)

The following appendices of the Guide for introducing a malaria vaccine containing key messages are available for country adaptation

<https://www.medbox.org/document/key-messages-on-malaria-vaccination-for-health-workers-and-caregivers>  
<https://www.technet-21.org/fr/ressources/orientations/key-messages-on-malaria-vaccination-for-health-workers-and-caregivers>



## Vector Control

### Malaria control in emergencies: field manual

World Health Organization WHO (2025)

Growing emergencies and displacements across the world demand increasingly complex interventions and responses. The World Health Organization (WHO) has developed Malaria control in emergencies: a field manual to provide technical guidance to help partners respond effectively to malaria in emergency situations. This field manual supersedes the 2013 WHO handbook.

<https://www.medbox.org/document/malaria-control-in-emergencies-field-manual>  
<https://iris.who.int/bitstream/handle/10665/382214/9789240112834-eng.pdf?sequence=1&isAllowed=y>



### WHO guideline for the prequalification assessment of insecticide-treated nets

World Health Organisation WHO (2024)

The purpose of the guideline is to provide information to stakeholders on the necessary requirements for a complete prequalification dossier for insecticide-treated nets (ITNs). Its aim is to establish the baseline for dossier requirements

which are necessary to assess ITN products for the purposes of prequalification, describe the data requirements for fulfilling each dossier module, and to provide standardized information for applicants and testing facilities generating data for ITN prequalification dossiers. The document is supported by implementation guidance documents which provide specific information and considerations for how applicants may approach the generation of supporting information and compilation of a complete product dossier.

<https://www.medbox.org/document/who-guideline-for-the-prequalification-assessment-of-insecticide-treated-nets>  
[https://extranet.who.int/prequal/sites/default/files/document\\_files/who\\_itnguideline\\_web.pdf](https://extranet.who.int/prequal/sites/default/files/document_files/who_itnguideline_web.pdf)

**Operational manual on indoor residual spraying: Control of vectors of malaria, Aedes-borne diseases, Chagas disease, leishmaniasis and lymphatic filariasis**  
*World Health Organization WHO (2024)*

Indoor residual spraying (IRS) involves applying residual insecticide to potential vector resting sites on the interior surfaces of human dwellings or other buildings. The main aim of IRS is to kill vectors before they are able to transmit pathogens to humans. When carried out correctly, IRS has historically been shown to be a powerful intervention to reduce adult vector density and longevity for mosquitoes, sand flies and triatomine bugs and can reduce the transmission of vector-borne diseases.

<https://www.medbox.org/document/operational-manual-on-indoor-residual-spraying-control-of-vectors-of-malaria-aedes-borne-diseases-chagas-disease-leishmaniasis-and-lymphatic-filariasis>  
<https://iris.who.int/bitstream/handle/10665/375978/9789240083998-eng.pdf?sequence=1>

**Reactive strategies for reducing malaria transmission in elimination settings**  
*World Health Organisation WHO (2024) Video*

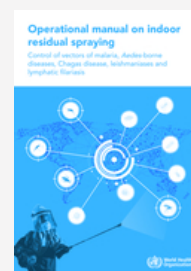
This WHO guidance outlines reactive strategies to interrupt malaria transmission in areas nearing elimination or to prevent re-establishment, triggered by confirmed cases.

<https://www.medbox.org/document/reactive-strategies-for-reducing-malaria-transmission-in-elimination-settings>  
<https://www.who.int/multi-media/details/reactive-strategies-for-reducing-malaria-transmission-in-elimination-settings>

**WHO recommendations on new types of insecticide-treated nets. Video**  
*World Health Organisation WHO (2023) Video*

This WHO video presents updated recommendations on two new types of insecticide-treated nets (ITNs) designed to combat mosquito resistance: nets containing either pyrethroid and chlorfenapyr or pyrethroid and pyriproxyfen. The video highlights the improved effectiveness of these nets compared to standard nets and emphasises the importance of their universal use in malaria-endemic areas, particularly for pregnant women and young children where supplies are limited.

<https://www.medbox.org/document/who-recommendations-on-new-types-of-insecticide-treated-nets-video>  
<https://www.who.int/multi-media/details/who-recommendations-on-new-types-of-insecticide-treated-nets>



# Surveillance

## Malaria surveillance assessment toolkit, 2nd edition World Health Organization WHO (2022)

This Malaria Surveillance Assessment Toolkit implementation reference guide is a comprehensive reference document, as well as a step by-step guide. It aligns and adapts available tools into a single set of standardized tools, which can be used to conduct malaria surveillance assessments across all transmission settings. Use of these standardized tools allows comparison of results between countries and within the same country over time, enabling countries to track their progress towards surveillance system strengthening.

