

# **USAID**

# Malaria Programs in Africa

1998-2003



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# **Acronymns and Abbreviations**

AFR/SD Bureau for Africa, Office of Sustainable Development (USAID)

BASICS Basic Support for Institutionalizing Child Survival

BIMI Blantyre Integrated Malaria Initiative

CDC U.S. Centers for Disease Control and Prevention

CMS Commercial Market Strategies

CORE Child Survival Collaborations and Resources

CRHCS Commonwealth Regional Health Community Secretariat

DfID U.K. Department for International Development

DHS Demographic and Health Surveys

DR Congo Democratic Republic of the Congo

EHP Environmental Health Project

FHA Family Health and AIDS

FY Fiscal year

GFATM Global Fund to Fight AIDS, Tuberculosis, and Malaria

ID Infectious disease

IEC Information, education, and communication

IMCI Integrated Management of Childhood Illness

IPT Intermittent preventive treatment

ITN Insecticide-treated net

KEMRI Kenya Medical Research Institute

MAC Malaria Action Coalition

MICS Multiple Indicator Cluster Survey

MIPESA East and Southern Africa Coalition for Malaria Prevention and Control During

Pregnancy

MOH Ministry of health

MRTC Malaria Research and Training Center

NGO Nongovernmental organization

NMCC National Malaria Control Centre (Zambia)

NMCP National Malaria Control Program

PSI Population Services International

RBM Roll Back Malaria

RCQHC Regional Centre for Quality of Health Care

REDSO/ESA Regional Economic Services Office for East and Southern Africa (USAID)

RPM Rational Pharmaceuticals Management

SARA Support for Analysis and Research in Africa

UNICEF United Nations Children's Fund

UPHOLD Uganda Program for Human and Holistic Development

USAID U.S. Agency for International Development

VOA Voice of America

WAHO West African Regional Health Organization

WARP West Africa Regional Program (USAID)

WHO World Health Organization

WHO/AFRO World Health Organization, Regional Office for Africa

# Introduction



alaria has a critical impact on the health and well-being of the people of Africa. It is estimated that more than 90 percent of the up to 2.7

million deaths malaria causes worldwide each year occur in Africa. Young children are particularly vulnerable. Malaria is the leading cause of death among children under five years old and accounts for 20 percent of deaths among these children in Africa. It also constitutes 10 percent of the continent's entire disease burden. Loss of productivity due to malaria morbidity affects workers of all ages. Estimates suggest that malaria costs Africa more than US \$12 billion in lost gross domestic product annually.

The U.S. Agency for International Development (USAID) is a partner in the effort to fight malaria in Africa. As part of its commitment to improving the health and well-being of children and other vulnerable groups, the Agency has been involved in malaria research, prevention, and control since the 1960s. In 1998, the Agency significantly stepped up its malaria activities under a new Infectious Disease Initiative.

USAID is a committed partner in the global Roll Back Malaria (RBM) initiative, and its malaria strategy is consistent with RBM's technical and intervention priorities. The goal of USAID's malaria strategy is to reduce malaria-related morbidity and mortality by:

- Preventing malaria infection and illness;
- Promoting effective treatment of malaria illness;
- Protecting pregnant women from malaria;
- Responding to the emergence and spread of drug-resistant malaria;

- Developing new tools and approaches for malaria prevention and control; and
- Addressing the needs of populations in complex humanitarian emergencies.

Implementing this strategy has involved building malaria control networks among U.S. government agencies, multilateral and other bilateral donors, and nongovernmental organizations; working with the private sector to provide malaria control commodities and services to communities at affordable prices; and establishing malaria programs in more than 20 African countries as part of local RBM partnerships. USAID also supports operations research to improve access to interventions and to develop vaccines and other new prevention technologies. USAID works closely with the United Nations Children's Fund (UNICEF), the World Bank, and the World Health Organization (WHO) on the global RBM initiative to develop links with maternal and child health programs and foster innovative strategies for preventing malaria transmission.

This report highlights USAID's fight against malaria in Africa from 1998 to August 2003. Innovative approaches and public-private partnerships are highlighted as well as specific country-level results. The budget tables show the steady increase in malaria funding since 1998 within USAID. This increase has been matched and surpassed by the greatly increased attention and financial support for malaria from foundations and the private sector, but most notably from the Global Fund to Fight AIDS, Tuberculosis, and Malaria. This expansion of the world's attention to malaria presents both a tremendous opportunity and a daunting challenge to the RBM partnership and to USAID within it.

# Fighting Malaria in Africa: An Overview of USAID Achievements

USAID support and commitment has been a key factor in the Roll Back Malaria (RBM) partnership in Africa by:

- Strengthening the capacity of African institutions (including the WHO/Regional Office for Africa, the West African Health Organization, and the Commonwealth Regional Health Community Secretariat) to provide technical and political guidance to countries;
- Developing and articulating a strategic approach to malaria as outlined in the Abuja Summit Declaration;
- ▶ Providing technical leadership for scaled-up delivery of key interventions; and
- ▶ Providing leadership within the RBM partnership.

# USAID has played a lead role in the scaled-up deployment of insecticide-treated nets (ITNs) by:

- Providing technical leadership to the RBM partnership in formulating a strategic framework for ITN delivery in Africa; and
- Creating strong public-private partnerships in the NetMark Project. NetMark's commercial partners have sold more than 1.5 million ITNs and another 1.5 million re-treatment kits in six countries, while leveraging USAID's spending with over \$5 million dollars in commercial investment.

# USAID has provided technical and strategic leadership for improved access to effective malaria treatment by:

- Providing technical leadership with the U.S. Centers for Disease Control and Prevention and WHO in developing standards and guidance for a response to drug resistance in Africa;
- Supporting an Institute of Medicine expert committee to develop recommendations with RBM partners for financing the more expensive artemisinin-based combination malaria therapy;
- Providing technical leadership within the RBM partnership to involve the commercial sector for more effective treatment; and
- Providing technical assistance to countries to revise policies and scale up implementation. As a result, the number of African countries with revised treatment policies has risen from 2 to 20 since 1998. More than 54 million children under 5 years old stand to benefit from these revised treatment policies.

# USAID has provided leadership in developing a strategic approach to reducing the impact of malaria during pregnancy by:

- ▶ Providing a forum for malaria and maternal health programs to work together;
- Providing technical support for the development of clear guidance on intermittent preventive treatment (IPT) as part of an integrated antenatal package; and
- ▶ Providing technical assistance to countries to revise policies and scale up implementation. As a result, the number of countries with national IPT policies has grown from 1 to 20 since 1998, with others in review and revision. More than 7 million pregnant women will benefit from these revised IPT policies.

In addition, USAID has supported malaria vaccine development since the end of the malaria eradication campaign of the mid-1960s. USAID's sustained commitment is widely recognized as having contributed greatly to advancing the field to its current promising status, with several vaccine candidates in or nearing clinical field trials.

# **Africa's Malaria Situation**

M

alaria exacts an extreme human toll, affecting at least 300 million people annually. In malariaendemic countries in Africa, it

causes an average 30 percent of outpatient clinic visits and up to 50 percent of hospital admissions, thus placing a tremendous burden on already taxed health systems. Infants and young children are especially vulnerable to malaria as they experience repeated malaria attacks in the course of developing immunity. The impact of malaria in children ranges from febrile attacks to anemia to life-threatening severe malaria and the long-term cognitive effects in those who survive it.

Pregnant women, whose adult immunity to malaria is compromised by pregnancy (especially during their first pregnancy), are also at particular risk of malaria. Semi-immune pregnant women may not experience acute symptoms of malaria, yet are at greater risk of high parasitemia, placental infection, and anemia. The infection of the placenta leads to low birthweight and premature delivery. In areas where women do not have good immunity, they are at heightened risk for severe disease if infected during pregnancy.

The major challenge for malaria control in Africa is access to effective treatment and prevention services. In 2000, African heads of state acknowledged the public health impact of malaria in Africa. They met in Abuja, Nigeria and signed the **Abuja Declaration**.

The Declaration set three primary goals for malaria control in Africa, resolving to:

"Initiate appropriate and sustainable action to strengthen the health systems to ensure that by the year 2005,

- At least 60% of those suffering from malaria have prompt access to and are able to use correct, affordable, and appropriate treatment within 24 hours of the onset of symptoms;
- At least 60% of those at risk of malaria, particularly pregnant women and children under five years of age, benefit from the most suitable combination of personal and community protective measures such as insecticide-treated mosquito nets and other interventions that are accessible and affordable to prevent infection and suffering; and
- At least 60% of all pregnant women who are at risk of malaria, especially those in their first pregnancies, have access to chemoprophylaxis or preventive intermittent treatment."

The most recent estimates in the UNICEF and WHO Africa Malaria Report of April 2003 indicate that stiff challenges remain. The percentage of children under 5 years old in sub-Saharan Africa who sleep under any kind of net is around 20 percent. It is estimated that only 2 percent of children under 5 sleep under insecticide-treated nets.

# **USAID Programs in Africa**



SAID's Bureau for Global Health and Bureau for Africa, Office of Sustainable Development, both work on malaria control activities within the Roll Back Malaria (RBM) strategy. Activities complement and support those of USAID's Missions. As outlined below, USAID works in six key areas.

#### 1

# Preventing Malaria Infection and Illness

Access and use of insecticide-treated nets (ITNs) is one of the key intervention strategies for RBM. Proper use of ITNs can reduce overall child mortality by up to 30 percent and significantly reduce morbidity in children and pregnant women. However, less than 10 percent of African children sleep under ITNs. To create a sustainable supply of ITNs, USAID has launched NetMark, an innovative program that has formed partnerships with 27 major commercial firms to build demand for and expand the availability of affordable ITNs in Africa. USAID missions work with NetMark and local partners on expanded access to ITNs.

## 2

# **Promoting Effective Treatment of Malaria Illness**

Recognition of malaria symptoms and prompt, effective treatment are critical to saving the lives of children with malaria. USAID programs aim to increase the proportion of children with fever receiving prompt treatment with an effective drug within 24 hours. This approach involves improving symptom recognition and treatment-seeking behaviors at the household level, improving case management at health facilities, and developing national capacity to set appropriate policies and monitor antimalarial drug efficacy.

## 3

# Protecting Pregnant Women from Malaria

Each year, 22 million pregnant women in Africa are at risk of malaria. Women in areas of seasonal malaria are at high risk of severe malaria. Placental malaria increases the risk of low birthweight and other adverse birth outcomes. Intermittent preventive treatment of malaria as part of regular antenatal care can significantly reduce this risk to the newborn as well as the mother's risk of anemia. USAID programs, particularly the Malaria Action Coalition, promote partnerships between malaria and reproductive health to deliver this effective intervention to pregnant women in Africa. NetMark is developing cost-effective models for delivering targeted subsidies on ITNs to pregnant women through public-private partnerships.

