

Malaria Prevention



Every year, there are over 200 million cases of malaria diagnosed and over 400,000 deaths. Through innovative interventions, MCDI is committed to preventing and eliminating this global burden.

Integrated vector control

Since 1986, MCDI has worked to significantly reduce the prevalence of malaria infection and incidence rates by dramatically suppressing transmission through reductions in vector abundance, infectivity, and human contact.

In Equatorial Guinea, for example, the Bioko Island Malaria Control Project (BIMCP) has contributed to a significant decrease in childhood mortality rates on the island thanks to its vector control initiatives.

Indoor Residual Spraying (IRS)

Since 2004, MCDI has been responsible for planning, managing, implementing, monitoring and evaluating an extensive IRS program both on Bioko Island and mainland Equatorial Guinea. There, MCDI has sprayed approximately 650,000 houses and over 2.9 million rooms.



School-based bed net distribution on Bioko Island, Equatorial Guinea

Long Lasting Insecticide Treated Bednets (LLINs)

MCDI has managed the procurement and distribution of LLINs at the community level in Madagascar, Benin and Equatorial Guinea. MCDI has distributed hundreds of thousands of bednets throughout the lifetime of its projects, through both mass distributions, school-based distributions, antenatal care centers and top-up campaigns to ensure universal coverage.

Under its BIMCP and PADNET program in Benin, MCDI has conducted studies on the durability and effectiveness of LLINs, sharing lessons learned with regional partners and national malaria control programs.

Larval Source Management (LSM)

As part of an integrated vector management approach, MCDI has evaluated the feasibility and sustainability of community-based larval source management. MCDI conducted a two-year pilot LSM initiative in 13 communities on Bioko Island to evaluate the potential for integrating LSM with on-going indoor-oriented control.

Managing insecticide resistance

MCDI has led the way in working

with the National Malaria Control Program of Equatorial Guinea to develop the first national Insecticide Resistance Management Plan in Africa.

Monitoring and Evaluation

Developing applications for better data collection

The Campaign Information Management System (CIMS), developed by MCDI, is a Android-based tablet application that is being used as the primary data collection portal to collect field-level malaria control data. CIMS enables MCDI to track the coverage of integrated vector control and other interventions such as active case detection and treatment, as well as monitor the MCDI's malaria control interventions.

MCDI has also deployed the Malaria Decision Support System (MDSS) for data coordination and Collector for ArcGIS, used for georeferencing LSM data.

Evaluating the impact

Malaria Indicator Surveys (MIS) have been conducted annually on Bioko Island since 2004, asking participants over 300 questions to determine the impact of MCDI's malaria control interventions on the island.

MCDI Malaria Programs

(selection)

Bioko Island Malaria Control Project (BIMCP)

2004-2018 (to be extended)

Donor: Marathon Oil and the Government of Equatorial Guinea - \$80.7 million

Location: Equatorial Guinea

Equatorial Guinea Malaria Vaccine Initiative (EGMVI)

2012-2018 (to be extended)

Donor: Government of Equatorial Guinea and Marathon Oil - \$46.6 million

Location: Equatorial Guinea

Accelerating the Reduction of Malaria Morbidity and Mortality (ARM3)

2011-2018

Donor: USAID/PMI - \$20 million

Location: Benin

Project to Advance the Durability of Long Lasting Insecticide-Treated Nets (PADNET)

2012-2017

Donor: USAID - \$2 million

Location: Benin

Equatorial Guinea Malaria Control Initiative (EGMCI)

2006-2012

Donor: Global Fund to Fight AIDS, TB and Malaria - \$27 million

Location: Equatorial Guinea



Community health worker (right) visiting woman to provide BCC materials in Benin

Behavior Change Communication (BCC) to prevent malaria

MCDI, through its ARM3 program, helped develop the BCC National Strategic Plan in Benin to help promote regular LLIN use and other interventions in collaboration with the National Malaria Control Program. ARM3 developed supporting materials for health workers and scripts for mass media campaigns for malaria prevention, reaching 4.5 million people through radio programming. ARM3 has been recognized for its use of "infotainment," an innovative approach that links gaming with information and behavior change. Theater groups, for example, are engaged to increase the public's knowledge of malaria and to encourage healthy behaviors.

Preventing malaria in pregnancy

MCDI has extensive experience in assisting countries in improving the provision of Intermittent Preventative Treatment in Pregnancy (IPTp) as part of their prenatal care services. Most recently, MCDI has provided extensive support to the National Malaria Control Programs and Ministries of Health in Benin and Equatorial Guinea to strengthen and increase coverage of IPTp.

In Benin, ARM3 trained over 3,000 health workers in IPTp administration during antenatal care visits. As a result of ARM3's efforts, the percentage of women attending antenatal care visits to receive IPTp increased from 23% to 67%.

In Equatorial Guinea, the BIMCP worked with the National Malaria Control Program to introduce IPTp to pregnant women through all government health facilities on the island beginning in 2005.



Pregnant woman receiving IPTp treatment in Benin

Malaria vaccine trials: the future of prevention

MCDI and its partners Sanaria Inc., Ifakara Health Institute (IHI) and Swiss Tropical and Public Health Institute (SwissTPH) are implementing the Equatorial Guinea Malaria Vaccine Initiative (EGMVI), currently in its third stage. The objective of the EGMVI is to carry out a series of clinical trials of new candidate whole sporozoite malaria vaccines manufactured by Sanaria - the PfSPZ Vaccines and the PfSPZ C-Vac.



EGMVI trial participant

Should a licensed highly effective PfSPZ vaccine come on the market, MCDI plans to include the vaccine along with standard control measures to demonstrate that it is possible to eliminate malaria from Bioko Island and other highly endemic regions.

To learn more about MCDI, please visit:
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