



Neglected tropical diseases: Malaria Consortium's holistic vision for disease elimination

Neglected tropical diseases affect over 1.4 billion people worldwide and cause half a million deaths each year. They also cause chronic disability, stigma and ill health, disproportionately affecting poor, marginalised and conflict-affected people.

Malaria Consortium is one of the world's leading specialist non-profit organisations. Our mission is to improve lives of all, especially the poorest and marginalised in Africa and Asia through sustainable, evidence-based programmes that combat targeted diseases. We integrate childhood illnesses (such as pneumonia, diarrhoea and malnutrition), malaria prevention, control, treatment and surveillance, with neglected tropical disease management, with the ultimate goal of achieving cost-effective solutions.

Our current work focuses on **preventive treatment, vector control, case management and health system effectiveness and efficiency**. Through these core areas of work and expertise, we tackle specific aspects of NTD control such as surveillance, prevention (including vector control), treatment, morbidity management and community engagement.

What are neglected tropical diseases?

NTDs are a diverse group of communicable diseases, affecting the world's poorest, most vulnerable and remote populations.

NTDs prevail in 149 countries, costing developing economies billions of dollars every year. Most NTDs are preventable and curable. If untreated, they can cause chronic disability and can sometimes be fatal to the millions of people at risk.

Current challenges

Increased international interest about NTDs in recent years has led to significant progress against their prevention and control. However, the NTD landscape remains complex and challenging¹. There is a current need to develop innovative, more sustainable and cost-effective approaches, specifically for:

- Case finding and disease surveillance
- Integrated disability prevention and intense case management
- Community engagement
- Integrated vector control management

A global goal to eliminate NTDs

Within the framework of the Sustainable Development Goals, the World Health Organization (WHO) set out to eliminate some of these diseases by 2020 and reduce by 90 percent the number of people requiring interventions against NTDs by 2030. Five intervention packages to prevent, control, treat and eliminate most NTDs have been identified:

- Preventive chemotherapy of population at risk/infected
- Intensified case-finding and management
- Integrated vector control/management
- Provision of safe water, sanitation and hygiene
- Veterinary public health

WHO also suggests a set of guiding principles fundamental to the success of these interventions. These are: country ownership, community empowerment, strengthening of health systems, equity and gender-based intervention, and a robust monitoring and evaluation framework.²

¹ World Health Organization, *Investing to overcome the global impact of neglected tropical diseases: Third WHO report on neglected tropical diseases*.

² World Health Organization, *Regional strategic plan for neglected tropical diseases in the African Region 2014–2020; Regional action plan for neglected tropical diseases in the Western Pacific (2012–2016); Regional strategic plan for integrated neglected tropical diseases control in South-East Asia region*.

Our approach

Malaria Consortium aims to ensure access to effective prevention and treatment for neglected tropical diseases, especially for those who are most vulnerable. Our strategy supports, where possible, the integration of malaria and NTDs at all levels and where these diseases are co-endemic.

