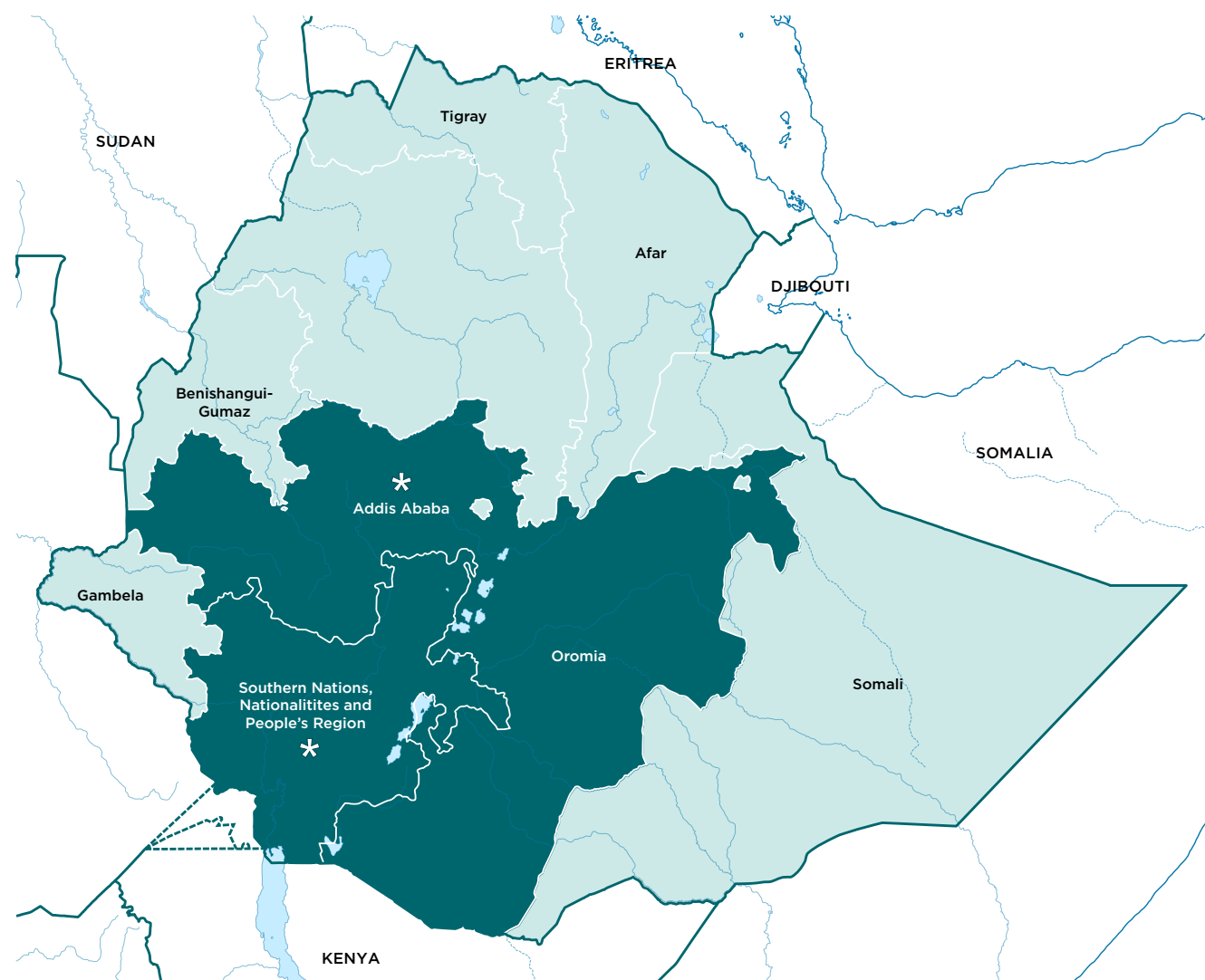




malaria
consortium
disease control, better health

CAPACITY STATEMENT

Malaria Consortium Ethiopia



- * Malaria Consortium office
- Active projects

Malaria Consortium has been implementing projects in Ethiopia since 2004 from our offices in Addis Ababa and Hawassa, with a focus on Southern Nations, Nationalities and Peoples' Region (SNNPR), Sidama and Oromia. We tailor our efforts towards national strategies and support the government in its efforts to tackle three major public health issues: malaria, neglected tropical diseases (NTDs) and poor child health indicators, particularly pneumonia, diarrhoea and febrile illness.

