Malaria is a preventable and treatable infectious disease transmitted by mosquitoes that kills more than half a million people each year. Malaria cases and deaths are highest in sub-Saharan Africa, where it is the leading cause of death for children under 5 years old. The global community has come together to combat malaria, with the goal of eradicating the disease by 2050.
Coconut Surveillance, our state-of-the-art mobile software app, has helped Zanzibar respond to more than 60,000 malaria cases since 2012. We are streamlining Coconut into the national surveillance system and strengthening the country's ability to own and manage the technology moving forward.

In Thailand, we helped launch and strengthen the 1-3-7 surveillance strategy: health officials report malaria cases within 1 day, investigate cases within 3 days, and deploy responses within 7 days. Since the introduction of this strategy in 2017, malaria cases have fallen by 81%.

**Our Approach**

Carefully listening to our clients, partners, and national malaria programs, we advance sustainable, multisectoral, local solutions for malaria prevention, control, and elimination. We design and implement interventions in close collaboration with local stakeholders, with the goal of country ownership of malaria activities. Our malaria experts conduct rigorous independent research and advance novel approaches based on local priorities, which allows us to shift our efforts based on what is working, not simply what was planned.

**Our Expertise**

**Surveillance and Data Science**

Collecting high-quality data on malaria cases, affected communities, insecticide resistance, and antimalarial drug resistance is essential to reaching elimination. We work closely with governments to strengthen health information systems, including building their capacity in advanced analytics approaches such as statistical modeling, economic analyses, and geographic information systems (GISs). This helps countries improve the targeting of interventions, estimate the interventions' cost-effectiveness, and predict and assess the interventions' impacts on morbidity and mortality. Having the systems and skillsets to analyze this important data allows in-country stakeholders to make informed decisions and target the right interventions at the right time.

**Vector Control**

We have extensive experience in the management of large-scale indoor residual spraying (IRS) operations, distribution of insecticide-treated nets (ITNs), environmental compliance, entomological surveillance, and insecticide resistance monitoring. Our IRS operations in Tanzania and Zanzibar, which are supported by the U.S. President’s Malaria Initiative (PMI), have been among the most successful in Africa, leading to a reduction in malaria prevalence to near zero in some areas and dramatically lowering malaria-related hospital and clinic admissions. We also provide technical assistance in program design, program implementation, and monitoring of ITNs distribution.
**DID YOU KNOW?**

With support from RTI and PMI, **Zanzibar** has moved toward malaria elimination, reducing its malaria prevalence from more than 30% in 2005 to less than 1% today.

In **Guinea**, we have distributed nearly 13 million bed nets, given 3.7 million doses of preventive malaria medicine to 300,000+ children, and helped the country reduce its malaria prevalence from 44% in 2012 to 17% in 2021.

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**Malaria Case Management**

We strengthen services and systems that improve high-quality diagnostic and treatment services in health facilities and communities. Examples include training and equipping health workers to adhere to national protocols for malaria treatment by using microscopy and rapid diagnostic tests, and developing social behavior change messaging to ensure patients adhere to treatment.

**Seasonal Malaria Chemoprevention (SMC)**

RTI plays an integral role in supporting national malaria programs and stakeholders to scale-up SMC in Guinea and Senegal, leveraging community platforms to reach children in hard-to-reach areas. Annual SMC campaigns involve the distribution of preventive medicines in certain regions during the rainy season, when the risk of malaria rises. These campaigns have been shown to be highly effective in protecting children from malaria. We support all aspects of annual campaigns, from forecasting medicine and commodity needs to training and supervising health workers and sensitizing communities to the importance of the campaigns. We are also a key member of working groups led by Roll Back Malaria’s Partnership to End Malaria and the World Health Organization (WHO) that develop global guidelines for SMC implementation.

**Malaria Operational Research and Policy**

We actively engage with national malaria programs, donors, and stakeholders interested in operational research to explore policies and strategies that will help countries effectively reach targets for malaria prevention, control, and elimination. Recent examples include evaluating the effectiveness of malaria case detection and response efforts in Zanzibar, piloting a text messaging service intervention to increase access to antenatal care and intermittent preventive therapy for pregnant women in Guinea, and assessing the contribution of active case detection to malaria elimination in Thailand. In addition, our staff regularly participate in numerous malaria research projects around the globe, and since 2010 have authored more than 300 malaria-related articles for publication in peer-reviewed journals.
RTI International is both a global research institute and a leading international development organization. We combine these powerful capabilities with those of our partners to co-create smart, shared solutions for a more prosperous, equitable, and resilient world. For more information visit, www.rti.org/idg.

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Selected Publications


Selected Projects
USAID/Owod (USAID, 2021–2026)
RTI supports the government of Senegal to strengthen the capacity and commitment of its health system at the district and regional levels to improve health outcomes for women and children by providing improved services for malaria; reproductive, maternal, newborn, child, and adolescent health; nutrition; and water, sanitation, and hygiene in five priority regions of Senegal (Diourbel, Kolda, Sédhiou, Tambacounda, and Kédougou).

Okoa Maisha Dhibiti Malaria Activity—Save Lives, End Malaria (USAID/PMI, 2018–2022)
RTI supports Tanzania’s National Malaria Control Program and the Zanzibar Malaria Elimination Program to strengthen malaria surveillance and monitoring and move the country toward malaria elimination.

Prevention of Mosquito-Borne Diseases through Vector Control IDIQ, (USAID, 2017–2022)
RTI is a holder of this global indefinite delivery/indefinite quantity contract, which supports ministries of health and national malaria control programs to address current and emerging mosquito-borne disease programmatic challenges and threats in countries where USAID supports vector control efforts.

Inform Asia: USAID’s Health Research Program (USAID/PMI, 2015–2023)
RTI works with the national malaria programs of Thailand and Lao PDR to strengthen surveillance systems and promote the use of strategic information to accelerate malaria elimination.

StopPalu and StopPalu+ (USAID/PMI, 2013–2022)
RTI assisted the government of Guinea to reduce malaria morbidity and mortality through multiple interventions in prevention, diagnosis and treatment, and capacity building of the Ministry of Health and National Malaria Control Program. The program supported mass ITN distribution, provides SMC, supplies case management, and builds capacity of the Ministry in malaria diagnostics.

Governance for Local Development (USAID, 2016–2021)
The project worked with the Government of Senegal, including the National Malaria Control Program, to support decentralization of selected government responsibilities and functions, including budgeting, local stakeholder and community engagement and coordination, oversight, and supervision of malaria programming.

Tanzania Vector Control Scale-Up Project (USAID, 2009–2016)
The project worked with the National Malaria Control Program and the Zanzibar Malaria Elimination Program to implement IRS, distribute ITNs, and perform malaria surveillance in mainland Tanzania and Zanzibar.

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