

### THE PRESIDENT'S MALARIA INITIATIVE

# PROGRESS THROUGH PARTNERSHIPS: SAVING LIVES IN AFRICA

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April 9, 2008

In 2005 President Bush launched the President's Malaria Initiative: a five-year program to combat malaria in the hardest-hit nations on the continent of Africa. We are partnering with countries throughout Africa to fight a disease that knows no national boundaries, spares no race or religion, and takes a devastating toll especially on women and children. A largely treatable and preventable disease, malaria claims the life of a child in Africa every 30 seconds and more than a million lives each year.

This historic partnership is saving lives across the continent of Africa. The United States has distributed life-saving medicines, insecticide sprays, and mosquito nets to more than 25 million people during the two years of PMI's implementation. I have seen firsthand the remarkable progress being made in the fight against malaria during my trips to Africa. I have met children whose lives have been saved by anti-malarial medicines, observed homes being sprayed with insecticide, and given pregnant mothers bed nets to protect both them and their unborn children from the dangers of malaria.

With continued support from the United States, other developed nations, foundations, businesses, religious groups, and private citizens, the people in Africa can have a bright and healthy future free of malaria.

With best wishes,
Laura Bull

# THE PRESIDENT'S MALARIA INITIATIVE

"Americans are a compassionate people who care deeply about the plight of others and the future of our world, and we can all be proud of the work our nation is doing to fight disease and despair. By standing with the people of Africa in the fight against malaria, we can help lift a burden of unnecessary suffering, provide hope and health, and forge lasting friendships." – President George W. Bush in a Malaria Awareness Day Proclamation on April 24, 2007



Mothers and their children wait for antenatal care services in a PMI-supported clinic in Tanzania. Women and children under five are most at risk for malaria and PMI's support is focused on these vulnerable groups.

ONNIE GILLESPIE/VOICES FOR A MALARIA-FREE FUTURE

## Executive Summary

#### **PMI** Goal and Targets

The President's Malaria Initiative (PMI) represents an historic five-year expansion of U.S. Government resources to fight malaria in the region most affected by the disease. The President committed an additional \$1.2 billion in malaria funding to this Initiative with the goal of reducing malaria-related deaths by 50 percent in 15 focus countries. This will be achieved by expanding coverage of highly effective malaria prevention and treatment measures to 85 percent of the most vulnerable populations – children under five years of age and pregnant women. This package of high-impact interventions includes insecticide-treated

mosquito nets (ITNs), indoor residual spraying (IRS) with insecticides, intermittent preventive treatment for pregnant women (IPTp), and artemisinin-based combination therapy (ACT).

#### **Achieving Results**

The rapid scale-up of PMI-supported malaria prevention and treatment measures continued into the second year of the Initiative and already signs of impact on malaria transmission are emerging. For example:

PMI RESULTS AT A GLANCE <sup>1</sup>				
	Year 1	Year 2	Cumulative Results	
Number of people protected by IRS	2,097,056	17,776,105	17,776,105 <sup>2</sup>	
Number of ITNs procured	1,047,393	5,149,038	6,196,431 (of which 4,306,410 have been distributed)	
Number of mosquito nets re-treated	505,573	677,108	1,182,681	
Number of ACT treatments procured	1,229,550	11,537,433	12,766,983 (of which 7,471,965 have been distributed <sup>3</sup> )	
Number of health workers trained in use of ACTs	8,344	20,864	29,208 <sup>4</sup>	
Number of rapid diagnostic tests procured	1,004,875	2,082,600	3,087,475 (of which 1,300,015 have been distributed <sup>3</sup> )	
Number of IPTp treatments procured <sup>5</sup>	0	1,350,000	I,350,000 (of which 583,333 have been distributed <sup>3</sup> )	
Number of health workers trained in IPTp	1,994	3,153	5,147 <sup>4</sup>	

Results reported in this table are up-to-date as of January 1, 2008, and include all 15 PMI focus countries. Year 2 IRS data from Mozambique and Malawi include spray results through February 2008.