## 4

# Responding to the Emergence and Spread of Drug-Resistant Malaria

Growing antimalarial drug resistance is challenging malaria control. New drugs exist but are significantly more costly than current therapies. With USAID support, an Institute of Medicine panel is developing guidance for the RBM partnership on the most efficient means of financing these newer, more effective treatments. USAID supports operations research to study issues affecting the introduction of combination drug therapies in Africa.

#### 5

### Developing New Tools and Approaches for Malaria Prevention and Control

In collaboration with public and private partners, USAID focuses on developing and testing malaria vaccines through its Malaria Vaccine Development Program. Funding through the Environmental Health Project is developing tools for the targeting and cost-effective deployment of vector management interventions.

## <u>6</u>

# Addressing the Needs of Populations in Complex Humanitarian Emergencies

There is a growing recognition that African populations in areas of war and conflict are at particular and increased risk of malaria. RBM has estimated that countries affected by complex emergencies account for more than 30 percent of the world's annual malaria mortality. USAID is supporting a five-year World Health Organization effort to reduce malaria in complex emergency situations, with particular focus on Angola, the Democratic Republic of the Congo, Liberia, and Sudan.

# USAID-Supported Malaria Initiatives

n 2002, USAID organized the Malaria Action Coalition (MAC) to coordinate funding for improved treatment of malaria and improved antenatal malaria interventions. The Coalition comprises four USAID partners that provide technical assistance in treatment and malaria in pregnancy—the U.S. Centers for Disease Control and Prevention (CDC), the Maternal and Neonatal Health Program of the JHPIEGO Corporation (an affiliate of the Johns Hopkins University), the Rational Pharmaceutical Management Plus Program of Management Sciences for Health, and the World Health Organization (WHO), primarily its Regional Office for Africa (WHO/AFRO) but also WHO headquarters in Geneva. The Coalition is a joint effort of USAID partners with supplemental funding from USAID to provide technical expertise to RBM activities. It does not supersede RBM; rather, it is guided by RBM, to which it provides supplemental support.

MAC brings together technical expertise to assist RBM partners, USAID Missions, national governments, and the private sector to develop

strategic frameworks for malaria control. Working in epidemiology, operations research, policy dialogue, drug management and regulation, drug use and practices, maternal health and antenatal care, behavior change, performance improvement, implementation of pilot studies, and monitoring and evaluation, MAC looks for opportunities to provide RBM partners with technical assistance where they need it on top of their own funded activities.

Recognizing the importance of expanding and sustaining the commercial sector's involvement in promotion, delivery, and supply of insecticide-treated nets (ITNs), USAID launched the **NetMark** Project in late 1999. This five-year project is intended to create sustainable public health impact by working with private companies to develop comercially viable ITN markets in sub-Saharan African countries. The early phase of the project focused on overcoming obstacles to ITN sales, such as lack of demand for ITNs and taxes and tariffs on ITNs and related products. In 2002, the program was scaled up to NetMark Plus, which is now USAID's primary mechanism to support the RBM

goal of making high-quality, affordable ITNs available across Africa. Now looking to build commercial markets for ITNs in more than 10 countries, NetMark Plus is expanding its partnerships with nongovernmental organizations (NGOs) to link commercial and subsidized product delivery, define best practices for delivering targeted subsidies, introduce state-of-theart products, and provide technical and policy support to ministries of health.

USAID has supported malaria vaccine development since the 1960s. The Agency's Malaria Vaccine Development Program works with the Bill & Melinda Gates Foundation's Malaria Vaccine Initiative at the Program for Appropriate Technologies in Health and with the European Commission's European Malaria Vaccine Initiative to facilitate malaria vaccine development. Activities range from testing and manufacturing vaccine candidates to ensuring their accessibility and affordability in developing countries. Each program advances the development of malaria vaccine candidates through partnerships with governments, universities, and biotechnology and pharmaceutical companies.

The portfolio of USAID regional malaria activities in Africa includes operations research and technical assistance activities that support capacity building. USAID has contributed to the development of a critical mass of African expertise in WHO/AFRO. USAID supports WHO/ AFRO to provide regional and global leadership in malaria control through its participation and leadership in regional meetings and workshops such as the Multilateral Initiative on Malaria research meeting, RBM agenda development, and global partnership meetings. WHO/AFRO works with RBM partners to ensure effective national malaria control programs in Africa and provides short- and long-term technical assistance to support countries in policy and program development, training and curriculum design, and applied malaria research.

In collaboration with CDC, the National Institutes of Health, and other national and international organizations, USAID funding and technical support has contributed to the development in Africa of centers of excellence in

malaria research and training, including the Malaria Research and Training Center (MRTC) in Bamako, Mali; the Kenya Medical Research Institute (KEMRI) in Kisumu, Kenya; and the International Centre for Insect Physiology and Ecology in Nairobi, Kenya. MRTC and KEMRI have been conducting a number of infectious disease research activities, including studies in malaria in pregnancy, drug efficacy and resistance, ITNs, malaria and anemia, home management of malaria, and malaria and HIV infection.

USAID has also been providing funding and technical support to the Commonwealth Regional Health Community Secretariat for East, Central, and Southern Africa (CRHCS) and the West African Health Organization (WAHO) to facilitate **policy development and dialogue** on significant malaria issues in these subregions, including management of malaria in pregnancy and taxes and tariffs on insecticide-treated materials.

## **Partners and Projects**

USAID works with a variety of partners to support malaria control activities and supports a number of specific projects. Following are some of the main USAID partners and projects in the battle against malaria in Africa. Although the major focus of each of these partners/projects is malaria, the impact of their activities often extends far beyond malaria to other aspects of child survival and maternal and child health, providing USAID with considerable added value for its investment.

#### **BASICS II**

The Basic Support for Institutionalizing Child Survival (BASICS) program addresses malaria through its activities in Integrated Management of Childhood Illness and through community-based interventions targeted at households. BASICS II supports facility-based goals, such as improved referral and drug availability, and aims to improve the skills of both formal and informal care providers. Community and communication activities developed under BASICS II aim to influence individual household behaviors related to malaria prevention and treatment.

#### CORE

The Child Survival Collaborations and Resources (CORE) Group is a membership association of American NGOs that works on a global scale to strengthen local capacity to improve the health and well-being of children and women in developing countries through collaborative action and learning. USAID, along with several of its partners, works through the CORE Group to combat malaria in Africa. The CORE Group facilitates networking among the private sector, donors, and NGOs and the integration of malaria programs with other health initiatives.

#### **Environmental Health Project**

The Environmental Health Project (EHP) works to reduce mortality and morbidity in children under five by reducing exposure to the mosquitoes that transmit malaria. EHP provides leadership in the refinement, implementation, and promotion of the "integrated vector management" approach to malaria control. EHP supports ministries of health and other health groups working to improve control programs for malaria and other vector-borne diseases through technical assistance and by providing improved tools for surveillance, operations research, and vector control.

# Maternal and Neonatal Health Program

The Maternal and Neonatal Health Program improves maternal and newborn survival through the implementation of intermittent preventive treatment (IPT) in antenatal care programs. The program works at the country, regional, and global levels, emphasizing supportive policies, strong partnerships, community involvement, and the importance of a continuum of care.

#### MACRO/DHS Surveillance

USAID has worked closely with MACRO International, Inc. and with the RBM global partnership to develop a malaria module within MACRO's Demographic and Health Surveys (DHS). This module provides data congruent with RBM goals and targets for Africa, including information on expenditures for malaria treatment, patterns of treatment seeking, sources of treatment, net/ITN ownership and sources, proportion of ITNs being re-treated with insec-

ticide, and prevalence of febrile illness in women and children. The RBM partnership would like to use DHS malaria data in its monitoring and evaluation activities and expects the data to be useful to country-level RBM partnerships. Beginning in 2000, DHS surveys in Benin, Eritrea, Malawi, Rwanda, Uganda, and Zambia have implemented the malaria module.

# Rational Pharmaceutical Management Plus

The Rational Pharmaceutical Management (RPM) Plus Program provides technical guidance in strengthening drug management systems to improve access to and use of quality antimalarial drugs. This management system includes global, regional, and country-level advocacy about the need for strengthening drug management systems and the provision of technical assistance to countries implementing new treatment policies and scaling up or strengthening existing malaria programs. In addition, RPM Plus is one of the four technical partner organizations in the MAC. As the coalition's U.S.based secretariat, it provides managerial and administrative support for this USAID effort to improve access to antimalarial drugs and IPT.

# Support for Analysis and Research in Africa

The Support for Analysis and Research in Africa (SARA) Project, managed by the Academy for Educational Development, provides technical support for the management of the Infectious Diseases Results Package of USAID's Bureau for Africa, Office of Sustainable Development. SARA carries out research, analysis, information dissemination, and advocacy, emphasizing partnership and leadership capacity development with African institutions and networks in the area of malaria control.

# U.S. Centers for Disease Control and Prevention (CDC)

CDC and USAID have collaborated on several projects and operations research studies that have advanced the knowledge and practice of controlling malaria in pregnancy in Africa. CDC works to prevent and control malaria throughout the world and to increase the survival of children in developing countries. They accom-

plish this through surveillance and by conducting laboratory and epidemiological research. CDC provides diagnostic, consultative, and epidemiological services and training to African institutions and governments in collaboration with USAID.

#### Voice of America

Through an initiative with the Voice of America (VOA), USAID raises local, regional, and global awareness of public policy regarding malaria control, prevention and treatment, and the impacts of malaria on pregnancy and children. VOA develops targeted messages on malaria and builds the capacity of health journalists in developing countries to report on the subject. The coverage uses local and global examples of malaria control policies and promotes best practices in malaria prevention and treatment through phone-in talk shows, special reports, storytelling, radio dramas, and interviews with experts.

#### World Health Organization (WHO)

In 1998, WHO founded the RBM initiative, a global partnership with the goal of halving the world's malaria burden by 2010. The RBM partnership includes national governments, civil society and NGOs, research institutions, professional associations, the United Nations and other development agencies, development banks, the private sector, and the media. USAID works closely with the RBM partnership in Africa and with WHO/AFRO to coordinate efforts to combat malaria.

