

# NetMark



NetMark 2004 Survey  
Insecticide Treated Nets (ITNs) in Ghana

A 2004 household survey in Ghana found that the majority of women knew mosquitoes caused malaria, had heard about ITNs and could identify benefits of using an ITN for malaria prevention. One in five households owned an ITN, and many more households owned untreated nets or baby nets with a built-in frame. This was true at all socio-economic levels and in both urban and rural areas. The youngest children and pregnant women, who are most vulnerable to malaria, were also most likely to sleep under a net in net-owning households.

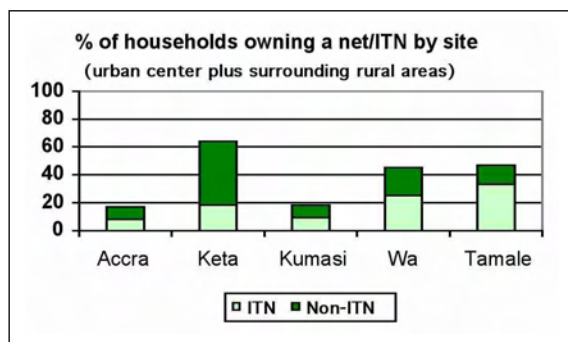
## BACKGROUND

Ghana's National Malaria Control Programme and local and international organizations have been promoting and distributing insecticide treated nets (ITNs) since 1998. The government reduced taxes and tariffs on nets in 2002 and waived them completely in 2004. Commercial markets have been expanding, selling untreated nets, ITNs and, since 2002, one long-lasting insecticide treated net (LLIN), PermaNet. Pregnant women and children under age five in some regions get subsidized nets provided by the Global Fund and UNICEF at local health facilities and through community agents. Private companies have also teamed up with the public sector to offer vouchers to vulnerable groups, enabling them to purchase commercial nets at discounted prices. The benefits of ITNs are promoted through mass media, such as radio and TV ads and billboards, as well as interpersonal communication including women's groups and traveling road shows.

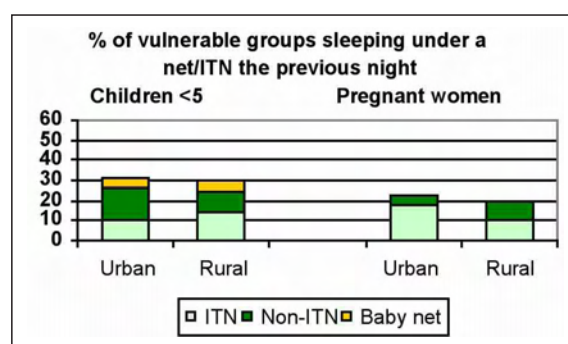
To measure the combined impact of ITN activities to date and to provide a reference point for measuring future progress, NetMark, with funding from the United States Agency for International Development (USAID), conducted a household survey in Ghana in 2004. Respondents were women aged 15 – 49 who cared for at least one child under five, living in urban and rural areas up to 200km from Accra, Keta, Kumasi, Wa and Tamale. 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

- Overall, 38% of households owned a net and 19% owned an ITN, but ownership varied a great deal by location. Two-thirds of respondents from Keta and surrounding rural areas owned a net, and one-third from the Tamale area owned an ITN. In Accra and Kumasi, where nets and ITNs were least common, baby nets were more popular, with about one-fourth of families owning only a baby net, but no hanging net.



