

# Zambia National Malaria Control Centre

## Monitoring and Evaluation Newsletter



### Issue No. 3: First Quarter 2010

Welcome to the Monitoring and Evaluation (M&E) Newsletter of the [Zambia National Malaria Control Centre \(NMCC\)](http://www.nmcc.org.zm). The newsletter is produced by malaria control partners to exchange information and news relevant to malaria control progress in the country.

We encourage you to contact us at [me@nmcc.org.zm](mailto:me@nmcc.org.zm) with ideas, success stories and features relevant for sharing with the national malaria M&E community.

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### 2010 – Year of measurement

2010 is a critical year for the NMCC. It marks the end of a very productive decade which ushered in Roll Back Malaria, increased financing and availability of malaria control services, and renewed commitment for sustainable impact in malaria control. 2010 will also see significant efforts toward measuring the progress in malaria control. This issue of the M&E Newsletter will provide an overview of the many planned measurement activities that will occur in 2010.

### Malaria Indicator Survey 2010

The Honourable Deputy Minister of Health, Dr. Solomon Musonda, officially launched the National Malaria Indicator Survey (MIS) 2010 on 25 March at the Barn Motel in Lusaka. The MIS has become a biannual event for the NMCC, having been conducted in 2006, 2008, and now 2010. The survey provides critical progress updates on malaria control services and malaria burden.

In 2010, more than 150 participants took part in the training held at the Barn Motel in Lusaka. These included participants from health centres and laboratories throughout the country as well as from all Provincial Statistics Offices. These health workers and enumerators were trained on the sampling procedures as well as the questionnaires, all programmed into hand-held computers for use during field work. Field teams will attempt to visit more than 4500 randomly selected households from census clusters scattered throughout the country.



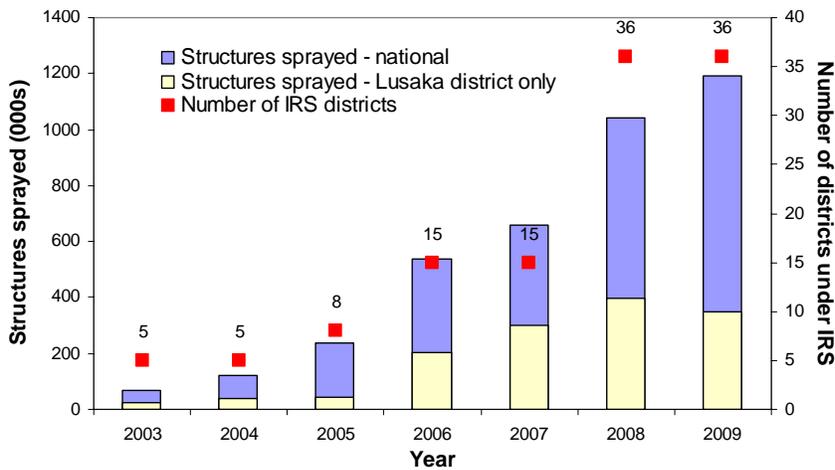
PHOTO: PATH MACEPA

The MIS field teams will test children for malaria parasitemia and anemia to measure cross-sectional, household-level prevalence. From previous MISs, microscopy-based malaria parasite prevalence was 22% in 2006, reducing to 10% in 2008.

Pictured here is the Deputy Minister of Health (second from right in photo above) acknowledging MIS training participants with certificates along with Dr. Mulakwa Kamuliwo, Acting Deputy Director of Public Health and Research, Malaria (center) and Dr. Ayorinde Ajayi, Vice President of Field Programs at PATH (right). Past results of the MISs are available on the NMCC website at [www.nmcc.org.zm](http://www.nmcc.org.zm).