## **Funding**

USAID's funding for malaria programs in Africa has almost doubled over the past three fiscal years, from about \$17 million in 2000 to \$30 million in 2003. Worldwide USAID funding for malaria has also increased over this period, as the table on the following page shows. In addition, USAID is a significant contributor to the Global Fund for AIDS, Tuberculosis, and Malaria, which supports malaria control work in Africa.

# USAID Funding for Malaria Programs FY 1998 to FY 2003 (in U.S. dollars)

Country	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Angola			1,075,000	1,000,000	1,000,000	1,000,000
Benin	500,000	500,000	830,000	828,000	1,500,000	1,000,000
Burundi						400,000
DR Congo			400,000	998,000	1,300,000	1,100,000
Eritrea	400,000	100,000	385,000	499,000	600,000	600,000
Ethiopia	650,000	500,000	500,000	499,000	1,100,000	900,000
Ghana	200,000	500,000	500,000	599,000	900,000	1,000,000
Kenya	138,000	1,000,000	695,000	698,000	1,200,000	1,200,000
Liberia						300,000
Madagascar					300,000	600,000
Malawi	500,000	500,000	956,000	1,347,000	1,800,000	1,500,000
Mali					800,000	1,000,000
Mozambique	734,000		800,000	1,497,000	600,000	500,000
Nigeria			1,450,000	2,495,000	2,900,000	3,000,000
Rwanda		300,000	300,000	299,000	600,000	750,000
Senegal			160,000	2,494,000	2,500,000	2,500,000
Sudan						300,000
Tanzania		340,000			600,000	400,000
Uganda			860,000	2,993,000	3,000,000	3,000,000
Zambia	1,000,000	1,000,000	1,935,000	3,991,000	4,000,000	4,000,000
WARP	500,000	500,000	500,000	499,000	800,000	800,000
REDSO/ESA	250,000	400,000	500,000	499,000	1,100,000	1,200,000
AFR/SD	3,184,000	3,048,000	5,020,000	4,772,000	4,807,000	3,660,000
Total Bureau for Africa	8,056,000	8,688,000	16,866,000	26,007,000	31,407,000	30,710,000
Total Bureau for Asia and the Near East	50,000	1,075,000	1,166,000	3,100,000	3,762,000	7,764,000
Total Bureau for Europe and Eurasia			195,000		1,000,000	1,000,000
Total Bureau for Latin America and the Caribbean	2,120,000	1,800,000	1,236,000	3,127,000	4,115,000	4,120,000
Total Bureau for Global Health	3,600,000	2,539,000	8,575,000	15,354,000	18,343,000	21,994,000
Total Bureau for Humanitarian Assistance			1,820,000	1,803,000	2,373,000	
Total Global Fund for AIDS,Tuberculosis, and Malaria					5,000,000	
TOTAL	13,826,000	14,102,000	29,858,000	49,391,000	66,000,000	65,588,000

Note: In FY 1998, the funding is all infectious disease (ID) directive; in FY 1999, FY 2000, and FY 2001, it is both ID and child survival funding; FY 2002 and FY 2003 include additional FREEDOM Support Act funding in Europe and Eurasia.

# **Country Profiles**

# **Country Profile Overview**

he following profiles provide an overview of malaria control programming in African countries where USAID works. The information was collected from a number of sources and provides insight into various aspects of the USAID programs.

## **Country Situation**

#### MALARIA RISK

This information was obtained from the *Africa Malaria Report* published by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) in 2003. The percentages of populations at risk represent people living in climates suitable for transmission. The estimates are derived by the Mapping Malaria Risk in Africa organization using a theoretical model of the distribution of endemic and epidemic malaria based on climate conditions suitable for malaria transmission, such as rainfall and temperature.

# STATUS OF ROLL BACK MALARIA (RBM) TARGETS

This information was obtained from the 2003 WHO/UNICEF Africa Malaria Report. The percentage of children under age 5 using mosquito nets or insecticide-treated nets (ITNs) represents those who slept under nets or ITNs the night before the survey. These estimates were derived from nationally representative household surveys such as the Multiple Indicator Cluster Survey (MICS) or the Demographic and Health Survey (DHS).

## **USAID Country Program**

#### **KEY ACHIEVEMENTS**

This information describes achievements from the investments of the past five years. Several types of achievements are noted: development of national strategic plans, establishment and maintenance of strong RBM partnership bodies, improved policies for treatment and intermittent preventive treatment, delivery of ITN services at scale, and successful garnering of increased resources for malaria from the Global Fund to Fight AIDS, Tuberculosis, and Malaria and others. These achievements are built on the accumulated work of USAID and its partners.

#### PROGRAM DESCRIPTION

This information was obtained from USAID Missions and partners. The description highlights Mission activities over the past five years and includes information on the overall country strategy to combat malaria and key involvement with host governments and RBM partners.

# Other USAID-Supported Activities

This information was obtained from USAID/Washington. The description highlights activities funded by USAID/Washington over the past five years.

## **Funding**

This information was obtained from USAID/Washington. The figures listed represent funds allocated for malaria for fiscal years 1998 through 2003 for Mission-directed malaria programs. The other USAID-supported activities have been supported with funding from USAID/Washington.

# **Angola**



## **Country Situation**

#### MALARIA RISK

The majority of the population of 13.5 million lives in areas of high transmission.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **10%** (MICS 2001)

Children under 5 using ITNs: **2%** (MICS 2001)

## **USAID** Country Program

#### **KEY ACHIEVEMENTS**

- USAID has been a lead supporter since the initiation of the Angola RBM program in 2001; this assistance has enabled key policy changes both for treatment and for intermittent preventive treatment (IPT).
- The National Malaria Control Program (NMCP) recently submitted a proposal to the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), which was approved for a total of \$25.2 million over two years.

#### PROGRAM DESCRIPTION

In 2001, USAID/Angola joined with the Angola Ministry of Health and WHO to commit funds to an RBM program. The RBM strategy aims to reduce Angola's malaria burden by addressing diagnosis, treatment, and program management and coordination, with a special focus on

malaria in pregnancy. Program activities targeting Malanje, Huambo, and Luanda provinces began in 2002. The USAID Mission has assisted with program implementation and also supports a technical advisor position in the local WHO office and coordinator positions in two provinces to strengthen institutional capacity.

The NMCP recently submitted a proposal to the GFATM, which was approved for a total of \$25.2 million over two years. The proposal seeks support for scaling up social marketing of ITNs, expanding the use of effective drugs, implementing IPT for pregnant women, and increasing surveillance.

In 2002, Management Sciences for Health initiated a USAID-supported maternal and child health project in Luanda province. The project has been identified as a special opportunity to promote IPT for pregnant women.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
		\$1,075,000	\$1,000,000	\$1,000,000	\$1,000,000

# **Benin**



## **Country Situation**

#### MALARIA RISK

Malaria is a major health problem in Benin, with the entire population of 6.4 million at risk.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **32%** (DHS 2001)

Children under 5 using ITNs: **7%** (DHS 2001)

## **USAID** Country Program

#### **KEY ACHIEVEMENTS**

- In Oueme-Plateau, research was conducted to improve malaria control in conjunction with Integrated Management of Childhood Illness (IMCI) programs. Best practices for malaria treatment are now standardized based on this research.
- In 2002, Benin's social marketing program established 295 new sales sites for ITNs and 302 sites for re-treatment kits while selling nearly 53,000 ITNs and 46,000 kits.

#### PROGRAM DESCRIPTION

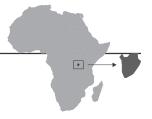
USAID works closely with UNICEF, WHO, and the Government of Benin on malaria control programs. While the USAID/Benin malaria strategy focuses on strengthening malaria prevention and treatment under IMCI, the Benin Ministry of Health is exploring policy changes for intermittent preventive treatment for pregnant women and tax and tariff reductions for bednets. Benin was awarded \$2.4 million in the first round and \$1.4 million in the third round of proposals from the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

In partnership with Africare, Population Services International (PSI), and the U.S. Centers for Disease Control and Prevention (CDC), USAID has supported the integrated AIMI-ProLIPO malaria Project in Oueme-Plateau since 1999. This program applies best practices related to malaria control and IMCI and also, through the recent collaboration of PSI and NetMark, offers subsidized ITNs in antenatal clinics. Africare and CDC are conducting operations research to develop methods to improve training and supervision of IMCI in health facilities as well as targeted distribution of ITNs via community groups. Recent studies have provided important information on identifying key supervisory job aids for improved IMCI in health facilities as well as on targeting high-risk locales for increased prevention activities.

The Mission also supports a regional integrated family health program in Borgue-Alibori that focuses on educational outreach and community-based distribution of key child survival products including ITNs and net re-treatment kits. In 2002, Benin's social marketing program established 295 new sales sites for ITNs and 302 sites for net re-treatment kits while selling nearly 53,000 ITNs and 46,000 kits.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$500,000	\$500,000	\$830,000	\$828,000	\$1,500,000	\$1,000,000

# **Burundi**



## **Country Situation**

#### MALARIA RISK

In Burundi, 68 percent of the population of 6.5 million lives in malaria-endemic areas. Another 17 percent lives in epidemic-prone areas, where resistance to the disease is rare.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **3%** (MICS 2000)

Children under 5 using ITNs: **1%** (MICS 2000)

## **USAID** Country Program

#### **KEY ACHIEVEMENTS**

The Burundi Ministry of Health (MOH) has recently decided to initiate a more effective malaria treatment policy with artemisinin-based combination therapy. USAID supports this new policy and is assisting the government with drug supplies.

#### PROGRAM DESCRIPTION

As a first step toward developing a malaria program, USAID/Burundi is working with the MOH, WHO, UNICEF, and other partners to formalize a Roll Back Malaria (RBM) plan. The malaria control strategy will consist of early and effective treatment, use of ITNs for prevention, preventive therapy for pregnant women, and recognition of and response to outbreaks and epidemics. In January 2003, the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) awarded Burundi \$13.8 million for malaria control activities. USAID helped the MOH prepare the proposal to the GFATM.

In 2002, the MOH decided to deploy artesunate-amodiaquine combination therapy in light of evidence of resistance to sulfadoxine-pyrimethamine. USAID's Regional Economic Development Services Office for East and Southern Africa (REDSO/ESA) will use FY 2003 infectious disease funding to support UNICEF in meeting shortfalls in the supply of the new drug combination.

