

# MALARIA: A GLOBAL BURDEN

## Introduction

Malaria is a mosquito-borne parasitic disease that is common in the world's poorest countries. It is preventable and treatable, yet it still kills some 881,000 people every year, 90% of whom are in Africa and 85% of whom are children under five.

Malaria was eliminated in most western countries more than 50 years ago; today, more than half of all estimated malaria cases occur in just five African countries: Nigeria, Democratic Republic of Congo, Ethiopia, United Republic of Tanzania and Kenya.

Malaria predominantly affects rural and poor populations that have little or no access to current prevention and treatment tools. It is estimated that malaria costs Africa more than US\$12 billion every year in lost GDP, due to the heavy toll it inflicts on families in rural areas.

## Malaria Interventions

Over the past decade or so, the world has developed several successful malaria interventions, although they remain unavailable in many places. Below are the current WHO-recommended strategies for preventing and treating malaria:

- *Long-Lasting Insecticidal Nets (LLINs)* are designed to repel, disable, or kill malaria-bearing mosquitoes and are effective without re-treatment for the entire life of the net (around 3-5 years).
- *Indoor Residual Spraying (IRS)* employs insecticides to prevent malaria by killing mosquitoes that might bear the disease as they enter houses or other sleeping areas.
- *Artemisinin-Combination Therapies (ACTs)* are currently the most effective form of treatment against malaria.
- *Intermittent Preventive Treatment (IPT)* in pregnancy provides antenatal malaria treatment to pregnant women, who are particularly vulnerable to the disease.

Other malaria interventions, including vaccines and new classes of antimalarial drugs, are currently being tested and could be available soon. Among other approaches, researchers are looking at the best ways to use rapid diagnostic tests for malaria, and the WHO is considering recommending IPT for children under five in high-risk areas.

### MALARIA QUICK FACTS

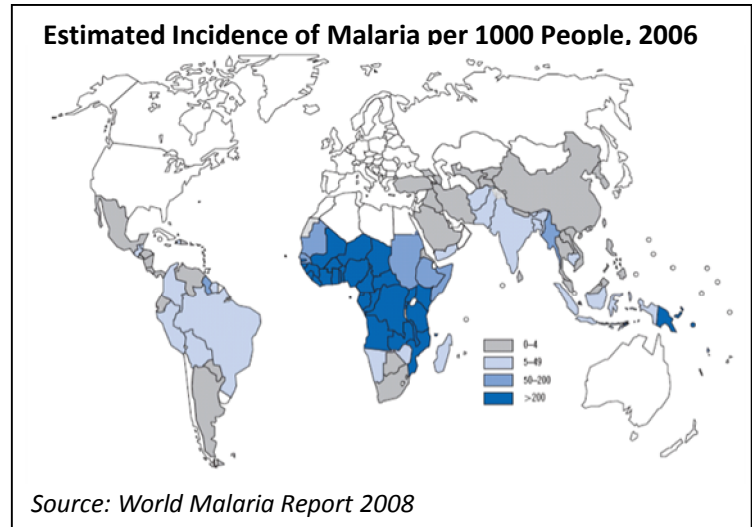
Annual number of malaria cases globally	247 million
Annual number of malaria deaths globally	881,000
Number of malaria-endemic countries	109
Number of people at risk for malaria	3.3 billion
Percent of global population at risk for malaria	50%
Percent of malaria deaths in Africa	90%
Percent of malaria deaths in children under 5	85%
Percent of symptomatic children under five in Africa treated with ACTs	3%
Percent of at-risk people in Africa protected by insecticide-treated nets	26%

*Source: World Malaria Report 2008*

## Recent Progress

In recent years, the global malaria community has dramatically increased its efforts to halve the number of malaria cases and deaths and achieve 80% coverage of malaria prevention and treatment by 2010 in line with targets set by the World Health Assembly in 2005. Grassroots organizations and celebrity champions have raised the profile of the disease, and put it on the agenda of global leaders. Between 2003 and 2008, anti-malaria investments grew from roughly US\$50 million to US\$1.1 billion, with substantial new commitments from the US and UK governments; the Global Fund to Fight AIDS, Tuberculosis, and Malaria; the World Bank; and the Bill & Melinda Gates Foundation, among others. At the same time, governments in Africa are increasingly promoting policies that improve access to ACTs, bed nets, and other effective interventions.

Globally, these efforts have contributed to a gradual decline in malaria incidence and mortality. In Africa, seven countries have already reduced their malaria burden by 50% since 2000, while many others are seeing a favorable shift.



## Challenges

Despite recent successes, the world is not on track to reach the WHA targets for 2010. Some of the challenges that threaten to arrest or undo progress include:

- *Drug resistance* is arising due to improper use of malaria medicines. Malaria strains resistant to the most commonly used malaria drugs exist in almost every endemic country. Resistance to ACTs was reported for the first time along the Thai-Cambodian border in early 2009.
- *Insecticide resistance* is growing, including resistance to DDT and other leading types of insecticides used in bed nets and spraying.
- *Improving access* to the latest anti-malaria tools continues to pose challenges. Although the availability of bed nets has increased dramatically in recent years, many people at risk of malaria still do not have ready access to the most effective interventions such as ACTs.

## Moving Forward

The global malaria community is coalescing around the ambitious long-term goal of malaria eradication. In order to achieve eradication, however, donors and endemic country governments must invest in research that:

- Guides evidence-based policies for malaria control.
- Monitors malaria incidence.
- Supports effective use of, and expanded access to, today's best malaria interventions including ACTs, vector control and diagnostics.
- Accelerates development of new tools that overcome today's resistance, including vaccines, effective new drugs and insecticides.
- Is prioritized to local needs and conducted with local and regional scientists.