

Zambia Achieves Impact on Malaria: Using Results to Inform Actions

A model for success

Zambia has made dramatic progress in its fight to control malaria, as evidenced by results from the country's 2008 malaria indicator survey (MIS). Most notable is the impact on Zambia's most vulnerable group, its children. In only two years, malaria parasite prevalence in children under age five years has been reduced by 54%, and severe anemia has been reduced by 69%. (See Table 1.) Since 2002, malaria infection and illness in this same age group have decreased substantially, and the mortality rate for children under age five years has dropped by 29%—meaning an estimated 75,000 lives have been saved.

Solid advances in intervention coverage, coupled with significantly strengthened capacity and infrastructure to plan and manage rapid malaria control scale-up, have positioned Zambia for sustained success in tackling the disease. The 2006–2010 National Malaria Strategic Plan¹ outlined bold steps and called for an innovative, multifaceted approach to malaria control. Armed with political will, solid financing, and global support to fight the disease, the Zambian Ministry of Health's National Malaria Control Programme and the country's Roll Back Malaria (RBM) partners have focused on implementing the following activities:

- Improving and expanding integrated vector control interventions.
- Preventing malaria during pregnancy through intermittent preventive treatment.
- Providing prompt and effective case management, including the diagnosis and treatment of malaria within 24 hours of the onset of symptoms.
- Strengthening the country's capacity for scale-up through increased financial support and improved planning.

Malaria in Zambia

Malaria is endemic in all nine provinces in Zambia, making it an urgent health priority. In 2005, it accounted for approximately 36% of hospitalizations and outpatient department visits, exacting a considerable toll on families and health systems. The government of Zambia has made malaria prevention and control a national priority and is steadfast in its commitment to ease the burden of the disease on its people. Since 2005, Zambia has been working with RBM partners to intensify scale-up of proven malaria control interventions and to strengthen the commitment of national leadership for increased program impact.

Highlights of progress

The country has made great strides toward its goal of a malaria-free Zambia through the massive, rapid scale-up of proven malaria control interventions:

- Nearly two-thirds of the country is now covered by either an insecticide-treated bednet (ITN) or recent indoor residual spraying (IRS).
- Over 4.5 million ITNs have been delivered to households in Zambia. ITN distribution efforts have targeted hard-to-reach groups, ensuring that rural families spend less time walking to health centers and taking care of sick children.
- Between 2006 and 2008, the use of ITNs by children under age five years and pregnant women has increased 69% and 76%, respectively.
 Pregnant women seeking prenatal care can now receive preventive medicines and ITNs at public health centers nationwide.
- In 2007, nearly 660,000 homes in urban and periurban areas had been treated by the IRS program, protecting more than 3 million people.

• The rollout of artemisinin-based combination therapy is now complete, and rapid malaria tests are available nationwide.

There have also been increases among women in knowledge of malaria, symptom recognition, and methods of prevention, which is key to effective malaria control: 71% of women now recognize fever as a symptom of malaria, 85% report that malaria is caused by mosquito bites, and 81% identify using mosquito nets as a prevention method. (See Table 1.)

Looking to the future

Zambia is dedicated to investing in proven program approaches and managing malaria control programming based on sound data and program accountability. The country has developed the capacity to rapidly scale up interventions and is now preparing to sustain current levels of coverage, while beginning the next phase in malaria control: eliminating the disease. It is with committed

leadership and united partners that Zambia is setting the standard for malaria control in the region and has strengthened the confidence of donors, stakeholders, and implementing partners to increase their commitments to malaria control. Other countries in southern Africa are now beginning to take the first steps toward national malaria control scale-up.

Scaling up for impact in Zambia

Zambia's commitment to the *scale-up for impact* approach to malaria control is predicated on rapidly making available, on a national scale, the range of proven malaria control interventions in order to bring about dramatic improvements in national health and economic indicators. Zambia is committed to leading an accelerated national scale-up guided by the principles of the *three ones*: working from one national plan, one coordination mechanism, and one monitoring and evaluation system.

Table 1. Making progress in Zambia

Indicator	DHS 2001/ 2002 ²	MIS 2006 ³	DHS 2007 ⁴	MIS 2008 ⁵	Percent change 2006- 2008
Percentage of households with at least one insecticide-treated net (ITN)	13.6	37.8	53.3	62.3	+65
Percentage of households in indoor residual spraying (IRS) targeted districts receiving IRS in the previous 12 months	NA	25.8	NA	42.7	+66
Percentage of households covered by at least one ITN or recent IRS	NA	43.2	NA	65.5	+52
Percentage of children ages 0–59 months who slept under an ITN the previous night	6.5	24.3	28.5	41.1	+69
Percentage of pregnant women (PW) who slept under an ITN the previous night	7.9	24.5	32.7	43.2	+76
Percentage of PW who took any preventive antimalarial drug during pregnancy	35.8	85.3	87.2	88.1	+3
Percentage of PW who received 2 doses of intermittent preventive treatment during pregnancy	NA	58.9	65.7	66.1	+12
Percentage of children ages 0–59 months with severe anemia (Hb<8 g/dl)	NA	13.8	NA	4.3	-69
Percentage of children ages 0–59 months with malaria parasitemia	NA	22.1	NA	10.2	-54
Percentage of women ages 15–49 years who recognize fever as a symptom of malaria	NA	65.2	NA	71.1	+9
Percentage of women ages 15–49 years who reported mosquito bites as a cause of malaria	NA	80.4	NA	85.2	+6
Percentage of women ages 15–49 years who reported mosquito nets as a prevention method	NA	77.7	NA	81.3	+5

^{1.} Zambia Ministry of Health, 2006. Zambia National Malaria Strategic Plan 2006–2010, A Road Map for Impact on Malaria in Zambia. Lusaka, Zambia: Ministry of Health. Available at: http://www.nmcc.org.zm/files/6NMCPStrategicPlanZMOH-2010.pdf. (Accessed May 15, 2009).

^{2.} Zambia Central Statistical Office, Zambia Central Board of Health, and ORC Macro. 2003. Zambia Demographic and Health Survey 2001–2002. Available at: http://www.measuredhs.com/pubs/pub_details.cfm?ID=403&ctry_id=47&SrchTp=ctry. Calverton, MD, USA: Central Statistical Office, Central Board of Health, and ORC Macro. (Accessed May 15, 2009).

^{3.} Zambia Ministry of Health, 2006. Zambia National Malaria Indicator Survey 2006. Lusaka, Zambia: Ministry of Health. Available at: http://nmcc.org.zm.whsites.net/files/2006 Zambia Malaria Indicator Survey.pdf. (Accessed May 15, 2009).

^{4.} Zambia Central Statistical Office, Zambia Ministry of Health, Tropical Diseases Research Centre, University of Zambia, and Macro International Inc. 2009. Zambia Demographic and Health Survey 2007. Calverton, MD, USA: CSO and Macro International Inc. Available at: http://www.measuredhs.com/pubs/pdf/FR211/FR211[revised-05-12-2009].pdf. (Accessed May 15, 2009).

^{5.} Zambia Ministry of Health, 2008. Zambia National Malaria Indicator Survey 2008. Lusaka, Zambia: Ministry of Health. Available at: http://www.nmcc.org.zm/files/ZambiaMIS2008Final.pdf. (Accessed May 15, 2009).