## Indoor residual spraying results

The annual post-spray meeting was held during the first week of February 2010. Results from 36 districts sprayed during the 2009 spray season (September through December 2009) are presented below. More than 1,191,000 structures were reported sprayed by indoor residual spraying (IRS) districts during this recently-



ended spray season. This is an increase of nearly 150,000 structures from the previous spray year. This increase in sprayed structures was due to an expansion of areas into more peri-urban and rural areas of existing IRS districts. Of note, Lusaka district represents on average one-third of the annual number of sprayed structures since 2003. For 2009, Lusaka, the most heavily populated district in Zambia, represents 19% of the allocated implementation budget for all district IRS activities. Among

districts with the significant increases in areas under IRS in 2009, Masaiti, Kasempa, Chilubi, Kaoma and Mansa, all reported more than doubling their number of sprayed structures compared to the previous year.

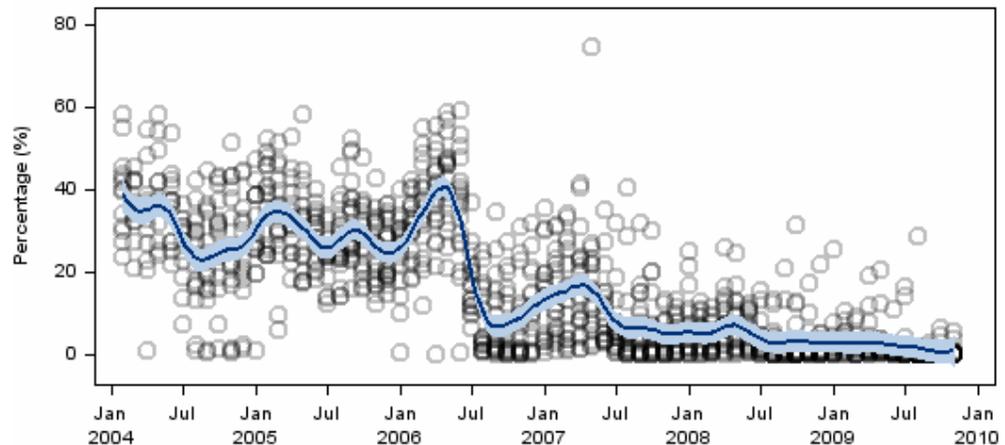
Annually, the NMCC has consistently increased the number of sprayed structures with increasing support from partners. Well done, IRS team!

## District basket – Mumbwa

NMCC has recently undertaken a comprehensive review of malaria case reporting from Mumbwa and Kazungula districts with support from MACEPA and FIND. This effort revealed the important role rapid diagnostic tests (RDTs) play in making precise malaria case definitions and the reduction in malaria case reports at health

facilities as a result (See page 4). As the figure (right) suggests, malaria's percentage contribution to the total patient consultations among all facilities also dropped significantly as a result of the introduction of RDTs during the middle of 2006 in Mumbwa district. The fitted line (spline plot) and

**Monthly reported malaria as percentage of total consultations, all facilities, Mumbwa District**



95% confidence area (blue band) of the monthly returns (circles) are from health facilities using RDTs. In order to distinguish trends in malaria and any contributions of malaria control services to declines in the malaria burden, data from health facilities must be consistently reported using standardized malaria case definitions for confirmed cases and laboratory services and supplies of RDTs must remain consistent.

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## Partner's corner – SFH, Tulane

As part of the MIS 2010 process, Luangwa and Nyimba districts are conducting district-based representative household surveys during April and May. The survey in Luangwa district is part of the follow-up evaluation of a behavioral trial in conjunction with the Ministry of Health, Tulane University, MACEPA and Society for Family Health. This study is designed to provide quantitative evidence for understanding the important role community health workers play in providing focused interpersonal communication about the importance of hanging up and using insecticide-treated mosquito nets. Baseline results from 2008 have been published already and show concentrated malaria parasitemia in certain areas of the district (Figure 1).<sup>1</sup>