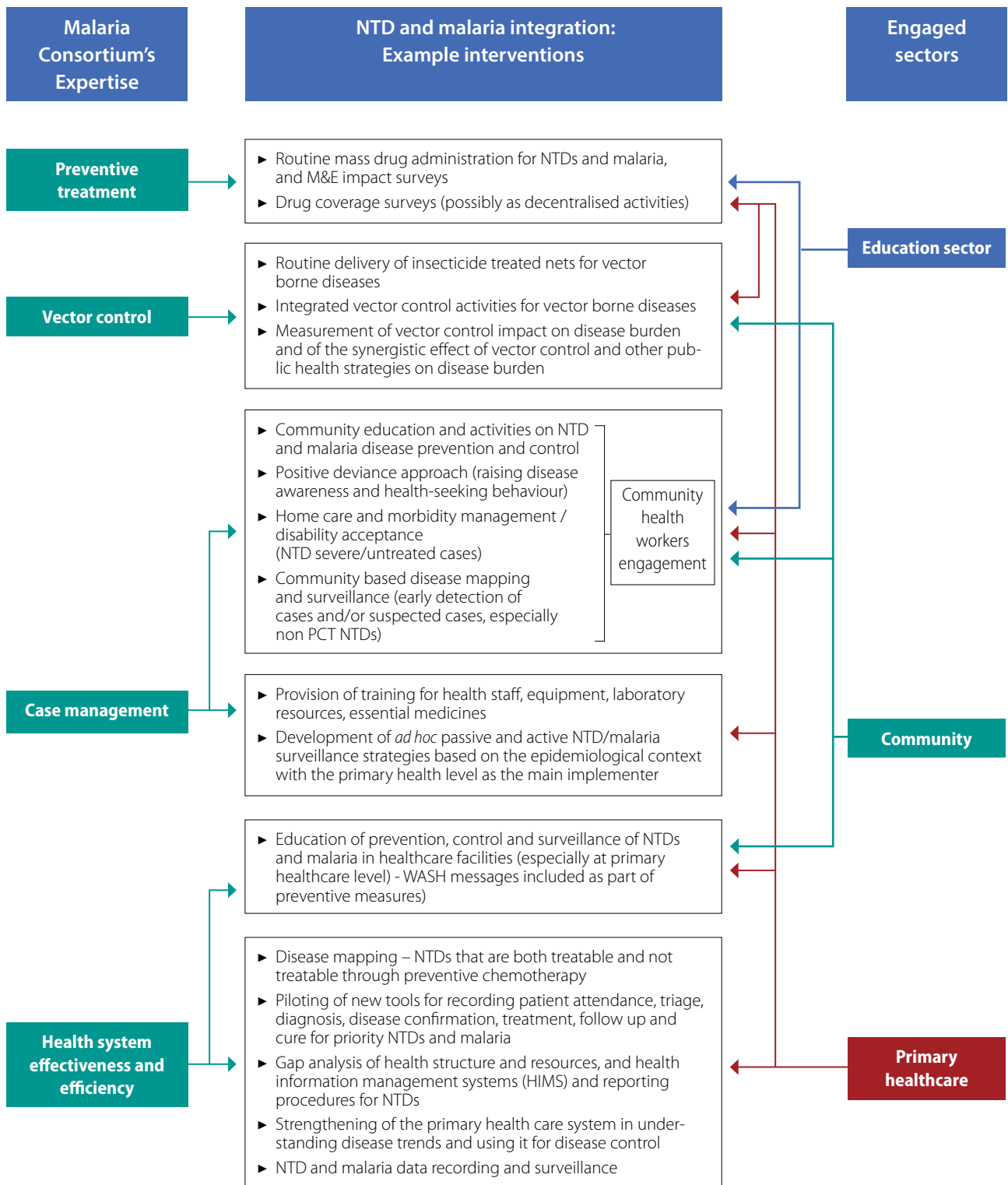
Malaria Consortium's NTD strategy focuses on the need to develop new approaches to the current NTD challenges, while delivering the core of the WHO intervention packages and matching their guiding principles. We promote a holistic approach that emphasises the engagement of the **education sector**, the **community** and the **primary healthcare structure**.

Our approach acknowledges that one size does not fit all and incorporates internationally-accepted procedures on NTD prevention and management into existing health and community structures, to avoid any parallel, unsustainable system. This approach also supports the integration of interventions against NTDs into existing formats used for malaria or other diseases, and does not target one specific disease, or group of diseases, but addresses diseases that reflect local endemicity and country priorities.

About Malaria Consortium

Malaria Consortium is one of the world's leading specialist non-profit organisations. Our mission is to improve lives of all, especially the poorest and marginalised, in Africa and Asia through sustainable, evidence-based programmes that combat targeted diseases.

NTD strategy



Our ongoing work

Our expertise in malaria control and understanding of the drivers of change that inform and influence NTD prevention strategies, help us meet the challenges in NTDs through our four core areas of work (see NTD Strategy diagram).

Our ongoing projects focus on:

- **dengue**
- **lymphatic filariasis** and management of morbidity related to untreated lymphatic filariasis (**elephantiasis and hydrocele**)
- **schistosomiasis (urinary and intestinal)**
- **soil transmitted helminth infections**
- **Buruli ulcer**
- **trachoma**

Our projects also target **podoconiosis** and **tungiasis**, which are a health priority in some countries where we work.

Evolution of our NTD work

Malaria Consortium has engaged actively in NTDs and their control since 2006, focusing efforts in countries where we are implementing malaria control.

Our work started with an NTD situation analysis in Uganda, and later in South Sudan, Ethiopia and Mozambique. We extended our work to understanding risk factors and strengthening the health system in detection and case management of **visceral leishmaniasis**, and mapping **trachoma, lymphatic filariasis**, and worm infections (soil-transmitted helminth infections and schistosomiasis).

