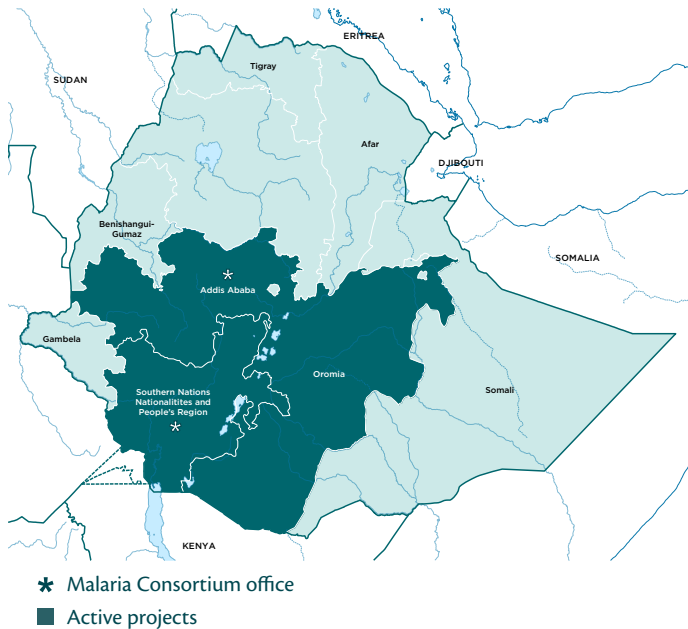


Malaria Consortium Ethiopia

Malaria Consortium has been implementing projects in Ethiopia since 2004 from our offices in Addis Ababa and Hawassa, with a focus on the Oromia region and Southern Nations, Nationalities and Peoples' region (SNNPR). We support the Ethiopian government in its efforts to tackle three major public health issues: malaria, neglected tropical diseases (NTDs) and poor child health indicators (e.g. pneumonia 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) to address these issues, using innovative approaches to health systems strengthening including digital health solutions, cutting-edge research, vector control, and social and behaviour change (SBC) activities.



Areas of focus

Health systems strengthening

Strengthening existing health systems is key to sustainably reducing malaria morbidity and mortality in Ethiopia.

Strengthening malaria surveillance for decision-making

We offer technical expertise in malaria surveillance to assist decision-makers in gathering the data they need to evaluate programmes and target scarce resources effectively. We have begun work on developing and setting up surveillance dashboards at district health offices and health facilities, with a view to enhancing the health system’s capacity to identify and respond to malaria outbreaks. A key aspect of this intervention entails developing the skills of health extension workers (HEWs) and the health development army — community-based networks of women that link primary healthcare units with the community — to detect, report and respond to outbreaks.

We also plan to support the Federal Ministry of Health’s (FMoH) rollout of a new electronic community health information system to stimulate the use of data for decision-making.

Further reading: <http://bit.ly/2IP8NC1>

Improving health systems’ responsiveness

Together with the Ethiopian Public Health Institute, we were the first to monitor changes in malaria epidemiology in different endemicity settings in Ethiopia as part of the Beyond Garki project. Based on our findings, we proposed ways to improve the responsiveness of health systems and surveillance interventions to the changing malaria epidemiology.

Further reading: <https://bit.ly/3clziHM>

Improving malaria diagnosis and treatment

We have helped reduce malaria morbidity in the SNNPR by improving malaria diagnosis and case management at health facilities. We supported the development of diagnosis and treatment guidelines, and trained health workers on the new protocols. We also helped establish external quality assessment guidelines for malaria microscopy in the region, which facilitated the development of national guidelines.

To better treat severe malaria in Oromia and the 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 addressed key barriers to supply and demand, and trained health workers on severe malaria case management.

Healthcare workers being trained in maternal care. Credit: Peter Caton



Vector control

Limiting the ability of vectors to spread diseases to humans is one of our key approaches to controlling and eliminating malaria.

Strengthening vector control activities via existing infrastructures

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

In 2019–2021, we supported the implementation of a community-based IRS campaign in Boloso Sore and Damot Sore, which revealed that a community-based model offers an optimal platform to promote integrated vector control management approaches. We further found that community-based efforts can be integrated effectively into the PHC system when supported by strong leadership from HEWs.

Further reading: <https://bit.ly/3uCVmC>

Social and behaviour change

We promote SBC interventions to ensure that the communities we work with are informed and engaged — supporting the practice of preventive health behaviours and community-led solutions.

