



### NetMark 2004 Survey on Insecticide Treated Nets (ITNs) in Zambia

#### BACKGROUND

Zambia employs a mix of ITN delivery mechanisms to target different geographic, economic and biologically vulnerable groups. These range from commercial sales by retail traders to a variety of targeted subsidy schemes, including a discount voucher program for pregnant women in urban areas and direct subsidized sales through antenatal clinics in rural areas. There are also subsidized revolving funds by District Health Management Teams and NGOs, and free distributions to the most vulnerable populations.

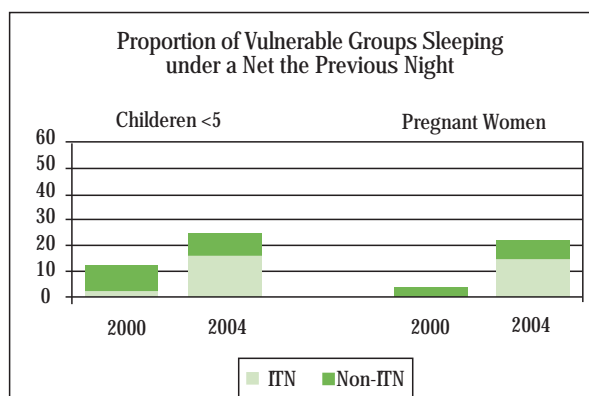
To measure the combined impact of these ITN promotion activities, NetMark, with funding from the United States Agency for International Development (USAID), conducted household surveys in Zambia in 2000 and 2004. Respondents were women aged 15 – 49 who cared for at least one child under Five, living in urban and rural areas up to 200km from Lusaka, Kitwe, Choma, Mansa and Kaoma. The women answered questions about ownership of mosquito nets and ITNs, use of nets by vulnerable groups, net treatment practices and knowledge and beliefs about mosquitoes and malaria.

#### FINDINGS

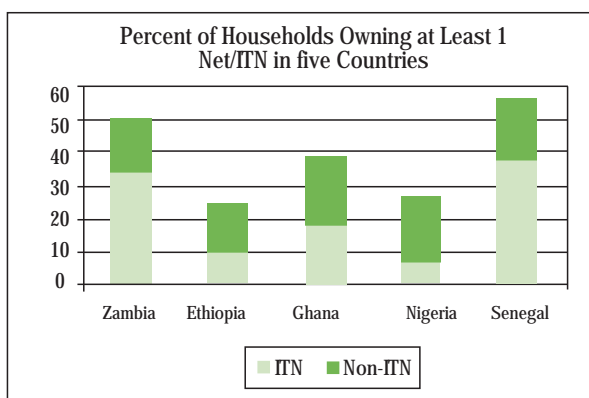
Survey result show dramatic improvements in all these areas, with half of all families now owning at least one bed net, including one in three owning an ITN. Many more children and pregnant women are protected by ITNs in 2004 than in 2000, with one in four sleeping under a net the night before the survey. Within net-owning households, the youngest children and pregnant women are given preference for sleeping under a net.

- Since 2000, the percentage of households owning a net has doubled, to 50%. ITN ownership has increased six-fold, from 6% to 35%. Two-thirds of nets owned were obtained in the past two years, indicating that recent promotion and distribution efforts have been effective. Net-owning families are more likely to own multiple nets.

- The percent of children sleeping under a net doubled, to 25%, and those sleeping under an ITN increased from 2% to 17%.
- The percent of pregnant women sleeping under a net increased five-fold, to 22%. In 2000, no pregnant woman in the sample had slept under an ITN the previous night but in 2004, 14% had.



- Compared to four other sub-Saharan African countries that NetMark also surveyed in 2004, ITN ownership and use in Zambia was amongst the highest.

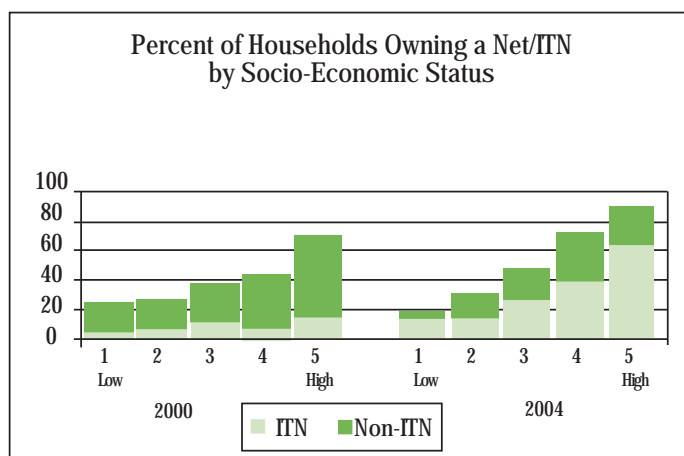


*Using the RBM definition, an ITN is defined as a long-lasting net, or one bought pre-treated or treated within the past 12 months.*

- Four out of five nets owned have been treated. People differentiate between untreated nets and ITNs, perceiving ITNs to be far superior. Negative perceptions of the insecticide have decreased since 2000 and are now very low.

- Three out of four respondents had heard a message about ITNs in the previous 12 months, primarily from health workers, but also from radio and television, posters in a health facility, or friends. Those who were exposed to these messages were much more likely to own a treated net.

While these results are cause for optimism and show the promise of the Roll Back Malaria approach, improvements have largely favored those in urban areas and higher socio-economic groups, suggesting lack of access to ITNs among poor and rural residents. Other countries have more equitable patterns, with ownership and use often higher in rural areas.



## PROGRAM/POLICY IMPLICATIONS

### Access and affordability

- In order to achieve equity, markets should be segmented. Programs providing highly subsidized or free ITNs targeted to the poor should be implemented to increase ownership in households that cannot afford ITNs. Economic or geographic targeting could accomplish this.

- Few nets come from open markets. A focus on getting ITNs sold in markets might help with access as well as affordability: overhead costs for retailers in markets are lower than in more formal stores, and market stalls may be able to specialize in nets and purchase in bulk at low prices.

- Continued effort is needed to strengthen the private sector, which has played an important role in increasing ITN ownership and in supplying net treatments and will serve as a sustainable source of ITNs into the future.

### Net treatment and use

- Although the percent of nets treated is high, it will be important to encourage purchase of LLINs and to make treatments readily available so that existing nets can be converted to ITNs and nets can be re-treated as necessary. Mass treatment campaigns should be considered and efforts should be made to make treatment kits more widely available in the commercial sector.

- Most respondents already know that children under five and pregnant women are most vulnerable to severe malaria, and intra-household net allocation favors these groups, but many households used their nets only about half the year. A better understanding of the barriers to and facilitators of year-round use could inform the behavior change communication strategy and content.



### Communication/Promotion of ITNs

- Promotional strategies that emphasize that ITNs are economical in the long run may help overcome cost as a barrier to ownership for some families.

- ITNs are considered superior to aerosols and coils on all attributes of insect control products except “kills other insects.” Since ITNs do kill other insects, messages should link ITNs with this desired characteristic.