In Ethiopia, around 52 percent of the population lives in malaria-risk areas^[1]; pneumonia remains the leading infectious cause of death among children under five^[2]; and the country has one of the highest NTD burdens in Africa.^[3] We work closely with the Ministry of Health (MoH), subnational health authorities and partners to implement evidence-based behavioural change communications and social mobilisation, innovative approaches to health systems strengthening including digital health solutions, and operations research. We also provide technical support to the Federal MoH (FMoH) and actively participate in policy formulation.

Areas of focus

Influencing policy and practice

We offer technical assistance and partner with national and regional programmes and academic institutions to support the prioritisation of country-led research agendas. We use our operations and implementation research to inform new, evidence-based interventions, promote evidence uptake into national and global policies, and support policy development towards universal health coverage.

Prioritising child survival in the national health agenda

We are providing technical assistance to the MoH to develop and strengthen evidence-based strategies for child survival, and write these into national policy. In 2022, we conducted a formative assessment that identified factors adversely affecting service uptake and management of the integrated management of newborn and childhood illness (IMNCI). This assessment informed the development of a national action plan that addresses pneumonia and diarrhoea, key contributors to child mortality.

The action plan seeks to ensure the continuous availability of essential child health commodities, and to improve regular monitoring and evaluation of child health programmes. Operationalising the plan will support the FMoH to implement the National Newborn and Child Survival and Development Strategy (2021–2025), thereby improving equitable access to pneumonia and diarrhoea control services.

Further reading: bit.ly/IMNCI_plan, bit.ly/Eth-pneumo

Integrating neglected tropical diseases into primary healthcare services

We support the government's strategic objective of integrating interventions for neglected tropical diseases (NTDs) into the primary healthcare (PHC) system, in line the World Health Organization's (WHO) NTD road map (2021–2030).

We conducted operations research exploring the feasibility, acceptability and cost-effectiveness of integrating interventions for several NTDs into the health system. In Damot Gale district in SNNPR, the use of focused trainings, job aids and an improved supply of drugs and equipment have all strengthened NTD case management. We also introduced the use of circulating cathodic antigen (CCA) tests to diagnose intestinal schistosomiasis, which proved to be more effective than the standard methodology.

Further reading: bit.ly/3vsPMMx, bit.ly/2XX11xbj, bit.ly/NTDs_research

Exploring co-morbidities to improve case management

There is currently limited knowledge on the long-term complications of SARS-CoV-2 infection (long-COVID), particularly in how they relate to other infectious diseases in Africa. Given the epidemiological similarities between SARS-CoV-2 and malaria, a better understanding of how these diseases interact is of great public health interest.

We are conducting research to determine the likelihood of malaria infection in COVID patients and the risk of developing long-COVID following previous SARS-CoV-2 infection. We will also evaluate healthcare pathways to manage fever and long-COVID. The findings from this study will provide invaluable data on the clinical profile of patients presenting with COVID and malaria/other co-infections, and could inform integrated approaches to future investigations and disease management, both in Ethiopia and similar contexts.

Further reading: bit.ly/COVID-malaria, bit.ly/3PRghb1

Improving treatment of unclassified fever in children under five

Fever is a common symptom in children under five, yet the cause is often difficult to identify in low-resources settings due to limited diagnostic capacity. Previously, febrile children have been referred directly to health centres or treated with malaria medication, even if the malaria rapid diagnostic test was negative.

We assessed health extension workers' (HEWs) treatment of unclassified cases and their follow-up recommendations. HEWs engaged community members on the causes and treatment of fevers, highlighting that medical treatment is not always needed. This allowed them to withhold unnecessary medicines, while making caregivers feel that their children were still receiving appropriate care. These findings provide important policy and practical considerations. Amending the current guidelines and follow-up recommendations to address specific contexts could help health workers in rural communities to manage febrile cases more confidently.

Further reading: bit.ly/Eth-fever



Caregiver holds child wearing a ChARM device — a respiratory rate counter used to monitor breathing in the Acute Respiratory Infection Diagnostic Aid project

Accelerating disease burden reduction to elimination

We support the development and implementation of innovative, community-based approaches to tackle malaria and other diseases. Such approaches improve demand for — and use of — PHC services, including integrated community case management services, as well as malaria services for mobile populations.