# Other USAID-Supported Activities

USAID/Washington's Bureau for Democracy, Conflict, and Humanitarian Assistance has been active in Burundi since the devastating malaria epidemic of 2001. The Bureau currently provides antimalarial drugs and is strengthening the capacity of health workers and community agents to prevent and treat malaria.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
					\$400,000

# Democratic Republic of the Congo



## **Country Situation**

#### MALARIA RISK

Just over 90 percent of the Democratic Republic of the Congo (DR Congo) population of 52.5 million is at risk of malaria. Mortality rates among children under age 5 are high because of malaria.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **12%** (MICS 2000)

Children under 5 using ITNs: **1%** (MICS 2000)

## **USAID** Country Program

#### **KEY ACHIEVEMENTS**

- The National Malaria Control Program (NMCP) has revised the malaria drug treatment policy with technical assistance and support from USAID and other partners.
- The NMCP has also developed new policies for intermittent preventive treatment (IPT) as part of an integrated antenatal package.

#### **PROGRAM DESCRIPTION**

USAID/DR Congo has recently revised its malaria strategy, which has four main objectives—increased access and availability of effective antimalarial drugs; timely and appropriate use of effective antimalarials in USAID-supported health zones; increased access, availability, and use of IPT for pregnant women; and increased access to, availability of, and use of affordable ITNs.

At the national level, the Mission provides technical support to the NMCP and supports a malaria advisor position at the DR Congo Ministry of Health. The NMCP has revised its national malaria treatment policy with technical assis-

tance and support from USAID and other partners. DR Congo was recently awarded \$25 million by the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

The Mission's malaria program in DR Congo is integrated in the national health zone systems being supported by the USAID-funded Rural Health (SANRU) Project. Key resources such as medication and training in malaria treatment have been provided to hospitals and clinics in USAID-supported health zones. A revised national case management policy, supported and disseminated by USAID, ensures that the medications provided to health zones are the most effective at combating drug-resistant strains. In order to have an impact on mortality, use of these improved medications must be combined with consistent use of ITNs. In USAID-assisted health zones, supply and distribution of ITNs are underway.

The USAID-supported BASICS II Project is combining the Integrated Management of Childhood Illness (IMCI) strategy with the RBM goals at the national, community, and facility levels. BASICS II is also monitoring drug resistance and promoting the new drug policy.

# Other USAID-Supported Activities

Through the USAID/Washington-funded Child Survival and Health Grants Program, the International Rescue Committee is implementing a project in the Kabare health zone aimed at reducing malaria-related child mortality. Activities include training health workers in malaria case management, maintaining supplies of malaria drugs at health facilities, providing IPT for pregnant women, and promoting ITN use.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
		\$400,000	\$998,000	\$1,300,000	\$1,100,000

# **Eritrea**



## **Country Situation**

#### MALARIA RISK

Malaria in Eritrea is highly variable with seasonal peaks in transmission. Most of the population of 3.2 million lives in or migrates to areas with seasonal risks, with the level of risk dependent on rainfall and altitude. Lowland villages are generally at higher risk.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **12%** (DHS 2002)

Children under 5 using ITNs: **4%** (DHS 2002)

Children under 5 using ITNs (malarious zones¹)<sup>5</sup> **65%** (MOH 2001)

Pregnant women using ITNs (malarious zones): **40%** (MOH 2001)

Children under 5 with fever receiving correct treatment within 24 hours<sup>2</sup> (malarious zones): 7% (MOH 2001)

## **USAID** Country Program

#### KEY ACHIEVEMENTS

- Eritrea has one of the most successful net treatment/re-treatment programs in Africa, with strong local participation and responsibility at the kebebe level and high reported rates of re-treatment of nets in community campaigns.
- USAID supports the National Malaria Control Program's (NMCP) evidencebased approach to malaria prevention and control. This approach has resulted in revision of treatment policy to more effective drugs, major changes in tactics in several zones, and an increase in local decision-making capacity.

#### PROGRAM DESCRIPTION

The Government of Eritrea launched an ambitious program in 1999 to reduce the country's malaria burden. With support from USAID/Eritrea, the World Bank, WHO, and the Italian Cooperation Agency, the Eritrea Ministry of

Health and other government agencies are implementing a five-year plan for malaria control in the RBM context. The strategy includes case management; larval control; indoor house spraying; ITNs; information, education, communication, and training activities; and operations research.

The Mission's program focuses on improving the efficiency of the NMCP by improving malaria surveillance and operations research, and strengthening the capacity to use data to target vector control operations more effectively. USAID supports a malaria advisor position in the NMCP. To date, Eritrea has reviewed and revised its malaria drug policy and has achieved one of Africa's highest rates for net re-treatment through community-based campaigns. The country is also establishing an evidence base for selective targeting of province-level preventive interventions.

USAID/Eritrea's primary implementing partner is the Environmental Health Project (EHP). EHP

<sup>&</sup>lt;sup>1</sup> Zones included in the survey are Gash Barka, Debub, Anseba, and North Red Sea.

Correct treatment at the time of the survey was chloroquine, in accordance with national policy. The policy has since changed, and correct treatment is now sulfadoxine-pyrimethamine plus chloroquine.

is helping the NMCP strengthen its surveillance systems and operations research capacity. The NMCP has been recognized for its success in increasing ITN availability, revising policies to ensure the use of effective antimalarial drugs, and regularly evaluating progress using standardized indicators.

USAID/Eritrea supports integrated primary health care activities such as the Integrated Management of Childhood Illness, which aims to improve diagnosis and treatment of malaria in children. Maternal health care includes attention to malaria in pregnancy. Health communication efforts supported by USAID include messages on malaria.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$400,000	\$100,000	\$385,000	\$499,000	\$600,000	\$600,000

# **Ethiopia**



## **Country Situation**

#### MALARIA RISK

Forty percent of Ethiopia's 64.5 million people live in malaria-endemic areas. Another quarter of the population lives in areas of low transmission where immunity to malaria is rare. The main danger in Ethiopia stems from epidemics, which tend to strike at five- to eight-year intervals and are closely tied to rainfall patterns and altitude. As the cause of the majority of outpatient cases, malaria constitutes a major burden on health systems.

#### STATUS OF RBM TARGETS

No data

## **USAID** Country Program

#### **KEY ACHIEVEMENTS**

- USAID has strengthened access to effective malaria treatment via improved Integrated Management of Childhood Illness (IMCI) programs and community-based programs for home management of fever.
- USAID has made major contributions to developing the five-year RBM plan and the successful application to the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

#### PROGRAM DESCRIPTION

USAID/Ethiopia works closely with the Ethiopia Ministry of Health (MOH), WHO, and UNICEF to control malaria in Ethiopia. The Mission supports the government's RBM program with policy dialogue, review of guidelines, and identification of best practices. Current activities to combat malaria focus on forestalling an impending

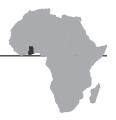
epidemic in late 2003. Activities include strengthening capacity for local planning, supporting preventive and curative responses, and improving access to IMCI methods at health clinics.

# Other USAID-Supported Activities

The USAID Office of Foreign Disaster Assistance is working closely with the MOH and other ministries to help prevent a malaria epidemic in 2003. Expert teams are working in conjunction with food relief to develop foundations for effective long-range malaria prevention programs in the affected regions.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$650,000	\$500,000	\$500,000	\$499,000	\$1,100,000	\$900,000

# **Ghana**



## **Country Situation**

#### MALARIA RISK

All of Ghana's nearly 20 million people are at risk for malaria year round. Malaria is the leading cause of death, accounting for 22 percent of all deaths among children under age 5 and 9.4 percent among pregnant women (RBM Baseline Survey, Ministry of Health, 2001).

#### STATUS OF RBM TARGETS

Children under 5 appropriately treated within 24 hours of onset:

**11.7%** (RBM Baseline Survey, MOH 2001)

Pregnant women on antimalarial chemoprophylaxis according to national policy: **11.6%** (RBM Baseline Survey, MOH 2001)

Households owning a mosquito net: **10%** (Omnibus Survey 2000)

Households owning an ITN: **1%** (Omnibus Survey 2000)

## **USAID Country Program**

#### **KEY ACHIEVEMENTS**

- To date, two commercial partners supported by the NetMark Project have sold nearly 500,000 (ITNs) and established a nationwide distribution system.
- USAID provides technical support through the Malaria Action Coalition (MAC), which is helping Ghana scale up its provision of intermittent preventive treatment (IPT) for pregnant women. The MAC also assists Ghana in reviewing its antimalarial drug policy.
- The Malaria Vaccine Development Program has been assisting with plans and preparations for vaccine field trials in northern Ghana.

#### PROGRAM DESCRIPTION

Ghana has committed itself to the RBM initiative. USAID/Ghana plays a strategic role in the RBM partnership and works within a malaria consortium that includes the World Bank, UNICEF, and WHO. In 1998, the Ghana Ministry of Health (MOH) launched a strategic plan to improve the coverage of malaria control ac-

tivities by adopting an intersectoral approach involving the public and private sectors and community organizations. Recently Ghana was awarded \$4.6 million to combat malaria by the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM).

The National Malaria Control Program (NMCP) recognizes ITNs as a major RBM intervention and a key strategy for malaria control. A plan has been drawn up for promoting private sector ITN availability. Several donors are partners in the public-private partnership for ITN promotion in Ghana, including USAID through the NetMark Project. In 2002, USAID-supported programs sold nearly 140,000 ITNs.

Along with the U.K. Department for International Development, USAID is supporting a joint MOH/ private sector voucher scheme for ITNs targeting pregnant women attending antenatal care clinics in the Volta region. There are plans to use the GFATM assistance to scale up this innovative subsidy scheme nationwide.

In the areas of antenatal interventions and treatment policy, USAID provides technical assistance to Ghana's RBM partnership through the MAC. MAC is helping Ghana scale up its provision of IPT to pregnant women and its data gathering and analysis activities, which provide the basis for changes in first-line treatment policies.

The "Healthier, Happier Homes" radio drama and magazine series, funded by USAID through the Health Communication Partnership of Johns Hopkins University, aims to improve the knowledge of Ghanaian families about treating and managing childhood illnesses, including malaria. The media campaign has been very successful.

USAID supports the MOH in training health service personnel in Integrated Management of Childhood Illness (IMCI) to improve clinical care for malaria. The community component of IMCI is implemented by the USAID partner BASICS II in four pilot districts.

# Other USAID-Supported Activities

Project Concern International works in western Ghana on malaria control activities through the USAID/Washington-funded Child Survival and Health Grants Program. Activities include increasing access to health care providers and drugs, promoting IPT in pregnancy, and promoting ITN use.

