

## Country Profile | President's Malaria Initiative (PMI)

# SENEGAL

April 2009



### At a Glance: Senegal

Population - 2009: 13.7 million<sup>1</sup>

Life expectancy at birth - 2009:  
57 years (male), 61 years (female)<sup>1</sup>

Population at risk of malaria - 2006:  
100%<sup>2</sup>

Under-5 mortality rate - 2007:  
114/1,000 live births, or approximately  
1 in 9 children<sup>3</sup>

<sup>1</sup> US Census Bureau, International Data Base 2009

<sup>2</sup> WHO World Malaria Report 2008

<sup>3</sup> UNICEF State of the World's Children 2009

### Background

All of Senegal's population are at risk of malaria. Historically, malaria has been reported to be responsible for about one-third of outpatient consultations and one-quarter of deaths among hospitalized children under five.

Senegal 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 Senegal'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

Senegal 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.

**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. A key malaria prevention strategy of Senegal's NMCP is the distribution of long-lasting ITNs to pregnant women and children under five. During its first two years of implementation, PMI has supported a comprehensive strategy to increase household ownership and use of ITNs. PMI has procured and distributed nearly 990,000 long-lasting ITNs, in addition to re-treating more than 125,000 nets. With PMI's support, more than 302,000 long-lasting ITNs were

distributed to pregnant women and children under five through a voucher program that guarantees low-cost nets to vulnerable groups. In addition, PMI has provided support to commercial ITN vendors, resulting in retail sales of more than 215,000 long-lasting ITNs to the general public.

**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. In 2007, PMI funds supported Senegal’s first large-scale IRS campaign in decades in the health districts of Vélingara, Nioro, and Richard Toll, each district representing one of the country’s three ecological zones. PMI sprayed nearly 34,000 houses in one district (Richard Toll) during March–April 2008, protecting more than 135,000 people. In June–August 2008, PMI sprayed nearly 154,000 houses in the same three districts as in 2007 (Nioro, Richard Toll, and Vélingara), which protected more than 645,000 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. With PMI support, expectant mothers receive malaria treatments given at regular intervals during pregnancy through antenatal care services. With the efforts of PMI and other partners, intermittent preventive treatment in pregnancy is now being administered in all Ministry of Health antenatal service delivery sites nationwide (all sulfadoxine-pyrimethamine needs are being met by the Government of Senegal). In 2008, PMI also supported training for more than 2,400 health care workers in IPTp.

**Diagnosis and treatment:** ACTs are highly effective against malaria parasites and have few or no side effects. Case management with ACTs is currently available in all public health facilities in Senegal. During 2008, with the help of PMI, treatment with ACTs at the community level was rolled out to all 1,297 health huts nationwide. As a result, more than 56,000 children under five were treated presumptively for malaria with ACTs at these health huts. During 2008, PMI also supported the development of a new training curriculum for malaria laboratory diagnosis, together with a revised system of supervision, quality assurance, and quality control; trained 70 laboratory technicians and 20 supervisory staff on malaria laboratory diagnosis; purchased 86 microscopes and related supplies; and supported refresher training in case management for more than 2,100 facility health care workers and more than 2,600 community health workers.

**PMI Funding**

For fiscal year 2009, PMI allocated \$15.7 million in funding for malaria prevention and treatment in Senegal. Of this amount, 42 percent will support household ownership and use of long-lasting ITNs, 20 percent IRS activities, 7 percent improved malaria diagnosis and treatment at the health facility level, 3.5 percent malaria in pregnancy activities, and 14 percent community-based malaria interventions. A total of 45.5 percent will be spent on commodities.

	FY 2006 Jump start funds	FY 2007	FY 2008	FY 2009
Budget	\$2.2 million	\$ 16.7 million	\$15.8 million	\$15.7 million

For details on 2009 PMI activities in Senegal, please see the Malaria Operational Plan at [http://www.pmi.gov/countries/mops/senegal\\_mop-fy09.pdf](http://www.pmi.gov/countries/mops/senegal_mop-fy09.pdf).