In districts where these diseases were found to be endemic we rolled out mass drug treatments. We also began research to understand community knowledge and practices on schistosomiasis (Mozambique) and dengue (Cambodia).

Preventive treatment

In general, Malaria Consortium is reaching the most vulnerable and marginalised populations with preventive treatment, by supporting the appropriate uptake of emerging vaccines and drug-based prevention approaches.

We are using our experience in the mass distribution of long lasting insecticidal nets and seasonal malaria chemoprevention administration to improve mass drug administration for NTDs. Where mass drug administration has not started, or has yet to be addressed with an adequate national plan, we support the engagement of primary schools and their collaboration with the Ministry of Health as the focus of administrations targeting school age children. In countries where a national plan for blanket treatment is already in place, we are using primary schools, primary healthcare centres and major community gathering points as distribution sites for mass drug administration to reach both school enrolled and non-enrolled children, as well as adults.

Where the disease burden is very low and yet treatment is needed, we are seeking to integrate preventive chemotherapy and/or NTD treatment within the primary healthcare system.

Vector control

Vector control, the appropriate application of which is dependent on the type of vector, is an important component of NTD prevention. Targeted approaches have been widely implemented for some diseases such as dengue, onchocerciasis and schistosomiasis.

Less implemented, however, is the **integration of vector control** when several of the neglected diseases are co-endemic, and/or endemic in areas where malaria is also present, and the assessment of its impact on vector density and diseases' burden transmitted with that same vector.

Malaria Consortium supports integrated vector-control activities for insect vector-borne diseases in our core areas of work, depending on needs and disease burden. For example, we studied the association between nets usage and leishmaniasis disease burden, and we are looking into assessing the impact of the most effective intervention to prevent malaria, such as long lasting insecticidal nets, on lymphatic filariasis. We are also addressing vector control by engaging communities in malaria and dengue vector control via social research studies aimed at understanding community perceptions and acceptance of specific vector control strategies (*Cambodia*).



Participants in Nampula province, Mozambique gather for a community dialogues session on schistosomiasis.

Case management

Malaria Consortium has many years of experience building capacity and supporting community-level health workers to recognise, diagnose, treat and refer children under five suffering from malaria, pneumonia and diarrhoea. For NTDs, we are using our expertise in community-based delivery systems, and in integrated community case management, to align NTD interventions and create cost-effective platforms.

For any disease that cannot be managed through preventive chemotherapy, **integrated disability prevention and intense case management** can be required. Delivering the necessary care can be a challenge due to the shortage of adequate capacity and relevant resources at the primary healthcare level. To tackle this, we are helping national programmes to increase the capacity and effectiveness of existing health structures to improve case management for morbidity related to lymphatic filariasis and podoconiosis at the primary health care level.

Community engagement is also a fundamental contributor to the early detection of NTDs in need of treatment and management. We are supporting communities in dialogues and activities aimed at raising the understanding of NTDs, thereby ensuring the rapid acceptance of health policies on NTD prevention, control, management and surveillance, when introduced. We are also assessing how this approach can facilitate community-led initiatives to manage NTD-related conditions (*Mozambique, Ethiopia*).

Health system effectiveness and efficiency

Sustained progress against infectious diseases requires a strong and resilient health system. A core area of our work supports governments to build their health system by providing evidence-based guidance and implementation support for disease prevention, control and management strategies. We do this by assessing their current health system, and designing and implementing sustainable solutions, tailored both to endemicity and current capacity.

Strengthening primary and secondary health systems is an important step towards elimination and ensuring the long-term sustainability of successes in NTD prevention and control. We are working with governments to understand in detail and stratify the burden of NTDs in their countries, and to train health staff to improve their knowledge of priority diseases and enable health facilities to identify and manage any disease that might reemerge.

To drive the NTD agenda on **case finding and disease surveillance**, Malaria Consortium adopts a systematic NTD health strengthening programme with surveillance as one of the main components, linked to the health information management and reporting system. Where such a system is not yet established, we are helping to build and strengthen those health information management systems, providing guidance on how to incorporate NTD reporting, and disease monitoring to ensure quality and timely use of data in case of outbreaks or unusual change of disease trends. In Southeast Asia, we are also assessing existing systems to evaluate the needs and challenges in dengue management and surveillance.