USAID/Washington has funded several research projects in Ghana. The Malaria Vaccine Development Program has been assisting with plans and preparations for vaccine field trials in northern Ghana. In Kumasi, the Environmental Health Project is supporting the International Water Management Institute in a study of mosquito breeding sites in urban areas. The results will be used to design interventions for controlling mosquito larvae in urban agricultural sites. A trial of the impact of zinc supplementation on malaria is also being carried out by the Noguchi Institute with USAID support.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$200,000	\$500,000	\$500,000	\$599,000	\$900,000	\$1,000,000

# **Kenya**



## **Country Situation**

#### MALARIA RISK

Malaria is a serious public health problem for Kenya's 31 million people. It contributes to the worsening survival chances of children and exposes women to a higher risk of maternal mortality. Nearly 50 percent of the population lives in malaria-endemic coastal and lake regions, while 25 percent live in epidemic-prone highland and semi-arid areas.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **16%** (MICS 2000)

Children under 5 using ITNs: **3%** (MICS 2000)

## **USAID Country Program**

#### **KEY ACHIEVEMENTS**

- The USAID-supported integrated malaria initiative in Bungoma has led to strengthened national strategies for the Integrated Management of Childhood Illness (IMCI), malaria treatment, and intermittent preventive treatment (IPT) policies.
- With support from USAID and other donors, social marketing sales of ITNs in 2002 reached 450,000.
- In collaboration with the Kenya Medical Research Institute (KEMRI) and the Walter Reed Army Institute of Research Safety and with support from the Malaria Vaccine Initiative, trials in Western Kenya are testing a vaccine developed by the USAID Malaria Vaccine Development Program.

#### PROGRAM DESCRIPTION

The Kenya Ministry of Health (MOH) is committed to combating malaria and has initiated positive policy changes regarding malaria treatment and malaria prevention in pregnancy. The National Malaria Strategic Plan developed in April 2001 is a follow-up to the 2000 Abuja meeting. The main short-term goal is to reduce the level of malaria illness and death in Kenya by 30 percent by the year 2006.

USAID/Kenya is a strong partner in Kenya's RBM program. The Mission's program focuses on promoting prevention through social marketing of ITNs in partnership with Population Services International (PSI) and the U.K. Department for International Development (DfID), improving malaria treatment and case management by health workers, and strengthening community capacity to prevent malaria, seek malaria treatment, and manage malaria at home. USAID also supports operations research to inform policy and collaborates with other partners such as DfID, WHO, UNICEF, and the U.S. Centers for Disease Control and Prevention (CDC) to support innovative pilot programs. Kenya was recently awarded \$11 million from the Global Fund to Fight AIDS, Tuberculosis, and Malaria for malaria activities.

From 1998 to 2002, USAID/Kenya supported the integrated malaria initiative in Bungoma District. The main implementing partners included the African Medical and Research Foundation, the Bungoma District Health Management Team, the MOH, the Quality Assurance Project, and BASICS II, with technical assistance from CDC. The project aimed to improve maternal and child health and survival by focusing on preventing and treating malaria. Strategies included early and effective treatment of children under age 5 by health workers and home caregivers as part of IMCI; IPT for pregnant mothers during routine antenatal follow-up; and promotion of

ITN use by children and pregnant women. The project's achievements included strengthened national strategies for IMCI, malaria treatment, and IPT policies; strengthened capacity of the District Health Management Team; improved malaria case management; and improved dispensing practices of malaria drugs by private sector outlets. USAID has recently funded the Malaria Action Coalition (MAC) and CDC to build on the Bungoma experience in providing technical assistance to RBM strategic planning.

In collaboration with DfID (the primary funding partner) and other partners, USAID is providing support to PSI to implement in Kenya one of the world's largest ITN social marketing programs. The strategy includes a unique rural kiosk-based distribution system that ensures product availability to those most at risk. ITN sales in 2002 increased to 450,000, a more than sevenfold increase over 2001. The program also includes an extensive campaign to increase the knowledge of malaria among risk groups, particularly pregnant women and children under 5.

The Mission has provided support to the CDC/KEMRI Center for Vector Biology and Control Research in Kisumu. In 1998, community and hospital-based studies assessed the burden of anemia in young children and pregnant women and evaluated methods to control anemia in these target groups. USAID also supported technical assistance from CDC/KEMRI to RBM/Kenya for scaling up new treatment and IPT policies.

The MAC strategy has received the support of the MOH, and the partners are ready to commence their activities. The Maternal and Neonatal Health Program plans to expand its malaria-in-pregnancy programs to cover additional endemic districts; to develop malaria-in-pregnancy modules for four nursing schools; and to provide central-level training to the MOH divisions of reproductive health and malaria control. CDC/KEMRI plans to support an evaluation of three district demonstrations of the drug retailer training program and an evaluation of IPT information in western Kenya. The Rational Pharmaceutical Management Plus Program will help the government define national antimalarial drug requirements and identify areas in need of improvement in the drug supply chain.

# Other USAID-Supported Activities

Through the Child Survival and Health Grants Program, USAID/Washington provides funding for malaria projects in Kenya to World Vision (Teso District), Catholic Relief Services (Mbeere District), and Plan International (Kwale District). The goal of their activities is to reduce malaria-associated illness and death in children through improved case management in health facilities and households and through use and re-treatment of ITNs. World Vision also focuses on improving maternal health through IPT promotion and anemia treatment for pregnant women.

USAID's Bureau for Africa provided funding to CDC/KEMRI for two ITN studies in western Kenya from 1996 to 2002. The initial study involved more than 125,000 people and showed definitively that ITNs are effective in reducing child mortality in an area with intense year-round malaria transmission. The second follow-on study in the same population demonstrated that extended use of ITNs does not produce a delayed malaria mortality spike. The Bureau has also supported CDC/KEMRI in studies of HIV infection and malaria.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$138,000	\$1,000,000	\$695,000	\$698,000	\$1,200,000	\$1,200,000

# Liberia



## **Country Situation**

#### MALARIA RISK

All of Liberia's 3 million people are at risk for malaria.

#### STATUS OF RBM TARGETS

No data

## **USAID Country Program**

#### **KEY ACHIEVEMENTS**

In collaboration with USAID and other donors, the Liberia Ministry of Health (MOH) has recently set up a coordinating mechanism to ensure successful monitoring and implementation of malaria control projects. This mechanism developed a successful \$12.1 million proposal for malaria control activities to the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM).

#### PROGRAM DESCRIPTION

USAID/Liberia operates a small malaria program at present. Due to past and current civil unrest, Liberia has only recently been able to address its malaria situation. The Mission provides technical support to the MOH and works

primarily on promoting prompt and effective malaria treatment. The MOH, in collaboration with implementing partners such as USAID, UNICEF, WHO, and others, has recently set up a coordinating mechanism to ensure successful implementation and monitoring of future malaria control projects. With USAID support, Africare works to combat malaria through child survival programs. The government was recently awarded \$12.1 million for malaria control activities by the GFATM.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
					\$300,000

# Madagascar



## **Country Situation**

#### MALARIA RISK

Madagascar has a varied pattern of malaria transmission, with rare but devastating epidemics in the highlands and intense transmission in coastal and lowland areas. Nearly 90 percent of Madagascar's 16.4 million people live in areas where malaria is endemic. The risk of malaria epidemics exists for the remainder of the population.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **30%** (MICS 2000)

Children under 5 using ITNs: <1% (MICS 2000)

## **USAID Country Program**

#### KEY ACHIEVEMENTS

- USAID/Madagascar developed an integrated strategic plan for malaria control activities in 2003.
- USAID/Madagascar has provided technical assistance to the Ministry of Health and other partners to develop new policies to deliver effective antimalarial treatment and prevention in pregnancy and to promote ITN use.

#### **PROGRAM DESCRIPTION**

USAID/Madagascar has invested in malaria activities, particularly in cyclone-affected coastal areas, for several years as part of its integrated child survival program. With earmarked funding in FY 2002, the Mission began expanded malaria control activities as part of its new country strategic plan. Increased funding in FY 2003 will provide technical assistance to the Madagascar RBM partnership that will enable it to scale up such interventions as prepackaged unit-dosed medications, promotion of ITNs, and antenatal interventions, especially intermittent preventive treatment (IPT) for pregnant women.

The Mission works closely with the RBM partnership and the National Malaria Control Program. USAID's program will complement programs of other partners, including the World Bank, WHO, UNICEF, and the Madagascar Pasteur Institute. In the first round of funding from the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), Population Services International (PSI) was awarded \$2 million for malaria control. The government recently established a country coordinating mechanism, and a second proposal to the GFATM was granted \$5.2 million.

PSI is a major USAID partner in developing plans and strategies for ITN delivery in Madagascar. PSI currently sells long-lasting ITNs at cost nationally and subsidized ITNs for vulnerable groups, pregnant women, and children under age 5 in rural areas. PSI also contributes to the home management of malaria by making prepackaged unit-dosed medications available in communities.

# Other USAID-Supported Activities

USAID has supported malaria prevention and control through the Integrated Management of Childhood Illness (IMCI) initiative launched in 1998 with BASICS and continued by John Snow, Inc. from 1998 to 2003.

Through the LINKAGES Project and BASICS II, clinic- and community-based activities that promote early involvement of the child's caretaker will continue in 2003 and 2004.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
				\$300,000	\$600,000

# Malawi



## **Country Situation**

#### MALARIA RISK

Nearly all of Malawi's 11.5 million people are at risk of malaria.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets:

**8%** (DHS 2000)

Children under 5 using ITNs:

**3%** (DHS 2000)

Pregnant women receiving IPT at least once:

**90%** (DHS 2000)

Pregnant women receiving IPT at least twice:

**68%** (DHS 2000)

Pregnant women using mosquito nets:

29% (DHS 2000)

Pregnant women using ITNs:

**7%** (DHS 2000)

## **USAID Country Program**

#### **KEY ACHIEVEMENTS**

- The USAID-supported Blantyre Integrated Malaria Initiative (BIMI) has developed best practices that have contributed to an impressive reduction in the under-5 child mortality rate from 234 per 1,000 live births in 1992 to 189 per 1,000 live births in 2000.
- Malawi has adopted policies for first-line treatment of malaria and intermittent preventive treatment (IPT) for pregnant women that USAID has integrated into programs throughout Africa over the past decade.

#### PROGRAM DESCRIPTION

The long-term success of USAID/Malawi's malaria program has been fostered by a three-way partnership of the Mission, the National Malaria Control Program (NMCP), and the U.S. Centers for Disease Control and Prevention (CDC). In 1993, Malawi became the first country in Africa to change from chloroquine to sulfadoxine-pyrimethamine as the first-line treatment for uncomplicated malaria and and to implement IPT for pregnant women. Working closely with the Malawi Ministry of Health (MOH), the Mission has integrated these policies into its programs

over the past decade. Malaria will remain a significant health focus as the Global Fund to Fight AIDS, Tuberculosis, and Malaria has just awarded nearly \$21 million to Malawi to combat malaria over the next two years.