<sup>&</sup>lt;sup>2</sup> IRS operations typically involve successive rounds of spraying in the same geographical area. Thus, only one spray round was counted to avoid counting the same household residents twice.

<sup>&</sup>lt;sup>3</sup> Distributed to health facilities.

<sup>&</sup>lt;sup>4</sup> Numbers reported here do not account for possible double-counting of health workers trained in Year 1 and Year 2 or health workers who were trained in both ACT use and IPTp.

A treatment of IPTp consists of three tablets of sulfadoxine-pyrimethamine.

FIGURE I Percentage of Blood Slides Positive for Malaria, Muleba District Hospital, Tanzania, 1997-2007

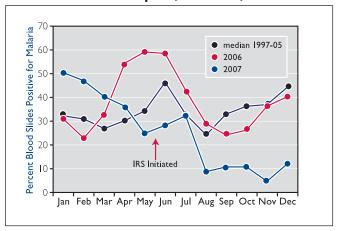


FIGURE 2 Percentage of Blood Slides Positive for Malaria in Children Under Age 2, Zanzibar, 2005-2007

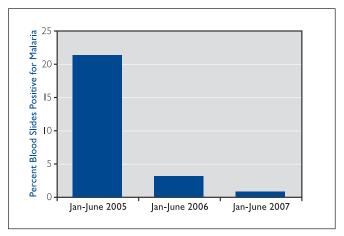
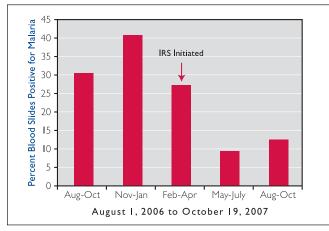


FIGURE 3 Percentage of Blood Slides Positive for Malaria, Kihihi Health Center, Uganda, 2006-2007



- In 2007, PMI worked with the National Malaria Control Program (NMCP) to launch IRS in Muleba District in northwest Tanzania, an area with highly seasonal malaria transmission. Information collected from the district hospital shows a 37 percent reduction in the proportion of blood smears from patients of all ages that were positive for malaria during the peak transmission season of June and July when compared with previous years. Data from this hospital also show a 70 percent reduction in severe anemia, to which malaria is a major contributor (see Figure 1).
- During the past two years, the NMCP, PMI, the Global Fund, and other partners supported a rapid scale-up of ITNs, IRS, and ACTs on the island of Zanzibar. As of May 2007, a population-based survey showed that 74 percent of children under five and 73 percent of pregnant women had slept under an ITN the previous night. In July-August 2007, a survey of 10 health facilities showed a greater than 90 percent decline in the proportion of blood smears positive for malaria in children under two years of age from 22 percent in 2005 to just 0.7 percent in 2007 (see Figure 2).
- Malaria infections are one of the major contributing causes of severe anemia in young children in Africa. In Malawi, ITN coverage has increased considerably during the past three years through the efforts of the NMCP, Global Fund, PMI, and other donors. A 2007 household survey in six of Malawi's 27 districts showed a 43 percent relative reduction in severe anemia in children aged 6 to 30 months compared with children of the same age in a 2005 survey. These surveys also demonstrated that, in this age group, children sleeping under an ITN had significantly reduced risks of malaria infection and anemia.
- PMI and the NMCP supported an IRS campaign in Kanungu District, Uganda, during February and March 2007. Data collected from the Kihihi Health Center in that district showed a 58 percent relative reduction in the proportion of blood smears positive for malaria, from 30.3 percent in August-October 2006 to 12.7 percent during the same time period in 2007 (see Figure 3).

#### **Partnerships**

**NGOs and FBOs:** Partnerships are at the heart of PMI's strategy and during the past year, PMI greatly expanded its collaboration with the private sector, nongovernmental organizations (NGOs), and faith-based organizations

(FBOs). In December 2006, the First Lady announced the launch of the Malaria Communities Program to support small NGOs and FBOs that are involved in malaria-related activities in PMI focus countries. Five grants were awarded to NGOs and local organizations in 2007, and more grants will be awarded in future years. To date, PMI has supported more than 70 nonprofit organizations, of which more than 20 are faith-based.

