

Malaria



Ruth Owiti received an insecticide-treated net at the Ndori Dispensary near her home in Siaya County. Public health officials advised her on how to properly use the net, which she hopes will stop her four-year-old son, Winspencer, from getting sick every month during the rainy season.

Presidential Initiative
President's Malaria Initiative (PMI).

FY 2014 Funding:
\$35 million.

Goal:
Halve the burden of malaria in 70 percent of at-risk populations in Sub-Saharan Africa.

USAID Accomplishments (FY2014)

- 13.7 million doses of artemisinin-based combination therapy, the first-line treatment for malaria in Kenya procured.
- 346 health workers trained in malaria laboratory diagnostics (rapid diagnostic tests or microscopy)
- 4.5 million malaria rapid diagnostic tests procured by the U.S. Government distributed.
- 5.1 million insecticide-treated nets procured.
- 4,310 health workers in endemic areas trained in intermittent preventive treatment in pregnancy.

Focus Areas

USAID supports Kenya's Malaria Strategy 2014–2018 (KMS) in prevention and control interventions across the country, with particular focus in malaria-endemic and epidemic prone counties.

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OVERVIEW

Malaria is a major public health problem in Kenya. Due to altitude, rainfall patterns and temperature, about 70 percent of the Kenyan population is at risk for malaria. The disease accounts for about 18 percent of outpatient consultations and 6 percent of hospital admissions.

The 2014 Demographic and Health Survey showed Kenyan progress in the fight against malaria, contrasted to the 2008/2009 survey. The 2014 survey showed a 3 percent increase in Kenyan households who owned at least one insecticide-treated net (ITN) – from 56 to 59 percent. Fifty-four percent of children under the age of 5 and 51 percent of pregnant women age 15-49 slept under an ITN the night before the survey, increasing from 47 and 49 percent in 2008-09, respectively.

Kenya is a focus country for the U.S. President's Malaria Initiative, which supports efforts by USAID and other key U. S. Government partners, in collaboration with the Government of Kenya, to expand malaria prevention and treatment measures. Since the launch of the initiative in 2008, the United States Government has invested more than \$221 million in prevention and treatment services in Kenya. USAID also works closely with the National Malaria Control Program and counties to implement the national malaria strategy, promotes ITN use, and educates the public on the importance of prompt diagnosis and treatment for fever, particularly among pregnant women.

PROGRAM AREAS

Insecticide-Treated Mosquito Nets

USAID supports the procurement and distribution of ITNs for the Government of Kenya rolling mass distribution campaigns, and in antenatal clinics. In 2014-2015, Kenya conducted a mass distribution to reach universal coverage, defined as one net for every two persons in malaria-endemic and endemic-prone counties.

Prevention of Malaria in Pregnancy (MIP)

Prevention of malaria in pregnancy is crucial to improving maternal and child health outcomes in Kenya. USAID supports the review, development and dissemination of policy and messaging; procurement and distribution of ITNs through antenatal clinics; and strengthening of case management.

Current Government of Kenya policy calls for pregnant women to receive two or more doses of sulfadoxine-pyrimethamine for intermittent preventive treatment. To increase the number of pregnant women on treatment, USAID trains both health workers and community health volunteers on management of malaria during pregnancy.

Indoor Residual Spraying

USAID began indoor residual spraying activities in Kenya in 2008. In 2012, more than 2.4 million people (98% of the targeted households)

received spraying services. Thousands of local personnel have been trained to conduct and oversee spraying activities. County capacity has increased through strategic, technical, managerial, and operations support for indoor residual spraying activities, with the goal of establishing a model operation and augment government ability to implement safe and effective indoor residual spraying. In 2015-2016, USAID will be supporting the Government of Kenya National Malaria Control Program to provide spraying for more than one million people in target counties.

Diagnosis and Treatment

In 2012, based on global recommendations, Kenya adopted a policy of universal diagnosis – requiring all suspected cases of malaria be confirmed with a diagnostic test prior to treatment. In line with the policy, USAID assisted the Government of Kenya in efficiently rolling out rapid diagnostic tests (RDTs) in all dispensaries and health centers nationwide.

To enhance effective diagnosis and treatment of malaria, USAID supports both the improvement of government laboratories and skill-building for laboratory personnel. USAID has procured millions of RDTs and doses of malaria treatment and partners with the Kenya Medical Supply Agency and the National Malaria Control Program to strengthen supply and logistics systems.

USAID is working with counties to advance rational need forecasting and inventory of malaria commodities, to provide a steady supply of essential commodities. USAID also is helping counties build monitoring and evaluation capacity to provide malaria surveillance training and on-the-job coaching, support data quality audits, and supervise malaria interventions.

USAID's MALARIA PROGRAM IN ACTION



The Rapid Diagnostic Test (RDT) is easy to use for health care workers and creates a faster, more tolerable experience for Kenyans who come to get tested for malaria.

The Nyalunya Dispensary in Kisumu is quiet today – about 25 patients are waiting to be served by three health care workers. Noline Anyango, two, and her four-year-old sister are being tested for malaria. Noline doesn't shed a tear as her index finger is pricked. The entire process takes only a few minutes – and Noline and her family are dismissed to the reception area to wait about 20 minutes for their results.

The new malaria RDT is “easier and quicker than the old microscopy laboratory test,” health care worker Christine Musechi said, as she prepared another test kit. “The kits make it possible to diagnose and treat twice as many patients a day, compared to microscopy.”

While both tests use a drop of the patient's blood to confirm a malaria diagnosis – microscopy requires microscopic examination of blood by specialized personnel, such as a lab technician, and can often take hours. A shortage of lab personnel has also been a challenge.

The RDT displays a colored line if it detects a malaria antigen and results take five to 20 minutes. An additional advantage of the rapid diagnostic test is that it does not require specialized skills to use.

Before the universal diagnostic policy was introduced, health workers would clinically diagnose and treat the disease based only on the symptoms due to a shortage of specialized personnel, or long wait times. Headache, fever, chills – all of these are common symptoms of malaria, but they are also common symptoms of tuberculosis and a host of other infections.

The misdiagnosis of malaria bears a heavy health care cost to the patient and the nation, Emmah Obegi explained. A Kisumu County pharmacist, Obegi said, “When a person is misdiagnosed and given the three-day malaria treatment – they will inevitably return to the clinic with symptoms far worse than before.”

By scaling up the use of the rapid diagnostic tests, the Government of Kenya will save valuable health resources by eliminating the unnecessary use of malaria medications. These resources, can perhaps “be used to treat other diseases like HIV or typhoid – which are both major health issues,” adds Obegi.