<https://www.medbox.org/document/malaria-surveillance-assessment-toolkit-2nd-edition>  
<https://iris.who.int/server/api/core/bitstreams/c4cb6cbf-e70c-49dd-9511-cc688a5b654e/content>



## Digital solutions for malaria surveillance World Health Organization WHO (2025)

Surveillance is a core malaria intervention. Data standards, tools and curricula materials have been developed to support countries to strengthen and monitor national routine surveillance systems and to support use of data for decision-making in all transmission settings. These standards have been developed into malaria modules in DHIS2 for countries using this platform. These tools comprise: modules for burden reduction and elimination settings; aggregate module; case-based module and modules for entomological surveillance and vector control interventions

<https://www.medbox.org/document/digital-solutions-for-malaria-surveillance>  
<https://www.who.int/teams/global-malaria-programme/surveillance/digital-solutions-for-malaria-surveillance>



## Surveillance and control of Anopheles stephensi: country experiences World Health Organization WHO (2024)

Anopheles stephensi is an invasive mosquito species which has been found spreading across Africa. While this species presents a new challenge for malaria control on the continent, its surveillance and management have been ongoing in Asia for many years. This document aims to summarize key lessons from 3 countries – India, the Islamic Republic of Iran and Sri Lanka – that have been working to control An. stephensi. It is hoped that their experiences and insights will be valuable for countries encountering An. stephensi for the first time.

<https://www.medbox.org/document/surveillance-and-control-of-anopheles-stephensi-country-experiences>  
<https://iris.who.int/bitstream/handle/10665/378091/9789240094420-eng.pdf?sequence=1>



## The malaria surveillance system assessment toolkit; a standardized approach for supporting surveillance system strengthening Anderson, L. (2021); World Health Organization WHO

Presentation

<https://www.medbox.org/document/the-malaria-surveillance-system-assessment-toolkit-a-standardized-approach-for-supporting-surveillance-system-strengthening>  
[https://endmalaria.org/sites/default/files/Wednesday19\\_Laura%20Anderson\\_Surveillance%20toolkit.pdf](https://endmalaria.org/sites/default/files/Wednesday19_Laura%20Anderson_Surveillance%20toolkit.pdf)



## Surveillance, Monitoring, and Evaluation of Malaria Programs: Online Course Measure Evaluation (2020)

You can download the modules from the website

<https://www.medbox.org/document/surveillance-monitoring-and-evaluation-of-malaria-programs-online-course>  
<https://www.measureevaluation.org/resources/publications/ms-20-184.html>



## Life Cycle

### Malaria Lifecycle

Centers for disease control and prevention CDC (2024)

Diagram of the malaria lifecycle, including mosquito, human liver, and human blood stages. The diagram also illustrates infective vs diagnostic stages of the parasite's lifecycle. Also included are the temporal views of both *p. falciparum* and *p. vivax*.

<https://www.medbox.org/document/malaria-lifecycle>  
<https://www.cdc.gov/malaria/php/surveillance/appendix-a-malaria-lifecycle.html>

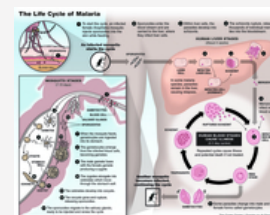


### The Life Cycle of Malaria

The Carter Center (2025)

Chart. Accessed July, 2025

<https://www.medbox.org/document/the-life-cycle-of-malaria>  
[https://www.cartercenter.org/resources/pdfs/news/health\\_publications/malaria/malaria-life-cycle-chart.pdf](https://www.cartercenter.org/resources/pdfs/news/health_publications/malaria/malaria-life-cycle-chart.pdf)

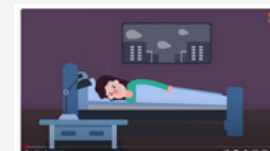


### Malaria and Life Cycle of Plasmodium

Infinity Learn NEET (2020) Video

This educational video uses the story of Zara, a student who develops a high fever and is diagnosed with malaria, to explain the causes and life cycle of the disease. It clarifies that malaria is not directly caused by mosquitoes, but by a protozoan parasite called Plasmodium, which is transmitted through the bite of an infected female Anopheles mosquito.

<https://www.medbox.org/document/malaria-and-life-cycle-of-plasmodium>  
<https://www.youtube.com/watch?v=BVRnNbb9cLU>



## Resource Platforms

### Malaria - WHO

World Health Organisation (WHO) (2025)

The fact sheet details transmission methods, symptoms, at-risk populations, diagnostic approaches, treatment options—including the use of artemisinin-based combination therapies (ACTs)—and preventive measures such as insecticide-treated nets (ITNs) and indoor residual spraying (IRS). It also discusses the impact



of malaria on vulnerable groups like children under five and pregnant women, and outlines WHO's global response strategies aimed at reducing malaria incidence and mortality rates.