Private sector: PMI continues to leverage private sector support. In partnership with Malaria No More and others, PMI distributed free long-lasting ITNs through national campaigns in Uganda, Madagascar, and Mali. In Zambia, PMI and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) joined with the Global Business Coalition to distribute more than 500,000 long-lasting ITNs through home-based care programs serving people affected by HIV/AIDS. In total, more than 6.5 million nets have

been distributed through public-private partnerships such as these.

The Roll Back Malaria Partnership and the Global Fund: Only 32 percent of countries which submitted Round 6 Global Fund malaria proposals were successful, including only two of the 15 PMI focus countries. To improve the approval rate of these proposals, the Harmonization Working Group of the Roll Back Malaria Partnership provided technical assistance to a selected group of 20 countries on how to prepare malaria proposals. This effort was supported by a coalition of donors, including the PMI, ExxonMobil, Malaria No More, and others. As a result of this effort, 15 (75 percent) of the 20 countries had successful proposals, including nine PMI focus countries. Based on this successful experience, the Harmonization Working Group is now planning to assist countries to ensure early signing and release of

PMI PUBLIC-PRIVATE PARTNERSHIPS: MASS INSECTICIDE-TREATED NET DISTRIBUTION CAMPAIGNS					
Country	Long-Lasting ITNs Distributed (All Partners)	PMI Partners	PMI Contribution		
Madagascar	1,500,000	NMCP Global Fund Malaria No More UNICEF Red Cross	\$1 million to support campaign logistics, social mobilization, and follow-up to the campaign		
Mali	2,262,404	NMCP Global Fund Malaria No More Nothing But Nets UNICEF WHO Red Cross Mission Bilateral Partners Groupe Pivot Santé	I 69,800 long-lasting ITNs; Technical support for campaign planning; financial and technical support for community mobilization and campaign follow-up		
Uganda	2,300,000	NMCP Global Fund Malaria No More	590,621 long-lasting ITNs; educational materials and support for monitoring and evaluation		
Zambia	500,000	NMCP PEPFAR Global Business Coalition RAPIDS	77,669 long-lasting ITNs		

#### PMI BACKGROUND

**PMI Structure:** The PMI is an interagency initiative led by the U.S. Agency for International Development (USAID) and implemented together with the U.S. Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS). It is overseen by a PMI Coordinator and an Interagency Steering Group made up of representatives of USAID, CDC/HHS, Department of State, Department of Defense, National Security Council, and Office of Management and Budget.

**PMI Country Selection:** The 15 focus countries were selected and approved by the Coordinator and the Interagency Steering Group using the following criteria:

- High malaria disease burden;
- National malaria control policies consistent with the internationally accepted standards of the World Health Organization (WHO);
- Capacity to implement such policies;
- Willingness to partner with the United States to fight malaria; and
- Involvement of other international donors and partners in national malaria control efforts.

**PMI Approach:** The PMI is organized around four operational principles based on lessons learned from more than 50 years of U.S. Government efforts in fighting malaria, together with experience gained from implementation of PEPFAR, which began in 2003. The PMI approach involves:

- Use of a comprehensive, integrated package of proven prevention and treatment interventions;
- Strengthening of health systems and integrated maternal and child health services;
- Commitment to strengthen national malaria control programs and to build capacity for country ownership of malaria control efforts; and
- Close coordination with international and in-country partners.

The PMI works within the overall strategy and plan of the host country's NMCP and planning and implementation of PMI activities are coordinated closely with each Ministry of Health.

PMI FUNDING SUMMARY				
Fiscal Year (FY)	Budget	Focus Countries		
2006	\$30 million l	Angola, Tanzania, Uganda		
2007	\$135 million <sup>2</sup>	Malawi, Mozambique, Rwanda, Senegal (in addition to Year I countries)		
2008	\$300 million <sup>3</sup>	Benin, Ethiopia (Oromiya region), Ghana, Kenya, Liberia, Madagascar, Mali, and Zambia (in addition to Year 1 and Year 2 countries)		
2009	\$300 million	All 15 PMI focus countries		
2010	\$500 million	All 15 PMI focus countries		

#### TOTAL: \$1.265 billion

In addition, Angola, Tanzania, and Uganda also used \$4,250,775 in FY05 funds for malaria activities.