Strengthening vector control via existing infrastructure

In SNNPR, we strengthened the technical capacity of primary healthcare units (PCHUs) to implement high-impact vector control interventions. These interventions, which include targeted indoor residual spraying (IRS), larvicidal control and distributing long-lasting insecticidal nets (LLINs), have contributed to — and continue to support — a sustained reduction in malaria morbidity.

In 2019–2021, we supported the implementation of a community-based IRS campaign in Boloso Sore and Damot Sore districts that revealed that a community-based model enhances community acceptance of IRS. We further found that community-based efforts can be integrated effectively into the PHC system when supported by strong leadership from HEWs.

Further reading: bit.ly/Eth-IRS

Employing innovative approaches to protect seasonal mobile workers

In the Amhara region, we are implementing a project seeking to reduce malaria morbidity and mortality among seasonal mobile workers (SMWs). This group is particularly susceptible to malaria, given their lack of access to appropriate case prevention and case management services, and inadequate knowledge about the symptoms of malaria and how to prevent and treat the disease. Aggravating factors include a lack of clarity around who SMWs should turn to for case management, disjointed policies, and top-down decision-making around SMWs' health.

We aim to increase the coverage and quality of malaria services provided to SMWs, in tandem with increasing their demand for and uptake of these services. An important part of this work will be in engaging policy makers to adopt and operationalise implementation. Most critically, the project will emphasise collaboration with SMWs through innovative community feedback mechanisms to enhance their participation in malaria-related decision-making. Ensuring that SMWs are supported to be the stewards of their own health will ensure greater sustainability of the intervention.



Mosquito nets in storage, Ethiopia

Health sector resilience and universal health coverage

Equitable access to health services requires tools and services that are quality assured, and which communities are actually able to use. We work with the government and communities to co-design sustainable solutions that meet communities' needs. In this way, they are supported to be more resilient in the face of health challenges.

Ensuring equitable access to health services

Building on the success of our work on NTDs and lessons learnt, we are currently implementing the Happy Feet project in two districts in SNNPR. This community-based intervention package targets communities affected by podoconiosis, an NTD contracted through bare feet being exposed to irritants in red clay soils. Women (many of whom are farmers) and marginalised groups are disproportionately affected as they lack access to shoes.

The project seeks to accelerate control of podoconiosis by promoting universal access to better quality preventive services and tools, particularly shoes, which are the most effective way to prevent the disease. Through the project, we are also advocating for adaptation of the water, sanitation and hygiene (WASH) strategy to include shoes (i.e. WASSH), and for health services packages to be implemented from an early age to raise awareness of podoconiosis, thereby embedding a culture of positive preventive behaviours.

Further reading: bit.ly/mchappyfeet

Building community resilience through locally led solutions

Through targeted, multi-level social and behaviour change approaches, we inform households of the importance of IRS and encourage them to use LLINs correctly and consistently, seek healthcare early on and adhere to treatments. We have disseminated key public health messages through radio broadcasts, billboards and posters, mobile vans and community dialogues.

In Damot Sore and Boloso Sore in SNNPR, we implemented the role model approach. This innovative approach helps to identify positive health-seeking behaviours within a community that can be amplified. We saw a marked improvement in communities' awareness of the cause and symptoms of malaria, and of prevention and control methods. Treatment-seeking and adherence to antimalarial drug regimens improved. Uptake of malaria interventions also increased significantly. Encouragingly, role model activities directly encouraged communities to mobilise and cooperate with stakeholders and each other. Collectively, these outcomes point to greater resilience within the community to respond to health challenges in a sustainable manner.

Further reading: bit.ly/Eth-rolemodel

Improving diagnosis, treatment and severe outcomes of malaria

We have contributed to reduced malaria morbidity in SNNPR through improved diagnosis and case management at health facilities. We conducted a study to test and identify the most appropriate, quality-assured malaria rapid diagnostic tests for the Ethiopian context. Our findings provided the FMOH with evidence to guide appropriate product selection. We supported the development of external quality assessment guidelines for malaria microscopy in the region and also supported updates to national diagnosis and treatment guidelines, as well as training on the new protocols.