<https://www.medbox.org/document/malaria-who>  
<https://www.who.int/news-room/fact-sheets/detail/malaria>

### Topics: Malaria

*Pan American Health Organization PAHO (2025)*

Resource Platform providing Key facts and resources

<https://www.medbox.org/document/topics-malaria>  
<https://www.paho.org/en/topics/malaria#info>

### The WorldWide Antimalarial Resistance Network WWARN

*Infectious Diseases Data Observatory (2025)*

The WorldWide Antimalarial Resistance Network (WWARN) is a global collaborative platform that provides the malaria community with innovative tools and reliable evidence to help them understand and address antimalarial drug resistance. Using molecular surveyors and mapping tools, WWARN visualises the evolution and geographical spread of resistance to key antimalarial drugs. Accessed June 2025

<https://www.medbox.org/document/the-worldwide-antimalarial-resistance-network-wwarn>  
<https://www.iddo.org/wwarn>

### Target Malaria

*Target Malaria (2025)*

Target Malaria is an innovative project that aims to reduce the population of mosquitoes that transmit malaria in sub-Saharan Africa, thereby decreasing disease transmission. As part of its work to combat malaria, Target Malaria has started contained studies at the Uganda Virus Research Institute (UVRI) in Uganda. Accessed on 01/07/2025.

<https://www.medbox.org/document/target-malaria>  
<https://targetmalaria.org/>

### The Severe Malaria Observatory

*Severe Malaria Observatory SMO (2025)*

The Severe Malaria Observatory (SMO) is a global knowledge platform designed to enable professionals working on severe malaria, such as researchers, clinicians, public health experts, programme managers, policymakers and technical partners, to access, share and analyse reliable data on malaria complications.

<https://www.medbox.org/document/the-severe-malaria-observatory>  
<https://www.severemalaria.org/>

### Malaria at a Glance

*RBM Partnership to end malaria (2025)*

Dashboards

<https://www.medbox.org/document/malaria-at-a-glance>  
<https://dashboards.endmalaria.org/en>



## Online Courses & Apps

### WHO Malaria Toolkit app

World Health Organisation WHO (2025)

The Global Malaria Programme Toolkit app brings together the content of the latest World malaria report and of the consolidated WHO Guidelines for malaria as well as operational manuals and other technical documents – in one easy-to-navigate resource.

<https://www.medbox.org/document/who-malaria-toolkit-app>  
<https://www.who.int/teams/global-malaria-programme/malaria-toolkit-app>



### Introducing Pf-HaploAtlas: A new app to track malaria parasite mutations

MalariaGEN (2025)

The article introduces Pf-HaploAtlas, a new online tool developed by MalariaGEN to track genetic mutations in the Plasmodium falciparum parasite—the most deadly malaria-causing species. This app allows researchers and public health professionals to explore global data on drug resistance mutations and genetic variation across thousands of parasite genomes. The tool is designed to improve understanding of how malaria parasites evolve and spread, and to support efforts in monitoring antimalarial drug resistance. With an intuitive interface, Pf-HaploAtlas enables users to visualize haplotype patterns, compare regional differences, and access up-to-date data that can inform control strategies and research.

<https://www.medbox.org/document/introducing-pf-haploatlas-a-new-app-to-track-malaria-parasite-mutations>  
<https://www.malariagen.net/article/introducing-pf-haploatlas-a-new-app-to-track-malaria-parasite-mutations/>



### NLM Malaria Screener

National Library of Medicine (NLM) (2021); Lister Hill National Center for Biomedical Communications

The NLM Malaria Screener is a mobile app developed by the U.S. National Library of Medicine to support the diagnosis of malaria through automated analysis of blood smear images. It uses smartphone microscopy and machine learning to detect malaria parasites in thin blood smears, helping health workers and lab technicians – especially in low-resource settings – screen for Plasmodium falciparum infections. The app is intended for research and educational purposes and aims to enhance diagnostic accuracy where access to expert microscopists is limited. It provides results quickly and can assist in training or field screening, but it is not approved for clinical use.

<https://www.medbox.org/document/nlm-malaria-screener>  
[https://play.google.com/store/apps/details?id=gov.nih.nlm.malaria\\_screener&hl=de](https://play.google.com/store/apps/details?id=gov.nih.nlm.malaria_screener&hl=de)



### Malaria Consortium Webinars

Malaria Consortium (2025)

The webinars aim to create awareness and convene discussion, bringing together Malaria Consortium technical experts and programmes teams with other actors working on the effective delivery of national and global health interventions worldwide.

<https://www.medbox.org/document/malaria-consortium-webinars>  
<https://www.malariaconsortium.org/pages/webinars.htm>



## Global Health e-Learning Center Malaria USAID (2025)

Malaria is a leading cause of illness and death in the developing world and a significant drag on economic development. This course will provide basic knowledge about the burden of malaria and effective tools to both treat and prevent malaria, and discuss the challenges and opportunities for taking these interventions to scale.