With the MOH, CDC, and other Roll Back Malaria partners, USAID/Malawi supports the Blantyre Integrated Malaria Initiative (BIMI). BIMI was established in Blantyre District in 1998 to promote sustainable and effective strategies to manage and prevent malaria-related morbidity and mortality. BIMI has produced best practices for malaria control and capacity-strengthening activities that have been instituted throughout the country. These practices contributed to an impressive reduction in the under-5 child mortality rate from 234 per 1,000 live births in 1992 to 189 per 1,000 live births in 2000, as reported by the 2000 Demographic and Health Survey.

With Mission funding, Population Services International (PSI) works to prevent malaria in Malawi by increasing the use of ITNs. In an effort to target those most at risk, PSI has expanded delivery of ITNs through the commercial sector and increased distribution of more heavily subsidized ITNs through public sector antenatal and young child clinics.

# Other USAID-Supported Activities

USAID/Washington supports malaria control activities in Malawi through the Child Survival and Health Grants Program. The International Eye Foundation works in Nsanje District through a

community-based health program, and World Relief works in northern Malawi through a child survival project. Both organizations implement programs to prevent and treat malaria.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$500,000	\$500,000	\$956,000	\$1,347,000	\$1,800,000	\$1,500,000

## Mali



#### **Country Situation**

#### MALARIA RISK

Mali's malaria situation is similar to that of surrounding countries, with the entire population of 11.7 million at risk.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **37%** (DHS 2001)

#### **USAID Country Program**

#### KEY ACHIEVEMENTS

- To date, USAID-supported NetMark ITN sales have reached nearly 13,000, and re-treatment sales have exceeded 88,000.
- With the support and collaboration of the National Institute of Allergy and Infectious Disease, the Malaria Research and Training Center, and the University of Maryland Center for Vaccine Development, safety trials in Mali are testing a vaccine developed by the USAID Malaria Vaccine Development Program.
- USAID supported the celebration of 2001 Africa Malaria Day by providing 15,500 bednets to the National Malaria Control Program (NMCP).
- For the 2003 malaria transmission season, USAID supported a media campaign coupled with free distribution of 70,000 ITNs by Population Services International (PSI) targeting poor and vulnerable pregnant women and children under 2 in rural villages. Twenty thousand nets were purchased from NetMark's local commercial partner.

#### PROGRAM DESCRIPTION

USAID/Mali started supporting malaria control activities in 2000. The program focuses on capacity building and ITNs. The Mali Ministry of Health, along with USAID and other partners, is committed to the RBM initiative, and the NMCP leads malaria control activities. National objectives are consistent with those of RBM—reduced malaria morbidity, reduced malaria mortality, and increased coverage of insecticide-treated materials for vulnerable groups such as pregnant women and children under age 5. Mali was recently awarded \$2.2 million for malaria control activities by the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM).

The Mission is investing in scaled-up distribution of ITNs, including subsidized ITNs for vulnerable groups, through the NetMark Project. USAID recently supported the CORE Initiative in hosting a regional conference of nongovernmental organizations to discuss implementing activities.

## Other USAID-Supported Activities

Plan International receives USAID/Washington support for malaria control activities through the Child Survival and Health Grants Program. Its intervention in a district in the Kayes region aims to reduce malaria-related morbidity and mortality in children and pregnant women through prevention education, ITN promotion, improved treatment of malaria, and intermittent preventive treatment for pregnant women.

As a subrecipient of the GFATM grant, PSI will implement a social marketing project to reduce the burden of malaria in Mali by increasing awareness and knowledge about malaria and ITNs and by expanding access to ITNs and retreatment kits. The primary targets of the intervention are children under 5 and pregnant women, particularly those in the poorest communities.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
				\$800,000	\$1,000,000

## **Mozambique**



#### **Country Situation**

#### MALARIA RISK

Like many other sub-Saharan African countries, Mozambique's entire population (18.6 million) is at risk of malaria.

STATUS OF RBM TARGETS

No data

#### **USAID Country Program**

#### **KEY ACHIEVEMENTS**

USAID has supported the Mozambique Ministry of Health (MOH) in strengthening its capacity for evidence-based malaria control, including vector control and revised malaria treatment policy.

#### PROGRAM DESCRIPTION

USAID/Mozambique has been supporting malaria control activities since 1998. The Mission has taken a district-level focus for most of its activities, with particularly high-need districts in selected provinces receiving priority attention. Activities include community- and facility-based programs for improved access to treatment, social marketing of ITNs, and capacity-building support to the National Malaria Control Program for operational monitoring and evaluation. The MOH is committed to the RBM priorities, and the country has recently been granted \$12 million for malaria activities from the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

USAID works in three provinces to strengthen health services. Malaria-related activities include support for access to quality child care using the Integrated Management of Childhood Illness approach and, through the NetMark Project, support for ITN promotion and accessibility. The Mission also supported the MOH in adopting a malaria treatment policy in 2002.

## Other USAID-Supported Activities

USAID/Washington provides support to three organizations in Mozambique for malaria control activities through the Child Survival and Health Grants Program. CARE works in Nampula province to improve the health status of children under age 5 and women of reproductive age through increased access to treatment and prevention measures. Health Alliance International works in Sofala and Manica provinces with malaria control activities that focus on prevention and case management of malaria in children and pregnant women (including intermittent preventive treatment during pregnancy); support to health departments for ongoing assessments of drug resistance; training in new malaria drug regimens; and expanding the distribution and use of ITNs. Save the Children works in northern Mozambique on similar malaria control activities.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$734,000		\$800,000	\$1,497,000	\$600,000	\$500,000

## **Nigeria**

#### **Country Situation**

#### MALARIA RISK

Nigeria is in the heart of Africa's malaria belt. All 130 million of its inhabitants are at risk of malaria.

**STATUS OF RBM TARGETS**No data

#### **USAID Country Program**

#### **KEY ACHIEVEMENTS**

- To date, USAID-supported NetMark ITN sales have reached nearly 182,000, and re-treatment sales have reached nearly 475,000.
- USAID investment in the Malaria Action Coalition (MAC) and Population Services International (PSI) supports the Nigeria Ministry of Health (MOH) in providing intermittent preventive treatment (IPT) for pregnant women and strengthening community treatment of malaria.

#### PROGRAM DESCRIPTION

USAID/Nigeria works closely with Nigeria's RBM partnership. The RBM strategy for Nigeria addresses prompt and effective treatment, IPT for pregnant women, and provision of ITNs. A strategic plan and policy for ITNs has been developed by the MOH with a focus on setting technical standards for nets and insecticides. Although taxes and tariffs on nets and insecticides were quickly reduced after the 2000 Abuja summit (enabling the RBM partnership to support expanded commercial sector ITN provision), they were subsequently raised again, which severely hampered international suppliers. UNICEF is leading the local RBM partners in a coordinated strategy for scaling up ITNs.

USAID has made a significant investment in public-private partnerships for ITNs in Nigeria through NetMark Project activities initiated in

2002. To date, retail outlets for NetMark brands have expanded from 20 to 210 in six initial target states. Twelve more states are now being targeted. Some 20,000 ITNs have been sold through retail outlets, and more than 150,000 have been sold to institutional clients. Approximately 400,000 ITNs are in retail outlets. NetMark uses mass and other media to raise awareness of and encourage ITN use. New types of better-quality nets are now being produced locally by manufacturers who received technical assistance from NetMark. The unsettled issues of taxes and tariffs have forced NetMark to modify its country strategy to also focus on improving the quality of locally produced nets.

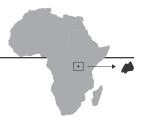
Mission support has enabled the BASICS II Project to add malaria activities to its community-based work in three states. PSI and the Johns Hopkins University Center for Communication Programs conduct community malaria activities focusing on communications and training for improved practices, especially improved vendor practices in social marketing sales of prepackaged drugs.

Mission investment in MAC supports technical assistance to the MOH and other USAID partners for laying the foundation for IPT and backing up the community treatment work of BASICS II. Support for malaria research is also provided to Boston University's Applied Research on Child Health Program to build individual and institutional research capacity and disseminate new findings to agencies operating in Nigeria.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
		\$1,450,000	\$2,495,000	\$2,900,000	\$3,000,000



## **Rwanda**



#### **Country Situation**

#### MALARIA RISK

Approximately one-half of Rwanda's 8 million people live in areas where malaria is endemic. Another 15 percent are at risk of infection through outbreaks occurring at higher (formerly malaria-free) altitudes.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **6%** (MICS 2000)

Children under 5 using ITNs: **5%** (MICS 2000)

#### **USAID Country Program**

#### **KEY ACHIEVEMENTS**

USAID support to the RBM partnership in Rwanda was instrumental in the development of a successful Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) proposal for malaria. The funds will enable scale-up of revised policies for both treatment and prevention of malaria in pregnancy.

#### PROGRAM DESCRIPTION

Rwanda's National Malaria Control Program (NMCP) has developed an overall strategy for malaria control that is consistent with WHO's global and regional malaria control strategies. The program's greatest emphasis is on malaria case management and prevention, with a secondary focus on epidemiological surveillance; operations research; and information, education, and communication. The NMCP has recently developed a new malaria treatment policy that is being implemented throughout the country. A policy for malaria control in pregnancy is less developed.

USAID/Rwanda supports the development and implementation of treatment policies and policies for preventing malaria in pregnancy. The Malaria Action Coalition (MAC) operates entirely within the RBM framework at all levels and provides relevant technical assistance and support to the RBM country partnership for policy revision, development, and implementation. The

RBM partnership helped the NMCP prepare a proposal for the GFATM, which was recently awarded \$13 million.

As a backer of the Strategic Framework for Scaling-Up Insecticide-Treated Net (ITN) Programs in Africa, the Mission supports the activities of Population Services International (PSI) in Rwanda. PSI implements ITN social marketing activities in Kigali and selected rural areas. Several other RBM partners are also involved in ITN services, primarily through procuring nets and insecticides for delivery through public health outlets.

Other USAID health partners in Rwanda carry out activities that are relevant to ITN services. The PRIME Project is establishing and expanding health *mutuelles* (health insurance schemes) in several districts, supporting antenatal services at the district and national levels, and helping the Rwanda Ministry of Heath update reproductive health program guidelines.

