

TANZANIA

April 2011



At a Glance: United Republic of Tanzania

Population (2011): 42.7 million¹

Population at risk of malaria:

Mainland: 93%²

Zanzibar: 100%

Estimated annual malaria deaths/100,000 population (2008): 87³

Under-five mortality rate (2007): 91/1,000 live births, or approximately 1 in 10 children die before their fifth birthday⁴

¹ US Census Bureau, International Data Base 2011

² PMI Malaria Operational Plan 2011

³ WHO World Health Statistics 2011

⁴ Tanzania HIV/AIDS and Malaria Indicator Survey 2007

Background

Malaria continues to be a major public health problem on the Mainland of Tanzania, where about 41 million residents are at risk of the disease. Transmission is highest in the north of the country around Lake Victoria and on the coast of the Indian Ocean. On Zanzibar, which has a population of 1.2 million people, malaria control efforts over the past five years have dramatically reduced transmission of the disease.

The President's Malaria Initiative (PMI)

The United Republic of Tanzania includes both the Mainland and Zanzibar and 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 (NMCPs) 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, including faith-based and community groups; and the private sector. In Tanzania, PMI works with the Ministries of Health and the NMCPs of both the Mainland and Zanzibar.

Key Interventions

In line with the national malaria control strategies of the Mainland and Zanzibar, PMI supports four major interventions to prevent and treat malaria.

- **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, in spite of frequent washings. The universal coverage campaign, which aims to provide one long-lasting ITN per sleeping space, has distributed more than 12 million nets in the past 12 months and is

scheduled to end soon. PMI also supports the national voucher program for infants, whereby vouchers worth about 90 percent of the cost of a long-lasting ITN are given out at antenatal care and child health clinics. These vouchers can then be redeemed at retail shops for a small top-up fee (\$.45). PMI has also supported logistics management and training of community volunteers for net distribution.

- **Indoor residual spraying (IRS):** IRS involves spraying of the inside walls of houses with insecticides. When mosquitoes land on the sprayed walls, they pick up the insecticide and are either killed immediately or their lifespan is shortened and malaria transmission is reduced. In FY 2011, PMI will maintain high IRS coverage in the three regions of the Lake Zone around Lake Victoria and will conduct targeted spraying in the remaining high malaria transmission areas of Zanzibar.
- **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. IPTp consists of the administration of at least two doses of the antimalarial drug sulfadoxine-pyrimethamine, which is given at least one month apart during the second and third trimesters of pregnancy. PMI funding for IPTp in Tanzania has focused on health worker training and a facility-level quality improvement program. PMI has also supported an update of the training curricula for nursing and medical training institutions to incorporate new areas in malaria prevention and case management, including malaria in pregnancy.
- **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 Tanzania. In addition to purchasing ACTs, PMI also supports strengthening pharmaceutical and supply chain management. PMI's support for malaria diagnostics has focused on training, equipping, and certifying microscopists for parasitological diagnosis and refining and piloting a quality assurance system for both RDTs and microscopy.

Progress to Date

The table below shows key results from nationwide household surveys, including the Demographic and Health Survey (DHS) and the Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS). These surveys provide nationally representative, household-level data on the health status of the population and on coverage with malaria prevention and treatment measures.

Tanzania Malaria Indicators	PMI Baseline (DHS 2004)	THMIS 2007	DHS 2010
All-cause under-five mortality rate	112/1,000 (Mainland and Zanzibar combined)	91/1,000 (Mainland and Zanzibar combined)	81/1,000 (Mainland and Zanzibar combined)
Proportion of households with at least one ITN	22% Mainland 28% Zanzibar	38% Mainland 72% Zanzibar	63% Mainland 76% Zanzibar
Proportion of children under five years old who slept under an ITN the previous night	16% Mainland 22% Zanzibar	25% Mainland 59% Zanzibar	64% Mainland 55% Zanzibar
Proportion of pregnant women who slept under an ITN the previous night	15% Mainland 20% Zanzibar	26% Mainland 51% Zanzibar	57% Mainland 50% Zanzibar
Proportion of women who received two or more doses of IPTp during their last pregnancy in the last two years	22% Mainland 14% Zanzibar	30% Mainland 52% Zanzibar	26% Mainland 47% Zanzibar

Tanzania is in its sixth year as a PMI focus country. With support from PMI and its other partners, malaria control interventions have been scaled up on both the Mainland and on Zanzibar with procurement and distribution of vital commodities and IRS.

PMI Contributions	2006	2007	2008	2009	2010	Cumulative
IRS: Houses sprayed ¹	203,754	247,712	308,058	422,749	889,981	
IRS: Residents protected ¹	1,018,156	1,279,960	1,569,071	2,087,062	4,861,179	
ITNs procured	130,000		143,560	1,468,966	623,441	2,365,967
ITNs distributed	130,000		113,560	1,498,966	1,495,121	3,237,647
ITNs redeemed through voucher programs		362,194	1,034,711	596,275	623,441	2,616,621
ACTs procured	380,160	694,050	146,730	4,001,760	8,751,150	13,973,850
ACTs distributed	380,160	494,050	346,730	544,017	4,873,207	6,638,164
RDTs procured	875,000	550,200	1,075,000	950,000	292,000	3,742,200
RDTs distributed	250,000	1,025,200	425,000	989,500	661,900	3,351,600
Health workers trained in IPTp ²	376	1,158	2,532	2,288	2,157	
Health workers trained in ACT use ²	4,217	1,011	1,767	1,018	1,162	
Health workers trained in diagnostics ²				247	338	

¹ A cumulative count of the number of houses sprayed and residents protected is not provided since most areas have been sprayed more than once.
² A cumulative count of individual health workers trained is not provided since many health workers have received training on more than one occasion.

Impact

In Tanzania, on the Mainland and Zanzibar combined, all-cause mortality in children under the age of five fell by 28 percent between 2005 and 2010. Over the same time period, household ownership of at least one ITN increased from 23 to 64 percent, and ITN use among children under five and pregnant women increased from 16 percent (in both groups) to 64 and 57 percent, respectively. Severe anemia (hemoglobin < 8 g/dL) in children six months to five years of age has been shown to be strongly associated with malaria; on the Mainland, the frequency of severe anemia in this age group fell by 50 percent between 2005 and 2010.

Malaria control efforts have been very successful on the island of Zanzibar. In 2010, less than 2 percent of blood smears taken from patients at the 90 health facility surveillance sites that make up Zanzibar’s malaria epidemic early detection system were positive for malaria parasites.

PMI Funding

	FY 2005 Jump start funds	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Budget (in millions)	\$2.0	\$11.5	\$31.0	\$33.7	\$35.0	\$52.0	\$46.9

For details on FY 2011 PMI activities in Tanzania, please see the **Tanzania Malaria Operational Plan:**
http://pmi.gov/countries/mops/fy11/tanzania_mop-fy11.pdf.



PRESIDENT'S MALARIA INITIATIVE

