



# WORLD HEALTH ORGANIZATION

EXECUTIVE BOARD  
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## Malaria

### Report by the Secretariat

1. In 1998 the Director-General initiated a new effort to roll back malaria. This initiative has brought together countries endemic for malaria, foundations, bilateral agencies, nongovernmental organizations, the private sector, academia and international organizations as partners. The Health Assembly, in resolution WHA52.11, encouraged Member States “to reduce malaria-related suffering and promote national development in a sustained way by rolling back malaria”. It requested the Director-General to support Member States by promoting harmonized strategies, encouraging consistent technical guidance, promoting international investment in cost-effective new approaches and products, and brokering technical and financial support, and to report regularly on progress of the global Roll Back Malaria partnership.
2. In 2000, African heads of State and government, meeting at the African Summit on Roll Back Malaria in Abuja, committed themselves to reducing the burden of malaria – halving mortality by 2010 and ensuring that at least 60% of those at risk of or suffering from malaria benefited from suitable preventive and curative interventions by 2005.<sup>1</sup>
3. Also in 2000, the General Assembly of the United Nations had included “Combat HIV/AIDS, malaria and other diseases” in the Millennium Development Goals. The subsequent year, it proclaimed the period 2001-2010 the Decade to Roll Back Malaria in the Developing Countries, Particularly in Africa, and requested the Secretary-General, in close collaboration with the Director-General of WHO, developing countries and regional organizations to conduct in 2005 an evaluation of measures taken and progress made towards mid-term targets.<sup>2</sup>
4. The Report of the Commission on Macroeconomics and Health published by WHO in 2001 noted that countries with malaria grew economically 1.3% less per person per year than non-malarious countries, and that a 10% reduction in malaria was associated with 0.3% higher growth.<sup>3</sup> It concluded that malaria not only is a severe burden on household economies, but also acts as a powerful deterrent to investment in countries and areas endemic for malaria.<sup>4</sup>

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<sup>1</sup> Abuja Declaration on Roll Back Malaria in Africa, Abuja, 25 April 2000.

<sup>2</sup> Resolution 55/284.

<sup>3</sup> *Macroeconomics and health: investing in health for economic development. Report of the Commission on Macroeconomics and Health*. Geneva, World Health Organization, 2001.

<sup>4</sup> [http://www.cmhealth.org/docs/wg1\\_paper10.pdf](http://www.cmhealth.org/docs/wg1_paper10.pdf).

5. The Africa Malaria Report 2003 issued by WHO and UNICEF presented data collected up to the end of 2002 in sub-Saharan Africa that provided a baseline for evaluating progress.<sup>1</sup> The report made the following observations.

- Malaria remains a principal cause of death for nearly 20% of all children under the age of five years in Africa; the mortality rate in eastern and southern Africa almost doubled over the period 1990-1998 compared with 1982-1989 possibly as a result of increasing resistance of plasmodia to chloroquine.
- In malaria-endemic countries, 25% to 40% of all outpatient visits and 20% to 50% of hospital admissions were for malaria.
- Malaria was also an important indirect cause of mortality, estimated to cause 75 000-200 000 infant deaths per year, for example through malaria-related maternal anaemia in pregnancy and low birth weight.
- Only 2% of children under five years of age slept under insecticide-treated mosquito nets; the proportion for untreated nets was 15%.
- On average, 42% of children under five years of age with fever were treated with an antimalarial agent, but in many cases this was chloroquine whose efficacy is declining.
- More than 60% of pregnant women in 15 of 17 countries sought antenatal care; however, few countries were using such care services to provide intermittent prophylaxis against malaria.
- Some 110 million Africans lived in areas at risk for epidemics of malaria; complex emergencies are one of the determinants of such epidemics and many of the deaths due to malaria in Africa occur in populations affected by conflicts.

6. WHO's Secretariat estimates that 803 000 children under the age of five years in sub-Saharan Africa died of malaria in 2000 (range 710 000-896 000),<sup>2</sup> and estimates of the annual number of deaths from malaria in the world lie between 1.1 and 1.3 million.<sup>3</sup> Based on reported data and estimations of populations at risk and incidence rates, it also estimates the incidence of malaria in 2004 in 111 countries affected at between 350 and 450 million cases. There is no evidence that the overall burden of malaria in terms of morbidity or mortality has changed significantly between 2000 and 2004.

