

Country Profile | President's Malaria Initiative (PMI)

RWANDA

April 2009



At a Glance: Rwanda

Population - 2009: 10.5 million¹

Life expectancy at birth - 2009:
49 years (male), 52 years (female)¹

Population at risk of malaria - 2006:
100%²

Under-5 mortality rate - 2008:
103/1,000 live births, or approximately
1 in 10 children³

¹ US Census Bureau, International Data Base 2009

² PMI Malaria Operational Plan FY09

³ Preliminary results, Interim Demographic and Health Survey 2008

Background

With a population of more than 10 million, Rwanda is one of Africa's most densely populated countries. Its entire population is at risk of malaria. Recent data indicate that malaria transmission has decreased substantially since 2005–2006. Reported malaria illnesses seen at health facilities have declined from 1.5 million in 2005 to 900,000 in 2007.

Rwanda is one of 15 countries benefiting from the President's Malaria Initiative (PMI), a five-year, \$1.2 billion program led by the U.S. Agency for International Development (USAID) and implemented together with the Centers for Disease Control and Prevention (CDC).

Goal

The goal of PMI is to reduce malaria deaths by 50 percent in 15 countries in Africa by reaching 85 percent of the most vulnerable groups – principally pregnant women and children under five years of age – with lifesaving prevention and treatment measures.

PMI coordinates with National Malaria Control Programs (NMCPs) and international partners, including the World Health Organization (WHO); the Global Fund to Fight AIDS, Tuberculosis and Malaria; the World Bank Malaria Booster Program; the Roll Back Malaria partnership; the Bill and Melinda Gates Foundation; nongovernmental organizations, including faith-based and community groups; and the private sector.

Key Interventions

In support of Rwanda's NMCP, PMI backs four key intervention strategies to prevent and treat malaria:

- Insecticide-treated mosquito nets (ITNs)
- Indoor residual spraying with insecticides (IRS)
- Intermittent preventive treatment for pregnant women (IPTp)
- Diagnosis of malaria and treatment with artemisinin-based combination therapy (ACT)

Results to Date

Rwanda is in its third year as a PMI focus country. With support from PMI and its partners, malaria control interventions are being implemented, and vital commodities are being distributed to vulnerable populations.

Preliminary results of a 2008 interim nationwide Demographic and Health Survey show about a fourfold increase in ownership of one or more ITNs, from 13 to 57 percent, and in the proportion of children under five sleeping under an ITN, from 15 to 58 percent between 2005 and 2008. This increased ITN ownership and use, along with targeted IRS, and the rollout of ACTs at both the health facility and community levels, were associated with a fall in the prevalence of malaria to less than 3 percent and an overall reduction in under-five childhood mortality of 32 percent between 2005 and 2008.

Insecticide-treated mosquito nets: Sleeping under a long-lasting ITN provides protection from malaria-carrying mosquitoes. The nets are nontoxic to humans, last up to three years, and do not need re-treatment with insecticide. The Rwandan NMCP aims to achieve 90 percent coverage of all age groups with ITNs. The recently revised strategy promotes one long-lasting ITN for every two people or three nets per household. Routine distribution of nets occurs at antenatal clinics and vaccination sites through social marketing in the commercial sector, and through community organizations. Preliminary results from the interim 2008 Demographic and Health Survey showed that 57 percent of households owned at least one ITN and 58 percent of children under five and 62 percent of pregnant women had slept under an ITN the previous night. To date, PMI has procured 550,000 long-lasting ITNs for free distribution to the poorest of the poor households.

Indoor residual spraying: IRS involves the coordinated, timely spraying of the inside walls of homes with insecticides. Mosquitoes are killed when they land on these sprayed walls and pick up the residual insecticide. To complement the distribution of long-lasting ITNs, the NMCP uses IRS in targeted high-risk areas. With PMI's assistance, more than 159,000 houses were sprayed in 2007. In 2008, PMI supported spraying in high-risk sectors of five districts that covered more than 189,000 houses and protected more than 885,000 residents.

Malaria in pregnancy: Pregnant women are particularly vulnerable to malaria, since pregnancy reduces a woman's immunity to malaria. Unborn children also suffer the consequences of maternal malaria infections, which can result in low birthweight and a higher risk of death early in infancy. Because of decreasing malaria prevalence and increasing parasite resistance to sulfadoxine-pyrimethamine in Rwanda, the NMCP has decided to discontinue IPTp. In keeping with the new NMCP policy, PMI continues to support other aspects of prevention and treatment of malaria in pregnancy. For example, PMI has trained 436 health workers to improve the quality of antenatal care for pregnant women and procured a one-year supply of iron and folic acid (20 million tablets) to prevent anemia among pregnant women.

Diagnosis and treatment: ACTs are highly effective against malaria parasites and have few or no side effects. The ACT artemether-lumefantrine (AL) is Rwanda's first-line treatment for uncomplicated malaria. With the fall in malaria prevalence, the NMCP now recommends laboratory confirmation of all cases before treatment. PMI efforts have focused on prompt and effective case management of malaria in health facilities, the private sector, and at the household level through community-based management. To date, PMI has procured 715,000 ACT treatments and distributed more than 411,000 to health facilities, community health workers, and through the commercial sector and supported community-based treatment of malaria in 10 of 19 malaria-endemic districts in the country.

PMI Funding

For fiscal year 2009, PMI allocated \$16.3 million in funding for malaria prevention and treatment in Rwanda. Of this amount, 37 percent will support procurement and distribution of long-lasting ITNs, 15 percent community-based management and treatment of malaria and malaria laboratory diagnosis, 33 percent IRS, 5 percent malaria in pregnancy activities, and approximately 2 percent monitoring and evaluation. Forty-six percent of the total budget will be spent on commodities.

	FY 2006 Jump start funds	FY 2007	FY 2008	FY 2009
Budget	\$1.5 million	\$20 million	\$16.8 million	\$16.3 million

For details on 2009 PMI activities in Rwanda, please see the Malaria Operational Plan at http://www.pmi.gov/countries/mops/rwanda_mop-fy09.pdf.