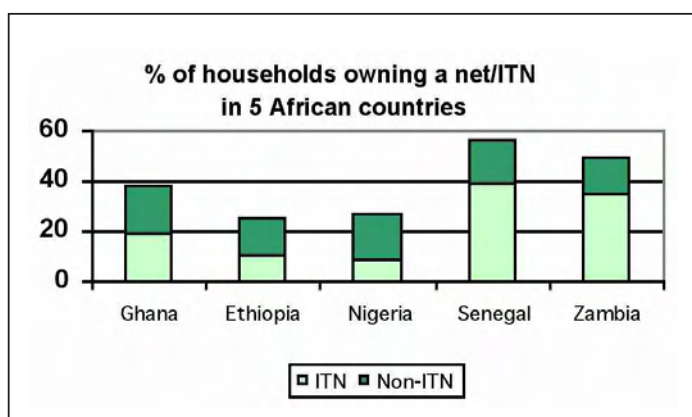
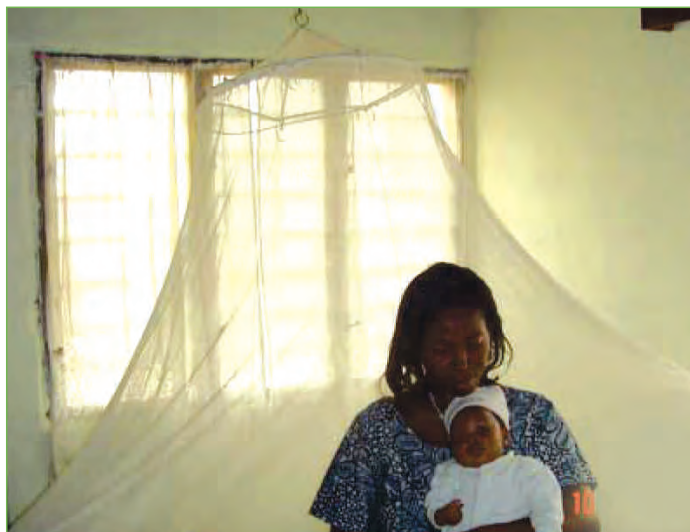
- One-fourth of all children under five slept under a hanging net the night before the survey, and an additional 5% slept under a baby net. Thirteen percent of children slept under an ITN treated in the past 12 months.
- Pregnant women and other women of reproductive age were equally likely to sleep under a net. One in five pregnant women slept under a net the previous night, including 8% who slept under an ITN.
- Ownership and use of ITNs in Ghana was extremely equitable by socio-economic status and urban/rural residence. Across the socio-economic spectrum, respondents were equally likely to have bought their nets from a commercial source, but poorer and rural respondents reported paying less for their nets—a median of 25,000 cedis compared to 35,000 cedis for wealthier and urban respondents.



- Nearly half of nets owned had ever been treated, and virtually all of those had been treated within the past year. This includes both nets that were bought pretreated (38%) and those that had been treated since they were acquired (19%).

- Nine out of ten women reported hearing a message about ITNs in the past year, most from health workers, radio, TV or friends.

- Compared to four other sub-Saharan African countries that NetMark also surveyed in 2004, Ghana fell in the middle of the range in terms of net and ITN ownership, but is still short of the Abuja targets.



### Net treatment

- Almost all respondents had heard of ITNs, but few owned them. Implementing mass treatment campaigns and making treatment kits more widely available in the commercial sector will help enable people to convert existing nets into ITNs. Treatment kits could be made much more affordable by waiving taxes and tariffs on them, as has been done with nets. Communication strategies should emphasize the effectiveness of net treatment in killing and repelling mosquitoes and other insects-valued attributes of mosquito control products that are not currently associated with nets. Marketing of long-lasting ITNs and treatments will help to overcome the challenge of getting people to re-treat nets.

## PROGRAM & POLICY IMPLICATIONS

### Net ownership and use

- The equity seen in ownership and use suggests that a mixture of public and private sector initiatives can make nets accessible and affordable to all socio-economic groups and in rural as well as urban areas.

- High levels of baby net ownership show that parents are concerned about protecting their babies and are willing to buy nets. Since babies soon outgrow baby nets, communication messages should encourage people to spend their resources on treated hanging nets instead, which protect a child longer, can be shared with the mother or siblings, and even afford some protection to others not sleeping under the net.

- Although most respondents knew that pregnant women were vulnerable to a severe case of malaria, pregnant women were not much more likely than non-pregnant women to sleep under a net or ITN. More information is needed to understand this gap between knowledge and behavior and aid in developing communication strategies.

- Over one-third of nets owned are tailor-made, presenting a special challenge for net treatment campaigns. A strategy for treatment of locally tailored nets needs to be developed, taking into account the variety of fabrics used in these nets. Where appropriate, ITN programs could support bundling of tailor-made nets with insecticide.



The complete report, *NetMark 2004 Survey on Insecticide-Treated Nets (ITNs) in Ghana*, is available at [www.netmarkafrica.org/research](http://www.netmarkafrica.org/research)

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