<sup>&</sup>lt;sup>2</sup> This total does not include \$25 million of additional FY07 funding, of which \$22 million was used for malaria activities in the 15 PMI focus countries. In addition, Malawi, Mozambique, Rwanda, and Senegal used \$11,951,000 in FY06 funds for malaria activities as allocated by the PMI Malaria Coordinator.

<sup>&</sup>lt;sup>3</sup> Benin, Ethiopia (Oromiya region), Ghana, Kenya, Liberia, Madagascar, Mali, and Zambia also used \$23.59 million of FY06 and \$42.82 million of FY07 funding (of which \$2.8 million was included in the \$25 million additional FY07 funding) as allocated by the PMI Malaria Coordinator:



funds from their Round 7 grants, and to assist other countries with their Round 8 proposals.

PMI is also working with the World Health Organization (WHO) and other technical partners to reach consensus on issues, such as how best to use microscopic diagnosis and rapid diagnostic tests (RDTs) in different epidemiologic and clinical settings and how to improve quality standards for antimalarial drugs, especially ACTs.

#### U.S. President's Emergency Plan for AIDS Relief:

The past year has seen enhanced coordination of activities supported by PMI and PEPFAR. In Mozambique, the two programs are working together to ensure that pregnant women receive a full package of services when they attend antenatal visits, including IPTp, long-lasting ITNs, and services to prevent mother-to-child transmission of HIV/AIDS (PMTCT). In Rwanda, PMI and PEPFAR have cooperated in reinforcing the laboratory diagnostic capacity for malaria and HIV/AIDS. In Zambia, PMI joined with PEPFAR and the Global Business Coalition to distribute approximately 500,000 free long-lasting ITNs through home-based care networks serving families affected by HIV/AIDS. In Tanzania, as a result of PMI/PEPFAR joint collaboration, a nationwide survey including both HIV and malaria indicators was completed.

#### **Strengthening Health Systems** and Building Capacity

PMI resources are now being programmed in ways that will directly and indirectly build health systems and strengthen overall capacity in host government ministries of health and national malaria control programs. This includes:

- Work with ministries of health, national malaria control programs, and national essential drugs programs in all focus countries to improve the forecasting, procurement, storage, and distribution of antimalarial and other drugs, together with training and supervision of pharmacy and medical store staff and health workers to ensure the correct usage of these drugs;
- Support to national health management information systems and malaria surveillance programs to improve the quality and timeliness of data collection, analysis, and reporting, as well as to strengthen epidemic detection and response;
- Work with national malaria control programs and other partners, such as PEPFAR and WHO, to strengthen laboratory diagnosis of malaria and ensure that clinical workers make appropriate use of the laboratory test results when prescribing treatment. This work will also improve the quality of general laboratory services;



In Senegal, spray operators stand ready to begin IRS activities with PMI's support in the village of Keur Moussa on May 29, 2007.

BOX I
Map of Africa Showing Countries Supported by PMI in Years 1, 2, and 3



- Support to integrated maternal and child health programs to increase clinic attendance through improvements to the quality and quantity of malaria prevention and treatment services provided; and
- General support to increase the capacity of national malaria control programs through training and supervision, procurement of laboratory equipment, and technical assistance.

#### **Looking Forward**

PMI activities are already under way in the eight new fiscal year (FY)2008 focus countries. Continuing challenges during this third year of PMI implementation include:

 The need for a rapid scale-up of ACT distribution and appropriate use of these drugs in countries with historically weak national pharmaceutical management systems and the expanded distribution of ACTs at the community level;



- The need to strengthen monitoring and evaluation systems for malaria so that national malaria control programs and partners can monitor the progress of their activities, make adjustments, and report on their results; and
- The need to translate high ITN ownership into high net usage.

Progress in scaling-up malaria prevention and control interventions during the last 12 months has been dramatic. There is now growing optimism within national malaria control programs and among partners that malaria in sub-Saharan Africa can be controlled.