<https://www.medbox.org/document/global-health-e-learning-center-malaria>  
<https://www.globalhealthlearning.org/course/malaria>

## Malaria microscopy self-learning course Pan American Health Organization PAHO (2026)

The course is divided into four thematic modules: 1. General information; 2. Laboratory diagnosis; 3. Plasmodium species identification and parasite counting; 4. Microscopy quality assurance. To update and review the basic concepts of epidemiology and laboratory diagnosis of malaria, as well as the corresponding quality controls.

<https://www.medbox.org/document/malaria-microscopy-self-learning-course>  
<https://campus.paho.org/en/course/microscopic-diagnosis-malaria>



## Information, Education and Communication (IEC)

### Zzippi drinks blood Children for Health (2025)

The 'Zzippi Drinks Blood' booklet is designed to be used as a teaching aid by health educators. It can be used to support malaria prevention teaching sessions and displayed on walls to help children remember the key messages. The illustrations can also be copied and used to create flashcards or a flipbook, facilitating interactive learning. Educators are encouraged to adapt the content to suit their local context, and to consult experts to ensure accuracy. Accessed on 14/07/2025.

<https://www.medbox.org/document/zzippi-drinks-blood>  
[https://www.childrenforhealth.org/wp-content/uploads/2017/01/Zzippi-drinks-blood\\_Single-pages\\_Final.pdf](https://www.childrenforhealth.org/wp-content/uploads/2017/01/Zzippi-drinks-blood_Single-pages_Final.pdf)



### SuperBetter Children for Health Children for Health (2022)

SuperBetter Children is a health and wellbeing curriculum designed to be integrated into school programmes or offered as an extracurricular activity.

<https://www.medbox.org/document/superbetter-children-for-health>  
[https://www.childrenforhealth.org/?sdm\\_process\\_download=1&download\\_id=42329](https://www.childrenforhealth.org/?sdm_process_download=1&download_id=42329)



### Mosquitoes and Malaria Dominiak, Z.; Imperial College London (2019)

This comic booklet introduces malaria and the mosquitoes that carry it in Africa. Through simple explanations and illustrations, it teaches readers about the habitats of mosquitoes, the species that transmit malaria and how ongoing research may

lead to new ways of controlling them in the future. The booklet is designed to help communities better understand malaria and support efforts to combat it.

<https://www.medbox.org/document/mosquitoes-and-malaria>  
<https://targetmalaria.org/wp-content/uploads/2021/09/target-malaria-booklet-eng.pdf>

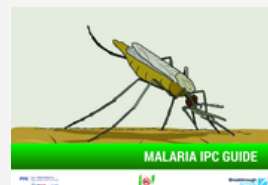


### Malaria IPC Guide Northern Nigeria

*Breakthrough ACTION ; United States Agency for International Development USAID; United States President's Malaria Initiative PMI (2024)*

This guide provides practical tools and strategies for interpersonal communication (IPC) to support the prevention and treatment of malaria in northern Nigeria. Targeting health workers, community leaders and vulnerable groups such as pregnant women and young children, it aims to improve knowledge, attitudes and behaviours through culturally appropriate, tailored messaging. The guide emphasises community engagement, effective counselling techniques, and collaboration with local stakeholders to improve malaria control. Accessed on 20/06/2025.

<https://www.medbox.org/document/malaria-ipc-guide-northern-nigeria>  
<https://breakthroughactionandresearch.org/wp-content/uploads/2024/06/Malaria-IPC-Guide-Northern-Nigeria.pdf>



## Environmental Factors

### Climate change and malaria: an old enemy of Africa is back

*Filho, W.L.; et al. (2025)*

BMC Public Health (2025) 25:3774 <https://doi.org/10.1186/s12889-025-24555-6>. The study results provide useful insights on how climate change influences malaria in African countries, and reiterates the need for a greater engagement of policymakers and social partners, in intensifying the action needed to fight the transmission of malaria in Sub-Saharan Africa

<https://www.medbox.org/document/climate-change-and-malaria-an-old-enemy-of-africa-is-back>  
<https://researchonline.lshtm.ac.uk/id/eprint/4680686/1/Climate%20change%20and%20malaria%20an%20old%20enemy%20of%20Africa%20is%20back.pdf>



### Effects of Climate Change on Malaria Risk to Human Health: A Review

*Megersa, D.M.; X.-S. Luo (2025)*

Atmosphere 2025, 16, 71. <https://doi.org/10.3390/atmos16010071>

<https://www.medbox.org/document/effects-of-climate-change-on-malaria-risk-to-human-health-a-review>  
<https://www.mdpi.com/2073-4433/16/1/71>