Engaging communities to identify solutions

Through targeted, multi-level SBC 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 certain areas, we are piloting positive deviance — an SBC approach that identifies positive health-seeking behaviours already demonstrated within a community that can be amplified.

Recognising schools to be an effective entry point for SBC interventions, we also support school clubs with media equipment such as tape recorders, loudspeakers and solar power chargers. The School Club Guidelines we developed for the SNNPR have fed into the FMOH's rollout of anti-malaria school activities in other parts of the country.

Further reading: <https://bit.ly/30T11B7>

Neglected tropical diseases

We support the government's strategic objective of integrating interventions for NTDs into the PHC system. This is part of the country's NTD Master Plan (2016–2020) and is in line the World Health Organization's (WHO) NTD road map (2021–2030).

Integrating neglected tropical diseases into primary healthcare services

Our operational research project in Ethiopia explores the feasibility, acceptability and cost-effectiveness of integrating interventions for lymphatic filariasis, schistosomiasis, trachoma and podoconiosis into the healthcare system. The latter is a non-communicable disease that affects over 1.5 million people in Ethiopia, but is little understood.^[4]

Building on our experience of piloting a public health intervention in Hawella Tula district (2017–2018) to integrate the detection, management and reporting of five NTDs into PHC, we designed and implemented a similar intervention in the Damot Gale district in 2019–2021. By communicating our recent findings to key stakeholders, we aim to inform policy uptake.

Further reading: <https://bit.ly/3vsPMMx> and <https://bit.ly/2XX11xb>

Collaborations and strategic partnerships

Malaria Consortium closely collaborates with the Ethiopian MoH. Since 2004, we have established and developed strong working relationships with the district health offices and the regional health bureaus of Amhara, Oromia, SNNPR and Tigray.

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. These initiatives provide a forum to coordinate stakeholders' efforts and streamline the technical assistance provided to national and regional programmes. We also 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).

Our assistance to the MoH is made possible thanks to generous funding from our donors, including the Bill & Melinda Gates Foundation, James Percy Foundation, Global Fund, the Foreign, Commonwealth & Development Office (formerly UK aid through the Department for International Development), UNICEF, UNITAID, USAID, the U.S. President's Malaria Initiative and the Swedish Research Council.

Our pioneering research projects can only be achieved thanks to the vital contributions of our many partners, including the Ethiopian Public Health Institute, Johns Hopkins University, John Snow Inc., Karolinska Institutet, the Nuffield Centre for International Health Development at the University of Leeds, Oulu University, Pathfinder International, VTT Technical Research Centre of Finland and WHO.



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

Child and maternal health

More than half of all deaths in children under five globally are caused by preventable and treatable conditions. We support the implementation of the government's Health Sector Transformation Plan to reduce preventable maternal and child deaths.

Preventing and treating malaria in pregnancy

Through the USAID-funded Transform: Primary Health Care project (2017–2019), we developed the capacity of antenatal care providers to diagnose and treat malaria, as well as to record case management data in the regions of Amhara, Tigray, Oromia and SNNPR. By providing a one-stop service for febrile pregnant women, more women can be reached with life-saving treatment in a timely and resource-efficient way.

Further reading: <http://bit.ly/2HqE91>

Improving treatment of unclassified fever in under-fives

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. In the past, children with fever have typically been referred directly to health centres, or treated with malaria medication even if the rapid diagnostic test was negative.

We assessed HEWs' treatment of cases of unclassified fever and their follow-up recommendations. Communication about this condition and the non-necessity of medical treatment enabled HEWs to withhold medicines, while making caregivers feel that their children were still receiving appropriate care. HEWs now recommend follow-up visits more frequently, as opposed to immediately resorting to referral.

Further reading: <https://bit.ly/3qPYd0>

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 Asia and Africa through evidence-based programmes that combat targeted diseases and promote universal health coverage.

Pioneering digital health solutions to tackle pneumonia

We are investigating the use of artificial intelligence to improve the ease of diagnosing pneumonia in children under five. In Ethiopia, HEWs often resort to respiratory rate (RR) counting to diagnose pneumonia in the absence of chest X-rays. We aim to assess whether videos captured on mobile devices could help determine a child's RR more accurately.

Our experience of introducing two automated RR counting aids in Ethiopia through the Acute Respiratory Infection Diagnostic Aid project (2016–2019) showed that both HEWs and caregivers are 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: <https://bit.ly/PB-AIRR> and <https://bit.ly/3bpyDKi>

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Cover image: Children are taught about the benefits of using a mosquito net at Himbecho primary school, Genjeb, Oromia region.



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