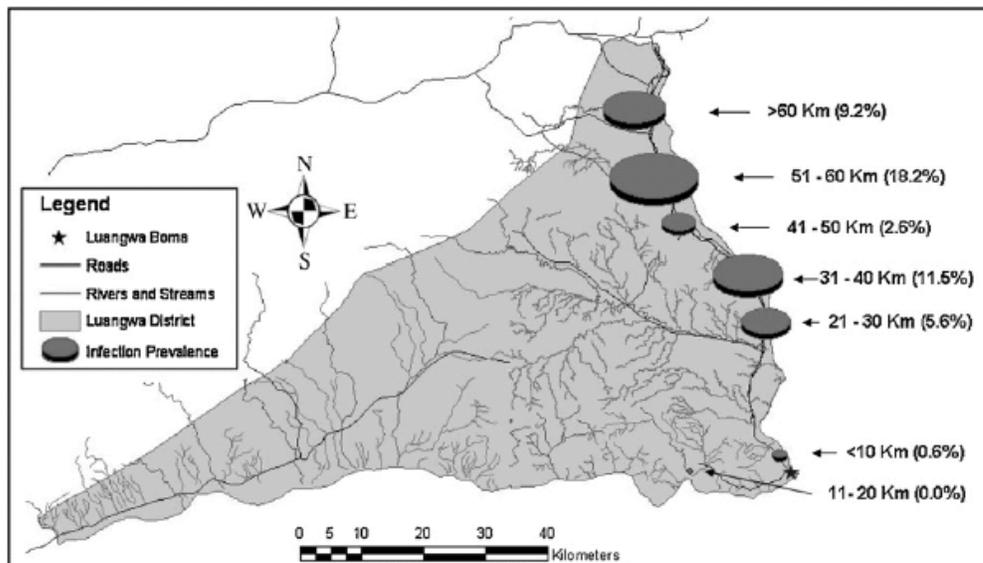


Figure 1. Map illustrating the proportion of malaria infections by distance to Luangwa Boma

The surveys in Luangwa and Nyimba will also form the baseline household-level measurement for Malaria Transmission Consortium (MTC) in relation to entomological studies. This project is a multi-year, multi-country effort designed to standardize measurement of entomological methods and indicators relevant for malaria control programs as they move toward elimination.

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## Upcoming events

Staff from NMCC will travel to Kisumu, Kenya, in May to take part in advanced molecular biological training for malaria diagnosis using polymerase chain reaction amplification of malaria parasite DNA. Parasitologists and molecular biologists from the NMCC will participate in this training as part of standardization of methods for MTC project activities. Also as part of MTC activities, entomologic staff at NMCC will be trained in July in PCR and ELISA techniques for determining mosquito speciation and malaria infection rates in Ifakara Research Centre in Tanzania.

### More upcoming events

April–May 2010	Malaria Indicator Survey (MIS) 2010 – field work
3–7 May 2010	Annual EARN Malaria Review Meeting, Nairobi
18–21 May 2010	Alliance for Malaria Prevention (AMP) LLIN M&E Workshop, Nairobi
May 2010	RBM Board Meeting/World Health Assembly, Geneva
June 2010	Child Health Week
July 2010	MTC entomological training, Ifakara, Tanzania

For more information, visit the National Malaria Control Centre website, [www.nmcc.org.zm](http://www.nmcc.org.zm), or contact the Monitoring and Evaluation Team at the National Malaria Control Centre at [me@nmcc.org.zm](mailto:me@nmcc.org.zm).

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<sup>1</sup> Keating J, Miller JM, Bennett A, Moonga HB, Eisele TP, 2009. Plasmodium falciparum parasite infection prevalence from a household survey in Zambia using microscopy and a rapid diagnostic test: implications for monitoring and evaluation. Acta Trop 112: 277-82. NMCC M&E Newsletter: Issue 3; Qtr 1 2010

## HMIS Update – 2004–2009 data

Reported malaria cases in rural health clinics throughout Kazungula and Mumbwa districts have declined precipitously as a result of the introduction and continuous use of malaria RDTs. The figures below show dramatic reductions in monthly malaria case reporting after the onset of RDTs in facilities and the mandate by the District Health leadership to report only confirmed cases of malaria. Precising malaria case definitions and leadership at local level has resulted in a bottoming out of reported malaria cases in these two districts.

