



# Mosquito net coverage of vulnerable groups reaches 50% in Kenya

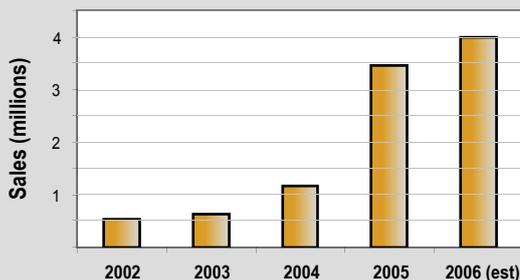
Nationwide distribution of up to 3.5 million insecticide treated nets (ITNs) per year has led to a rapid increase in coverage of vulnerable groups in the malaria endemic provinces of Kenya. By targeting heavily subsidized ITNs to vulnerable groups attending antenatal clinics (ANCs), as well as promoting sales through the commercial sector, coverage has reached 46% of children under five and 50% of pregnant women in three key malaria endemic provinces.

An intensive ITN delivery programme implemented by the Kenyan Ministry of Health and PSI/Kenya is proving highly successful. The programme, which is the largest of its kind in the world, was launched in 2002 with funding from the British Department for International Development (DFID) and the US Agency for International Development (USAID). Malaria is a major health problem in Kenya with rural pregnant women and children under five being most at risk from severe disease and death.

## THE KENYA ITN DELIVERY MODEL

Over 6 million ITNs were delivered nationwide between 2002 and 2005, and approximately 4 million more are targeted for delivery in 2006 (See Fig 1). Of the nets delivered so far, 42% were long lasting insecticidal nets (LLINs) and 85% of those delivered from now on will be LLINs.

**Fig 1. Kenya ITN programme sales (2002-2006)**



This programme demonstrates that with the right partnerships and an effective and responsive delivery strategy, rapid increases in net coverage amongst vulnerable groups can be achieved and sustained. These determinants of success are discussed below.

## Developing an appropriate delivery strategy

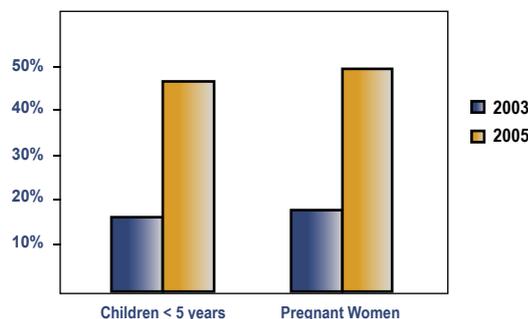
A key lesson of success is the development of an appropriate strategy that makes best use of the comparative advantages of different partners; public sector, commercial sector, and NGOs/FBOs.

The delivery strategy utilizes public and private outlets. Pregnant women and children under 5 years can access

## Programme Results

After four years of programme activity, several studies are showing a dramatic increase in ITN use among pregnant women and children under 5 years (See Figure 2).

**Fig 2. Percentage of vulnerable groups in three endemic provinces protected the previous night by a mosquito net**



### Notes:

2003 data is from DHS, compiled for Coast, Western and Nyanza Provinces

2005 data is from a PSI national survey of 3,192 respondents. Results presented for Coast, Western, and Nyanza Provinces

Nationwide, household net coverage rose from 22% (2003 DHS) to 44% (2005 PSI national survey) between 2003 and 2005.

The results were most impressive in the endemic provinces where the programme focused its activities. Household net coverage rose to 59% in these provinces, with half of the homes having treated nets.

A survey conducted by the Kenya Medical Research Institute/Wellcome Trust collaborative programme in 2005 in four rural sentinel districts also showed an increase in children under 5 sleeping under a treated net from 3% in 2002 to 24% in 2005. "In light of this dramatic increase Kenya is on track to achieve the 2010 Abuja ITN coverage target" says Prof. Bob Snow who conducted the study, and Kenya is likely to be one of the first countries in Africa to do so.

KENYA BRIEF



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**Clinic staff educate mothers on net treatment.**

ITNs at a heavily subsidized price (US\$0.60) through health facilities (antenatal clinics). People living in high risk rural areas may access ITNs for the subsidized price of US\$1.20 through rural shops or NGOs, and those living in more prosperous urban centres may purchase nets in the commercial sector for about USD\$4.

## Coordinated partnership is essential

The need for coordinating the different inputs from multiple partners has been highlighted in the Kenya ITN programme. The Ministry of Health provides leadership, the required policy framework and the country's public health infrastructure. WHO provides technical support. DFID provides most of the funding, supported also by USAID, and PSI provides management, distribution, promotion, accountability, and training inputs through the government and commercial sector infrastructure. The commercial sector produces and distributes nets through the wholesale/retail chain, and a wide range of NGOs, active in hard to reach areas, carry out targeted delivery through community based mechanisms.

## Building capacity among healthcare providers

In conjunction with the Ministry of Health's Division of Malaria Control (DOMC), PSI/Kenya trained over 6,400 health care providers in over 80% of the public and mission health facilities countrywide in 2004 and 2005. Training focused on promoting purchase and use of ITNs in the context of broader malaria prevention and treatment messages.

## Delivery through ante-natal clinics

- The antenatal model was piloted in four districts in Coast Province, and then rolled out nation wide in the last quarter of 2004.
- ITNs are delivered to ANCs either directly by PSI or indirectly via the local district hospital.
- Nurses promote the purchase and use of the nets by vulnerable groups during health talks and routine consultations.

- The health facilities purchase the nets for 30ksh and sell them to pregnant women and caretakers of children under 5 years for 50ksh (on producing the appropriate health card).
- All sales are recorded in the register and receipts issued.
- The 20ksh (US\$0.25) margin is a source of income for health facilities for infrastructure improvements and/or other recurrent costs.
- Joint monitoring and supervision is routinely undertaken by PSI/Kenya and the District Health Management Teams (DHMTs).

## Expanding and improving commercial sector ITN delivery

- The ITN commercial sector began to grow dramatically in 2004 and 2005 following considerable advertising and communications support from PSI.
- PSI supplies free insecticide treatment kits to manufacturers and distributors of commercial nets so that almost all commercial nets are now bundled with an ITN treatment kit.
- The number of commercial ITN brands has more than doubled, to about twenty, since 2002 and the average price has declined significantly from approximately USD\$6 to less than \$4.
- PSI has now licensed, at no cost, its *Supanet* social marketing brand to a local net manufacturing company to help sustain the commercial market.

## NGO partnerships further expand ITN delivery

- The Kenya program has developed partnerships with more than 10 large NGOs, and over 200 community and faith based organizations.
- Smaller NGOs that work with rural communities are uniquely positioned to educate and promote the use of ITNs within those communities, and are an excellent means by which to reach beyond the health facilities directly to people's homes.
- PSI trains NGOs and community groups in malaria prevention, and then supplies the with heavily subsidized ITNs for delivery in the community.

## Next steps

The Kenya ITN programme will continue to scale up and sustain coverage of vulnerable groups with LLINs, and target lower coverage areas, for as long as there is funding to support these activities.

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