Ongoing projects and activities

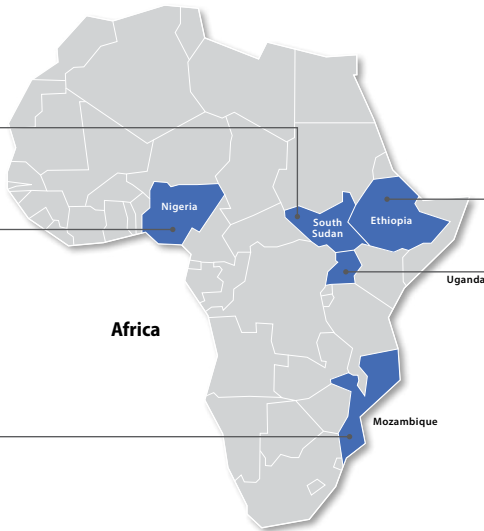
We are targeting NTDs in the following countries:

Ethiopia

- ▶ Increasing health workers' capacity to diagnose and treat country priority NTDs and produce reliable health facility-based data
- ▶ Supporting the Ministry of Health in mass drug administrations
- ▶ Implementing school-based NTD control interventions and using behaviour change communication approaches
- ▶ Assessing the disease burden at the rural level and the feasibility of a decentralised reporting system to detect, confirm, manage and record NTD cases
- ▶ Contributing to drafting the national NTD Master Plan (2016-2020)

South Sudan

- ▶ Supporting the Ministry of Health in assessing NTDs to inform the NTD National Master Plan
- ▶ Implementing mass drug administration for deworming enrolled and not enrolled school age children



Nigeria

- ▶ Engaging with NTD stakeholders and the Federal Ministry of Health to integrate malaria prevention, control and surveillance activities with NTD management
- ▶ Assessing the feasibility of delivering nets and deworming treatment in primary schools

Uganda

- ▶ Assessing the disease burden of three diseases known to be endemic in the country: podoconiosis, tungiasis and Buruli ulcers

Mozambique

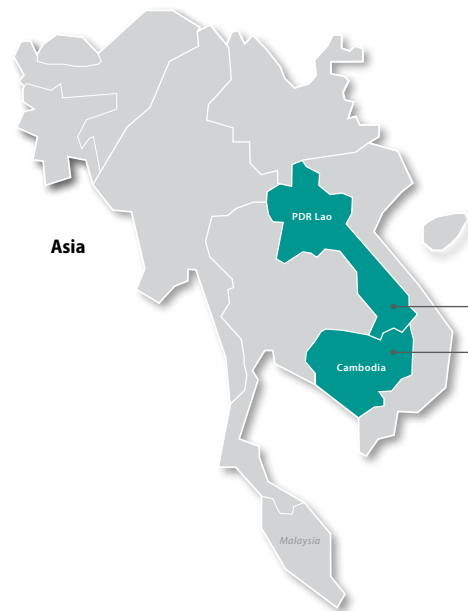
- ▶ Using a community dialogues approach to understand community perception and knowledge of NTDs and assessing how this approach can facilitate community-lead initiatives for lymphatic filariasis

Cambodia

- ▶ Testing the efficacy of guppy fish in reducing dengue transmission and surveying knowledge, attitudes and practices to determine the feasibility of such interventions

Laos and Thailand

- ▶ Assessing dengue surveillance systems as a first step to evaluate needs and challenges in dengue management and surveillance



Global

Malaria Consortium is part of a network of NGOs (NGDO Network) that influences donor policy and support evidence-based NTD control and is a member of the UK Coalition Against NTDs.

We continue to publish our research on NTDs through peer-reviewed journals available at: www.malariaconsortium.org/pages/journal-articles.htm

Cover image: A child in Mayon county, Unity state, South Sudan, receives medicinal syrup to help prevent trachoma. Photo: Jenn Warren

For more information about our current projects: www.malariaconsortium.org/pages/ntds.htm

For further information: [Giuseppina Ortu, g.ortu@malariaconsortium.org](mailto:Giuseppina.Ortu@malariaconsortium.org)

September 2016

Malaria Consortium

Development House 56-64 Leonard Street, London EC2A 4LT, United Kingdom

Email: info@malariaconsortium.org / www.malariaconsortium.org

UK Registered Charity No: 1099776 / US EIN: 98-0627052

malaria consortium
disease control, better health