

KENYA

April 2011



At a Glance: Kenya

Population (2011): 41 million¹

Population at risk of malaria (2009): 67%²

Estimated annual malaria deaths/100,000 population (2008): 12³

Under-five mortality rate (2009): 74/1,000 live births, or approximately 1 in 13 children die before their fifth birthday⁴

¹US Census Bureau, International Data Base 2011

²WHO World Malaria Report 2010

³WHO World Health Statistics 2011

⁴Demographic and Health Survey 2009

Background

The epidemiology of malaria in Kenya is quite varied geographically, with high levels of transmission on the coast and around Lake Victoria but little or no transmission in the highlands above 1,500–2,000 meters altitude. The Government of Kenya tailors its malaria control efforts according to malaria risk to achieve maximum impact. Recent household surveys show significant progress is being made against malaria in Kenya, with improvements in coverage with malaria prevention and treatment measures and reductions in malaria parasitemia and illness.

The President's Malaria Initiative (PMI)

Kenya is one of 17 focus countries benefiting from the President's Malaria Initiative (PMI), which is led by the U.S. Agency for International Development and implemented together with the Centers for Disease Control and Prevention. PMI was launched in 2005 as a five-year (fiscal year [FY] 2006–2010), \$1.265 billion expansion of U.S. Government resources to reduce the burden of malaria and help relieve poverty on the African continent. The 2008 Lantos-Hyde Act authorized an extension of PMI funding through FY 2013. With congressional authorization and the subsequent launch of the U.S. Government's Global Health Initiative, PMI's goal was expanded to achieve Africa-wide impact by halving the burden of malaria in 70 percent of the at-risk populations on the continent (i.e., approximately 450 million residents), thereby removing malaria as a major public health problem and promoting development throughout the African region.

To reach its goal, PMI works with national malaria control programs and coordinates its activities with national and international partners, including the Roll Back Malaria Partnership; The Global Fund to Fight AIDS, Tuberculosis and Malaria; the World Health Organization; the World Bank; numerous nongovernmental organizations (NGOs), including faith-based and community groups; and the private sector.

Key Interventions

In line with Kenya's national malaria control strategy, PMI supports four major malaria prevention and treatment measures.

- **Insecticide-treated mosquito nets (ITNs):** Sleeping under a long-lasting ITN provides protection from malaria-carrying mosquitoes. The nets are nontoxic to humans but can repel and kill mosquitoes for up to three years. Kenya is using its Global Fund grant (Round Four), support from the UK Department for International Development and PMI to significantly scale up routine ITN distribution, including distribution of free or highly-subsidized ITNs through antenatal and vaccination clinics, child health action days, community-based initiatives and retail outlets. In 2011, Kenya is implementing a mass ITN distribution campaign (its

first since 2007) to achieve universal coverage in high-priority areas, with support from the Global Fund, PMI, World Bank, and NGOs.

- Indoor residual spraying (IRS):** IRS involves spraying the inside walls of houses with insecticides. Mosquitoes are killed when they land on these sprayed walls, thus reducing malaria transmission. In 2010, the Government of Kenya's IRS program transitioned from epidemic-prone districts toward districts with seasonal malaria transmission. With FY 2011 funding, PMI will support spray activities in 10 endemic districts in Western and Nyanza Provinces and will protect an estimated 1.4 million people. Additionally, PMI supports entomological monitoring and provides enhanced epidemic surveillance and response in those districts that are transitioning away from IRS.
- Intermittent preventive treatment for pregnant women (IPTp):** IPTp is a highly effective means of reducing the serious consequences of malaria in both the pregnant woman and her unborn child, which include maternal anemia and low birth weight babies. It consists of the administration of at least two doses of the antimalarial drug sulfadoxine-pyrimethamine (SP), which is given at least one month apart during the second and third trimesters of pregnancy. In Kenya, SP needs for IPTp are being met by the national government and other donors. A pilot study conducted in 2010 confirmed that a new, simplified IPTp policy would increase SP uptake. PMI will support the implementation of this revised IPTp policy in malaria-endemic areas. It also will strengthen community-based behavior change communication activities to increase client demand for antenatal care and IPTp services.
- Diagnosis and treatment:** Effective case management of malaria depends on early, accurate diagnosis with microscopy or rapid diagnostic tests (RDTs) and prompt treatment with an effective drug. Artemisinin-based combination therapies (ACTs) are the recommended first-line treatment for uncomplicated *Plasmodium falciparum* malaria in most malaria-affected regions of Africa. They are extremely effective against malaria parasites and have few or no side effects. With FY 2011 funding, PMI will procure 1.5 million RDTs and support their rollout in areas with seasonal and low malaria transmission and training to strengthen microscopy practices nationally. PMI will also procure up to 7.8 million ACT treatments to fill gaps while continuing to strengthen the supply chain and logistics systems to ensure a steady supply of these essential medications.

Progress to Date

The table below shows key results from Demographic and Health Surveys (DHS) and a Malaria Indicator Survey (MIS) conducted in Kenya. These surveys provide national (DHS) and subnational (MIS), household-level data on the health status of the population and on malaria indicators.

Kenya Malaria Indicators	PMI Baseline	DHS 2009
All-cause under-five mortality rate	115/1,000 (DHS 2003)	74/1,000
Proportion of households with at least one ITN	48% (MIS 2007)	56%
Proportion of children under five years old who slept under an ITN the previous night	39% (MIS 2007)	47%
Proportion of pregnant women who slept under an ITN the previous night	40% (MIS 2007)	49%
Proportion of women who received two or more doses of IPTp during their last pregnancy in the last two years	12% (MIS 2007)	14%

Kenya is in its fourth year as a PMI focus country. With support from PMI and its partners, malaria control interventions are being scaled up, and vital commodities are being distributed to vulnerable populations.

PMI Contributions	2007	2008	2009	2010	Cumulative
IRS: Houses sprayed ¹	1,171,073	764,050	517,051	503,707	
IRS: Residents protected ¹	3,459,207	3,061,967	1,435,272	1,892,725	
ITNs procured		60,000	1,240,000	455,000	1,755,000
ITNs distributed		60,000	550,000	690,000	1,300,000
IPTp treatments procured			840,000		840,000
IPTp treatments distributed			840,000		840,000
ACTs procured		1,281,720	7,804,800	6,997,080	16,083,600
ACTs distributed		1,281,720	6,015,360	7,667,310	14,964,390
Health workers trained in IPTp ²			5,107	93	
Health workers trained in ACT use ²			4,747	390	
Health workers trained in diagnostics ²		77		485	

¹ A cumulative count of the number of houses sprayed and residents protected is not provided since some areas have been sprayed on more than one occasion.

² A cumulative count of individual health workers trained is not provided since some health workers have been trained on more than one occasion.

Impact

According to nationwide household surveys, all-cause mortality among children under five in Kenya has declined significantly, from 115 deaths per 1,000 live births in 2003 to 74 deaths per 1,000 live births in 2008 – a 36 percent reduction. During this period of time, most malaria coverage indicators have improved: ITN ownership increased to 56 percent and ITN use in children under five and pregnant women increased to 47 percent and 49 percent, respectively.

PMI Funding

	FY 2007 Jump start funds	FY 2008	FY 2009	FY 2010	FY 2011
Budget (in millions)	\$6.1	\$19.8	\$19.7	\$40.0	\$36.4

For details on FY 2011 PMI activities in Kenya, please see the **Kenya Malaria Operational Plan:**

http://www.pmi.gov/countries/mops/fy11/kenya_mop-fy11.pdf



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