



## Bednets Reduce Malaria

- *More than one million lives could be saved annually if insecticide-treated bednets (ITNs) were routinely used by those populations at greatest risk of malaria.*
- *Several models for delivery of ITNs have been developed, and the choice among them depends on how capable the commercial sector is to provide bednets.*
- *National Malaria Control Programs and their partners involved in insecticide-treated net interventions are encouraged to purchase only long-lasting insecticidal nets (LLINs).*

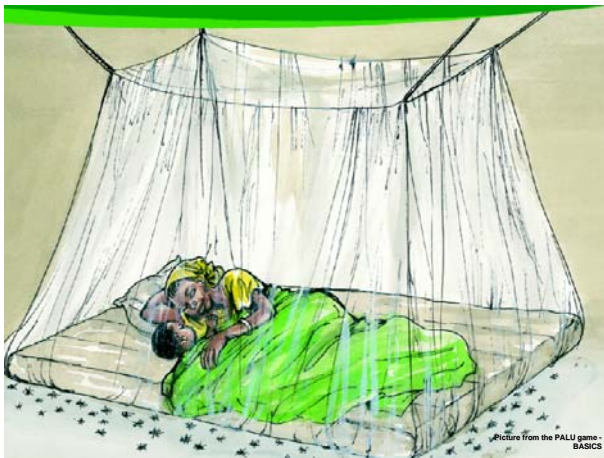
Insecticide-treated bednets (ITNs) are a highly effective way for individuals, families, and communities to protect themselves from malaria. In regions of stable malaria transmission, consistently sleeping under an ITN can decrease severe malaria by 45%, reduce premature births by 42%, and cut all-cause child mortality by 17% to 29%. When ITN coverage rates reach 80% or more in a community, those residents not sleeping under an ITN also obtain a protective benefit.

### ITN programs should target pregnant women and children under five.

Pregnant women and children under five, particularly infants, are at highest risk from malaria-associated death and morbidity. Programs should aim to reach this high-risk population, focus on the poor and on populations in rural areas, which have the greatest risk of malaria mortality.

### USAID supports wide distribution of nets.

Several successful ITN delivery mechanisms have been used to achieve high coverage and the choice of which to use should be guided by local conditions and circumstances.



Some of the most successful models for net distribution are:

- ITNs distributed free during routine visits to antenatal clinics or other contacts with the health system;
- Free mass distribution campaigns, as stand alone net campaigns, health or immunization days, targeting children under 5 and pregnant women;
- ITNs sold at a subsidized price to qualifying beneficiaries at government health clinics as part of regular service delivery;
- ITNs sold at a subsidized price through community-based groups; and
- Coupons/vouchers delivered through the health system to qualifying beneficiaries, providing a discount on commercially available ITNs.

If a country's policy is to provide free or heavily subsidized ITNs, and this will serve national coverage requirements over time, then USAID supports this strategy. Subsidies need to be targeted to ensure that scarce public sector funds are spent on those most in need. These approaches and their variations are appropriate in different contexts, and are presented here in order of their pertinence to increasingly mature commercial market conditions. Where the commercial sector is largely inactive, incapable, or unwilling to handle the logistics of delivering ITNs, it would be more effective to use the capacity of the public sector or NGOs to provide ITN services. At the other end of the range, delivery of ITNs using a coupon or voucher system may best work in areas where retail shops are active and have a demonstrated capacity to handle the logistics and financing of ITNs. Each of these approaches has advantages and challenges in relation to coverage and equity; effect on other ITN programs; effect on the health system; fraud/leakage; behavior change and exit strategies.

In areas with low overall net ownership there needs to be a "catch-up" strategy, mass distribution campaigns, followed by a "keep-up" approach that provides ITNs through routine services or social marketing to maintain high ownership. In the long run, all areas, even high net ownership areas, will need a "keep-up" strategy.

### **Long-lasting ITNs are the best option for achieving the full protection of ITNs.**

The WHO Global Malaria Program (WHO/GMP) and the Presidential Malaria Initiative (PMI) promote malaria prevention through the use of insecticide treated mosquito nets. Both call upon National Malaria Control Programs and their partners involved in insecticide-treated net interventions to purchase only long-lasting insecticidal nets (LLINs). LLINs are designed to maintain under recommended conditions of use their biological efficacy against vector mosquitoes for at least three years, obviating the need for regular insecticide treatment.

#### **PMI Targets**

**More than 90% of households with a pregnant woman and/or children under five will own at least one ITN;**

**85% of children under five will have slept under an ITN the previous night.**

#### **References:**

USAID Technical Reference Material, <http://www.childsurvival.com/documents/trms/tech.cfm>

Roll Back Malaria Web site, <http://www.rbm.who.int>

USAID Fact Sheet: The President's Malaria Initiative (PMI) <http://www.usaid.gov/press/factsheets/2006/fs060608.html>

Lengeler C, Cattani J, de Savigny D, eds. Net gain: a new method for preventing malaria deaths. Ottawa, International Development Research Centre/World Health Organization, 1996.

A detailed discussion on "best practices" for targeted subsidies is discussed in a new Roll Back Malaria (RBM) document: Targeted Subsidy Strategies for National Scale ITNs: Principles and Approaches, which can be accessed on the RBM Web site at [http://rbm.who.int/partnership/wg/wg\\_itn/docs/ts\\_strategies\\_en.pdf](http://rbm.who.int/partnership/wg/wg_itn/docs/ts_strategies_en.pdf)

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Last Revised: 10/15/07