## Other USAID-Supported Activities

Several private voluntary organizations are working in Rwanda with funding from the USAID/ Washington Child Survival and Health Grants Program. PSI works nationally to increase demand for and accessibility to ITNs and re-treatment kits. The International Rescue Committee works in Kibungo province using health anima-

tors as ITN sales agents in rural areas. Concern Worldwide works in Butare province on improving malaria case management and ITN access for pregnant women through antenatal care services. Lastly, World Relief works in

Cyangugu province to provide community-wide education about malaria prevention and treatment and to improve access to and use of ITNs and re-treatment kits.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
	\$300,000	\$300,000	\$299,000	\$600,000	\$750,000

## **Senegal**



#### **Country Situation**

#### MALARIA RISK

All of Senegal's nearly 10 million people are at risk of malaria.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **15%** (MICS 2000)

Children under 5 using ITNs: **2%** (MICS 2000)

#### **USAID Country Program**

#### **KEY ACHIEVEMENTS**

- To date, USAID-supported NetMark ITN sales have reached nearly 182,000 and re-treatment sales have reached 9,520.
- USAID-supported partners have provided technical assistance to determine the quality and efficacy of malaria drugs, which has led Senegal's National Malaria Control Program (NMCP) to change its treatment policy in support of a more effective drug regimen.
- USAID technical support has enabled Senegal's recent policy decision for intermittent preventive treatment (IPT) in pregnancy.

#### **PROGRAM DESCRIPTION**

USAID/Senegal is focused on scaling up malaria interventions to the national level, particularly in the priority RBM interventions. The Mission has designed its malaria program to build on previous work in strengthening Integrated Management of Childhood Illness (IMCI) at the facility and community levels and in developing capacity for monitoring and evaluation of drug quality and antimalarial drug efficacy.

The United States Pharmacopeia, a nongovernmental organization that works to ensure the quality and proper use of medicines, provides technical assistance to national laboratories and regulatory agencies for drug quality monitoring. Drug efficacy studies by the University of Dakar provide Senegal's NMCP with annual data on drug efficacy. Based on this data and the results of a June 2003 meeting, Senegal has changed its treatment policy in support of a more effective drug regimen.

The Rational Pharmaceuticals Management Plus and Maternal and Neonatal Health programs assist with operations research related to malaria-in-pregnancy interventions. Senegal has been moving forward to introduce IPT for pregnant women and is now a leader in West Africa for this intervention.

The NMCP's malaria strategy has three components—information, education, and communication (IEC); health worker training; and promotion of ITNs. USAID supports a malaria advisor position in the Senegal Ministry of Health. Senegal has recently been awarded \$4.3 million from the Global Fund to Fight AIDS, Tuberculosis, and Malaria for malaria control activities.

ITN distribution, both through public-private partnerships with the commercial sector and through community-level operations of nongovernmental organizations, is a major activity for USAID/Senegal. NetMark promotes ITN use nationally. The BASICS II Project also promotes ITNs as part of the IEC component of its programs. BASICS' primary malaria activities in Senegal, however, are linked to IMCI activities.

## Other USAID-Supported Activities

The Christian Children's Fund works in malaria control in the Thies region through the USAID/ Washington-funded Child Survival and Health Grants Program. Activities include training in

malaria case management, ensuring antimalarial drug supplies, IPT for pregnant women, and ITN promotion.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
		\$160,000	\$2,494,000	\$2,500,000	\$2,500,000

## Sudan



#### **Country Situation**

#### MALARIA RISK

Sudan has been embroiled in a civil war for the past 20 years. The war, coupled with frequent droughts, has caused a long-term humanitarian crisis. Due to the ongoing conflict, population displacements, and food insecurity, the health status of the southern Sudanese people is among the poorest globally. Both UNICEF and WHO classify malaria as the number one cause of underfive mortality. Several studies suggest that resistance is emerging to both chloroquine and sulplhadoxine-pyrimethamine. Plasmodium falciparum infection is overwhelmingly predominant.

#### STATUS OF RBM TARGETS

No data

#### **USAID Country Program**

#### **KEY ACHIEVEMENTS**

USAID, Office of Foreign Disaster Assistance has been funding humanitarian health activities in southern Sudan over the past 11 years through primary health care in which malaria control with the provision of antimarlarials is an important part.

#### PROGRAM DESCRIPTION

The Sudan Field Office has recently been established for southern Sudan. In early 2004, the USAID/Sudan mission expects to start a major Health Transformation Program (HTP) as part of development assistance. The thrust of the HTP will be the expansion of primary health

care in five southern regions of Sudan: Equatoria, Upper Nile, Southern Blue Nile, Bahr el Ghazal, and the Nuba Mountains. A major component of primary health care will be the prevention and control of malaria. Malaria control interventions will include prompt treatment with an effective antimalarial, the use of ITNs for pregnant women and young children, and the promotion of intermittent preventive treatment of pregnant women for malaria. Activities include strengthening capacity of maternal and child health workers, providing essential drugs, promoting and advocating through the radio, and providing health education with a link to primary schools.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
					\$300,000

## **Tanzania**



#### **Country Situation**

#### MALARIA RISK

Malaria is endemic in almost all parts of Tanzania, although there are seasonal variations. Malaria-free pockets are found only in higher altitude areas. Just over 90 percent of Tanzania's 34.5 million people are at risk for malaria.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **21%** (DHS 1999)

Children under 5 using ITNs: **2%** (DHS 1999)

#### **USAID Country Program**

#### **KEY ACHIEVEMENTS**

- USAID has worked closely with the Tanzania Ministry of Health (MOH) and the National Malaria Control Program (NMCP) on developing national policies and standards for intermittent preventive treatment (IPT) for pregnant women.
- USAID has collaborated with the MOH to develop IPT training materials and scale up IPT activities. At present over 60 percent of women receiving antenatal care have access to IPT.

#### PROGRAM DESCRIPTION

Tanzania's malaria control program is comprehensive and in line with the RBM program. Tanzania is an RBM signatory and has four key strategies: (1) improved malaria case management, (2) vector control through the use of ITNs, (3) prevention of malaria in pregnancy, and (4) epidemic preparedness and containment.

USAID/Tanzania malaria activities focus on the second and third strategies and include interventions in the use of ITNs in pregnancy and

preventive treatment in pregnancy. Other donors address malaria prevention and treatment outside of antenatal facilities. The Mission has worked closely with the NMCP and the Reproductive and Child Health Section of the MOH on developing national policies and standards for IPT for pregnant women and also in the field on prevention and treatment of malaria in pregnancy.

USAID supports the Maternal and Neonatal Health Program. The Program's goals include improving the quality of antenatal care services, with a special focus on treating malaria and syphilis in pregnancy in 16 districts. The Program works on building the capacity of regional training centers to develop provider skills in performing antenatal care interventions and in advocating the use of ITNs. With MOH collaboration, IPT training materials have been developed, and the 1999 malaria treatment policy guideline advocating IPT is being scaled up. USAID additionally supports Population Services International in covering administrative costs for commercial marketing of ITNs. A system has also been implemented to track malaria drug supplies and prevent stockouts.

## Other USAID-Supported Activities

USAID/Washington central funds support the large-scale Interdisciplinary Monitoring Project for Antimalarial Combination Therapy in Tanzania (IMPACT-Tz), a U.S. Centers for Disease

Control and Prevention project that examines malaria combination therapy and policy implications for first-line drug regimens. Significant impact has been made in modeling malaria resistance, in conducting market analyses for antimalarial drugs, and in studying adherence to artemisinin-based combination therapy and the impact of introducing it.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
	\$340,000			\$600,000	\$400,000

## **Uganda**



#### **Country Situation**

#### MALARIA RISK

Ninety percent of Uganda's 24 million people are at risk for malaria year-round. A small percentage (less than 5 percent) who live in highland areas are at risk of malaria epidemics.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **7%** (DHS 2001)

Children under 5 using ITNs: <1% (DHS 2001)

Pregnant women using mosquito nets:

7% (DHS 2001)

Pregnant women using ITNs: **1%** (DHS 2001)

#### **USAID Country Program**

#### **KEY ACHIEVEMENTS**

- Uganda has been instrumental in developing models of distributing ITN vouchers to pregnant women in rural areas through antenatal care services.
- USAID support has been instrumental in scaling up both revised treatment policy and intermittent preventive treatment (IPT) in pregnancy.
- USAID has developed innovative programming to coordinate the public and private sectors in using similar prepackaging of antimalarial drugs for better compliance.

#### PROGRAM DESCRIPTION

USAID/Uganda's malaria program is focused on bringing to national scale priority interventions such as home management of fever, IPT for pregnant women, promotion of ITN use and retreatment, and access to ITNs for vulnerable groups. The Mission's strategy emphasizes collaboration with the National Malaria Control Program (NMCP) and the RBM country partnership. An "essential health package" is at the core of Uganda's decentralized national health strategy, and the NMCP plays an important role in building the capacity of district health teams and ensuring success of the package's malaria interventions. USAID provides the NMCP with technical assistance for implementing malaria control activities and supports an NMCP

malaria advisor position. The Ministry of Health's ITN strategy is supportive of donor efforts to promote ITNs and cites a major role for the commercial sector. The government was recently awarded \$35 million (\$24 million for first two years) from the Global Fund to Fight AIDS, Tuberculosis, and Malaria for malaria control activities.

Key Mission-supported activities are currently exploring private sector production of prepackaged antimalarial products for home management of fever and conducting operations research into voucher schemes for subsidized distribution of ITNs in rural districts. The Commercial Market Strategies (CMS) Project is carrying out both these activities. CMS also sells ITNs through social marketing, airs a radio drama to increase awareness of malaria risks among vulnerable groups, and operates a health financing program to share ITN costs between health plan providers and members. The NetMark Project has recently started work in Uganda and will complement CMS by operating a demand creation campaign and supporting commercial-sector marketing of ITNs and re-treatment kits. USAID/Uganda-supported social marketing programs sold just over 75,000 ITNs in 2002, which is 30 percent of overall sales. The USAID-supported BASICS II Project is involved in promoting the Integrated Management of Childhood Illness, home management of fever, and ITN use in pilot districts.

The Uganda Program for Human and Holistic Development (UPHOLD), a large district-based health and education activity, is just beginning in 20 districts. UPHOLD will focus on district and community implementation of key malaria interventions, including ITNs, IPT, home management of fever, and behavior change communications.