To improve treatment of severe malaria and reduce related deaths in Oromia and SNNPR, we worked with government partners to improve access to injectable artesunate, which is used to treat severe cases and has a much higher survival rate than the alternative therapy of injectable quinine. Through coordinated interventions, we improved communities' access to quality care in three important ways: we addressed key barriers to supply and demand; developed supervision, monitoring and evaluation tools to capture actionable data; and trained health workers on severe malaria case management.

Further reading: bit.ly/2Wjwc3y, bit.ly/3rv9Sbk

Data-informed decision-making and digital solutions

We promote surveillance and the use of digital tools as core interventions to tackle disease. Our activities prioritise enhancing local capabilities to report, interpret and use available data, encouraging a culture of data-informed decision-making at all levels. This ensures that resources are targeted appropriately.

Improving the responsiveness of health systems

Working with partners, we were one of the first organisations to monitor changes in malaria epidemiology in different endemicity settings in Ethiopia. Our Beyond Garki project monitored these changes within the context of implemented malaria interventions to provide an evidence base to guide policies and strategies.

We wanted to assess the conditions for reducing malaria transmission below its critical level, and to make recommendations to adapt prevention and control measures accordingly. We found a number of interesting malaria patterns relating to coverage and use of interventions. Patterns included low prevalence in areas with previously high endemicity, wide variations in coverage and LLIN use, and the association between LLIN use and infection risk. Consequently, we proposed improvements to health systems' responsiveness and surveillance interventions by adapting them to the changing malaria epidemiology.

Further reading: bit.ly/Garki

Strengthening malaria surveillance for decision-making

In Boloso Sore and Damot Sore districts, we developed malaria surveillance dashboards at district health offices and health facilities to facilitate outbreak detection and response at PHCUs and the community level. Alongside providing computers and skills-based training to PHCU directors and district malaria officers to use the dashboards, we also supported skills development for HEWs and the health development army — community-based networks of women that link PHCUs with the community. This increased their capacity to detect and report cases, as well as to interpret the resulting data to take appropriate action to respond to outbreaks.

We supported the FMoH's rollout of a new electronic community health information system (the eCHIS) to stimulate the use of data for decision-making. We conducted a knowledge and skills assessment of HEWs and health workers, training them to use the eCHIS.

Further reading: bit.ly/JFP-surveil

Exploring innovative solutions to tackle pneumonia

Diagnosing pneumonia in low-income countries typically requires health workers to manually count a child's breaths for one minute, which is challenging and can lead to misdiagnosis and inappropriate treatment. In Ethiopia, our Acute Respiratory Infection Diagnostic Aid project explored the usability and acceptability of two automated respiratory rate (RR) counting aids: the Philips ChARM device and the Masimo Rad-G device. We trained HEWs to use these devices and conducted interviews to understand their perception of the devices.

Results showed that both HEWs and caregivers were generally accepting of digital health solutions. Moreover, our research demonstrated that, with practice, HEWs' ability to take RR and oxygen saturation level readings improved.

Further reading: bit.ly/ARIDAresbrief

Collaborations and strategic partnerships

Malaria Consortium closely collaborates with the Ethiopian government and has developed strong working relationships with district health offices and regional health bureaus. As a leading implementer of malaria programmes, we facilitated the establishment of the Coalition Against Malaria in Ethiopia in 2006 and served as secretary of the Malaria Control Support Team's Technical Advisory Committee. We represented malaria stakeholders for two terms (2012–2020) in the Ethiopia Country Coordinating Mechanism, which oversees the management of grants by the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund).

We acknowledge the support of our valued donors and partners: the Bill & Melinda Gates Foundation, the Ethiopian Public Health Institute, the Foreign, Commonwealth & Development Office, Global Fund, James Percy Foundation, Johns Hopkins University, John Snow Inc., Karolinska Institutet, the Nuffield Centre for International Health Development at the University of Leeds, Oulu University, Pathfinder International, the Swedish Research Council, UNICEF, UNITAID, USAID, the U.S. President's Malaria Initiative, VTT Technical Research Centre of Finland and the WHO.



An assessment using a pulse oximeter device at Borkeo Hospital

Malaria Consortium is one of the world's leading non-profit organisations specialising in the prevention, control and treatment of malaria and other communicable diseases among vulnerable populations.

Our mission is to save lives and improve health in Africa and Asia through evidence-based programmes that combat targeted diseases and promote universal health coverage.

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Cover image: Children are taught about the benefits of using a mosquito net at Himbecho Primary School

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