## Other USAID-Supported Activities

USAID's Regional Economic Development Services Office for East and Southern Africa (REDSO/ESA) provides support to the Regional

Centre for the Quality of Health Care at Makerere University in Kampala, including support for a malaria expert position and malaria-relevant short courses. USAID/Washington is supporting an operations research program with municipal governments in Kampala and Jinja to investigate the effects of larval control interventions on malaria in urban areas. The CHANGE Project is building the capacity of local language radio stations to develop and air high-quality public service announcements about malaria. In addition, Africare is implementing a health program under the Child Survival and Health Grants Program that includes antimalaria activities.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
		\$860,000	\$2,993,000	\$3,000,000	\$3,000,000

## Zambia



#### **Country Situation**

#### MALARIA RISK

In Zambia, 96 percent of the population of nearly 11 million lives in malaria-endemic areas. Another 3 percent live in areas that are vulnerable to malaria epidemics because the population has not built up immunity to the disease.

#### STATUS OF RBM TARGETS

Children under 5 using mosquito nets: **16%** (DHS 2001/2002)

Children under 5 using ITNs: **7%** (DHS 2001/2002)

Pregnant women using mosquito nets: **18%** (DHS 2001/2002)

Pregnant women using ITNs: **8%** (DHS 2001/2002)

#### **USAID Country Program**

#### **KEY ACHIEVEMENTS**

- To date, USAID-supported NetMark ITN sales have exceeded nearly 320,000, and re-treatment sales have reached nearly 400,000.
- USAID technical support to the Zambia Ministry of Health (MOH) has enabled two key policy revisions and their implementation: effective first-line treatment and intermittent preventive treatment (IPT) for pregnant women.

#### **PROGRAM DESCRIPTION**

The USAID/Zambia malaria program closely coordinates with the Zambia RBM partnership and takes a leadership role in coordinating and supporting malaria control activities of the National Malaria Control Centre (NMCC). USAID/Zambia's malaria program has the following objectives: (1) strengthened leadership and coordination; (2) improved household recognition/prompt response to fever; (3) increased availability and use of effective treatment; (4) improved access to and use of an essential antenatal malaria package; and (5) increased access to and use of ITNs and targeted vector control services. The Mission's program is well linked to NMCC priorities and collaborates closely with the RBM/ Zambia core group of donors. USAID has also

worked with the government on its proposal to the Global Fund to Fight AIDS, Tuberculosis, and Malaria, which has awarded Zambia nearly \$18 million for malaria control activities.

Through Boston University's Applied Research on Child Health Project, USAID supports the NMCC's commitment to capacity building at the national level and a resident malaria advisor position in the MOH. The Mission supported the MOH in reviewing and revising treatment policy through collection and analysis of information on drug resistance, access to treatment, and treatment seeking. This process led to decisions on new drugs and strategic approaches to service delivery in facilities and communities. USAID also helped the MOH gather evidence to support an IPT policy for pregnant women.

The Mission's primary channel for combating malaria in Zambia is the Zambia Integrated Health Program developed by USAID with the government to address major health problems and continue the process of health reform. The Mission is addressing treatment improvement through Integrated Management of Childhood Illness (IMCI) activities and also providing training in malaria case management, maintenance of antimalarial drug supplies, care seeking, illness recognition, and medication compliance. Information, education, and communication

(IEC) activities are carried out from the neighborhood to the national levels. The Rational Pharmaceutical Management Plus Program supports policy change in the areas of drug procurement, management, and use. The Maternal and Neonatal Health Program has been providing technical support for implementing the revised IPT policy.

The Zambia malaria program also includes a variety of partnerships for promoting and providing ITNs. The NetMark Project leads a public-private partnership to enhance commercial ITN distribution. From 2000 to 2002, annual sales of ITNs through USAID-supported programs increased from 43,000 to 265,000. Population Services International (PSI) supplies ITNs to vulnerable women and infants through antenatal clinics. In the Eastern Province,

USAID-supported IEC activities helped increase use of nets from 20 percent of households to 40 percent between 2001 and 2002. NetMark, PSI, UNICEF, and other local partners are exploring the issue of targeted subsidized ITNs, providing one of the first experiences of this important innovation.

## Other USAID-Supported Activities

The USAID/Washington-funded Child Survival and Health Grants Program supports IEC, health worker training, IMCI, antenatal care, and ITN distribution activities in Zambia through projects carried out by Project Concern International and the Adventist Development and Relief Agency.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$1,000,000	\$1,000,000	\$1,935,000	\$3,991,000	\$4,000,000	\$4,000,000

# Regional Economic Services Office for East and Southern Africa (REDSO/ESA)



#### **KEY ACHIEVEMENTS**

- USAID has supported the development of the capacity of two key institutions in the subregion for malaria: the Regional Centre for the Quality of Health Care (RCQHC) at Makerere University, Uganda and the Commonwealth Regional Health Community Secretariat (CRHCS) in Arusha, Tanzania.
- RCQHC serves as the Secretariat for the East and Southern Africa Coalition for Malaria Prevention and Control During Pregnancy (MIPESA) coalition to support scale-up of intermittent preventive treatment (IPT) in five countries. CRHCS has begun ITN tax and tariff removal in member countries.

#### REGIONAL PROGRAM

The Regional Economic Services Office for East and Southern Africa (REDSO/ESA) provides technical and implementation support to 23 USAID Missions located in East and southern Africa. REDSO/ESA also implements a regional development program, which was developed from USAID's experience implementing the Greater Horn of Africa Initiative.

REDSO/ESA works with several partners in the region to combat malaria and provides technical assistance on malaria to the Office of Non-Presence Counties. African partners include

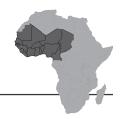
RCQHC and CRHCS. In addition, REDSO works with NetMark, the U.S. Centers for Disease Control and Prevention (CDC), and the Malaria Action Coalition (MAC). Malaria control activities coincide with those of the RBM initiative, in particular ITN promotion and IPT for pregnant women. NetMark is working with REDSO/ESA to advocate for eliminating taxes and tariffs on ITNs and to provide technical assistance to net manufacturers in the region.

At RCQHC, USAID sponsors a technical advisor and supports training activities. RCQHC offers courses on quality malaria care as part of the university curriculum and provides technical assistance to ministries of health and nongovernmental organizations in the region. The MIPESA Secretariat sits at RCQHC, a position supported by REDSO/ESA. MIPESA aims to help member countries accelerate their development and implementation of malaria control activities for pregnant women by sharing experiences and best practices in this area.

Support for malaria treatment policy adoption within countries in the region is another activity addressed by USAID. With REDSO/ESA support, CRHCS has recently worked to have IPT policy changed in several countries. It will also be starting work on the important policy issue of removing taxes and tariffs on ITNs in CRHCS countries.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$250,000	\$400,000	\$500,000	\$499,000	\$1,100,000	\$1,200,000

## West Africa Regional Program (WARP)



#### KEY ACHIEVEMENTS

- USAID's West Africa Regional Program (WARP) supports NetMark and the West Africa Health Organization (WAHO) in reducing taxes and tariffs on ITNs.
- WARP provides support through the Malaria Action Coalition (MAC) to the West Africa network for malaria in pregnancy. Best practices are disseminated within the region, and linkages with reproductive health and other programs are encouraged to control malaria in pregnancy.

#### **PROGRAM DESCRIPTION**

WARP began implementing malaria activities in 1998 (the first year of infectious disease/malaria earmark funding) through the Family Health and AIDS (FHA) Project. Under FHA, activities were concentrated in Burkina Faso, Cameroon, Côte d'Ivoire, and Togo. The new West Africa Regional Health Program, which began on October 1, 2003, includes all 15 member countries of the Economic Community of West African States as well as Cameroon, Chad, and Mauritania. WARP is advised by USAID Mission directors, and health officers at the Missions form a technical advisory group that meets annually. WARP's health program is designed to support six bilateral Missions in the region by improving regional policies, sharing best practices and tools, implementing cross-border programs, and strengthening networks and institutions.

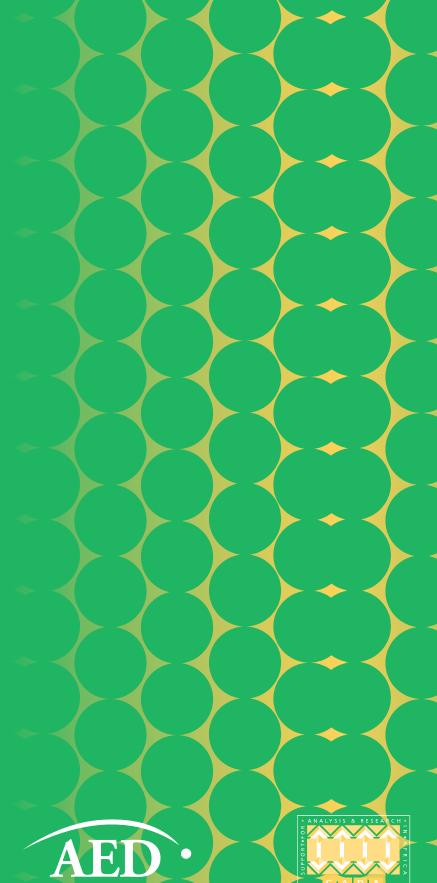
WARP works closely with WAHO on malaria control activities throughout the region and coordinates with other donors to ensure efficient use of limited resources for initiatives such as RBM. The WARP strategy emphasizes use of

ITNs, intermittent preventive treatment (IPT) in pregnancy, and prompt and effective treatment of malaria. Regional ITN promotion activities, including work to reduce taxes and tariffs on ITNs, are primarily carried out through the NetMark Project. WARP provides support through MAC to the new West Africa network for malaria in pregnancy.

MAC has identified support for West Africa's incipient malaria-in-pregnancy network as a priority activity. MAC will continue to facilitate interagency coordination among WHO, UNICEF, USAID, the U.K. Department for International Development, and technical partners in support of the Regional Framework for Control of Malaria in Pregnancy; dissemination of best practices, tools, and protocols; encouragement of RBM and reproductive health program links; and technical assistance within the RBM partnership.

WARP began funding malaria activities in Burkina Faso's Koupela District in 1999 in partnership with UNICEF and Plan International. The activity takes an integrated approach to improved maternal and neonatal health and includes antenatal malaria interventions. The U.S. Centers for Disease Control and Prevention and the Maternal and Neonatal Health Program are major implementing partners along with regional and local health experts and programs, including the National Malaria Control Program in Burkina Faso. These partnerships allow for sharing of best practices to help regional antenatal malaria control efforts. Partners such as Population Services International and Plan International promote ITN use for pregnant women and children in Koupela and in 2002 sold more than 15,000 ITNs.

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$500,000	\$500,000	\$500,000	\$499,000	\$800,000	\$800,000







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