## **PROGRESS IN MALARIA CONTROL 2000 TO 2004**

7. An external evaluation of the Roll Back Malaria initiative in 2002 observed that, whereas the partnership had been able to raise awareness about the importance of malaria, control efforts in Africa generally remained fragmented and underfunded.<sup>4</sup> International funding for malaria control in 2002

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<sup>1</sup> Document WHO/CDS/MAL/2003.1093.

<sup>2</sup>[http://rbm.who.int/partnership/wg/wg\\_monitoring/docs/CHERG\\_final\\_report.pdf](http://rbm.who.int/partnership/wg/wg_monitoring/docs/CHERG_final_report.pdf).

<sup>3</sup> See *The world health report*. Geneva, World Health Organization, for each of the years 1999-2004.

<sup>4</sup> [http://rbm.who.int/cmc\\_upload/0/000/015/905/ee\\_toc.htm](http://rbm.who.int/cmc_upload/0/000/015/905/ee_toc.htm).

was estimated to have been only about US\$ 130 million. Since 2002, when the Global Fund to Fight AIDS, Tuberculosis and Malaria started its operations, it has to date allocated a total of US\$ 940 million for malaria control over a two-year period and US\$ 1800 million over five years.

8. This financial support has enabled many countries to adopt highly effective artemisinin-based combination therapy, as recommended by WHO since 2001 to replace failing, but much cheaper treatments such as chloroquine. By the end of 2004, the Global Fund had allocated funds for 130 million courses of such treatment; 38 countries, 18 in Africa, had officially adopted combination therapy in their policies for treatment of malaria.

9. Increased funding has also boosted the deployment of insecticide-treated mosquito nets. Since 2002, several African countries, supported by partners such as International Federation of Red Cross and Red Crescent Societies, UNICEF and WHO, have been giving high priority to the rapid expansion of protective interventions for vulnerable groups, young children and pregnant women, through free or highly subsidized provision of nets in conjunction with immunization activities and antenatal care services. By the end of 2004, massive efforts to extend the use of nets will have been successfully completed in many countries, notably Eritrea, Togo and parts of the United Republic of Tanzania and Zambia. Since 2002, the Regional Office for Africa has successfully promoted free public re-treatment of mosquito nets with insecticide. Scientific and industrial partners have given increased attention to producing affordable long-lasting insecticidal nets, in which the insecticide remains active for about four to five years; these nets are readily adopted, facilitating efficient expansion of preventive interventions. In some situations, for example epidemics, other vector-control interventions, especially indoor residual spraying, are necessary; integrated vector management provides a framework for decision-making and rational use of insecticides.<sup>1</sup>

10. The policy of intermittent preventive treatment with antimalarial drugs to protect pregnant women had been adopted in 21 countries by late 2004. In five, that policy was being implemented throughout the country or progress towards that goal was on track.

## ISSUES

11. Many countries endemic for malaria have insufficient capabilities for large-scale implementation of control programmes at all levels of the health services. To be effective such programmes need governmental stewardship; national institutions that can select appropriate interventions and products, manage rapidly increasing resources, and collaborate with partners; and capacity at district level for microplanning, community mobilization, implementation, monitoring and evaluation. These needs should be met through development of capacity and suitable national policies on human resources.

12. The rapid increase in demand for artemisinin-based combination therapies in 2004 and the fact that it takes six to eight months for the plant from which artemisinin is extracted to grow have led to higher prices and temporary supply shortages. Stabilization of prices at a lower level and production volumes at high levels will require the recruitment of new producers who meet high quality standards and reliable forecasting of demand. The Institute of Medicine in the United States of America has proposed a global subsidy for such therapies, recognizing that they are an essential public health good,

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<sup>1</sup> Document WHO/CDS/CPE/PVC/2004.10.

which should be available and affordable through private and public channels;<sup>1</sup> Roll Back Malaria partners are exploring the feasibility of this proposal. The general application of parasitological confirmatory diagnosis could reduce use of medicines and thereby expenditures and drug pressure on plasmodia. Inexpensive rapid diagnostic tests for malaria are now available and recommended by WHO for specific settings, but these tests need to be improved. Furthermore, operational research is necessary to ascertain their optimal modes of deployment and benefits in various settings.

13. Evaluating the impact of malaria-control efforts is difficult because most malaria cases and deaths are not recorded by health services or civil registration. In areas where the epidemiology of malaria is stable, the impact of deaths from malaria is best assessed through the combination of mortality due to all causes in young children, coverage of malaria-control interventions, and cause-specific malaria mortality data from sentinel sites and special studies. Standardized household surveys provide crucial information for understanding all-cause mortality and coverage of interventions, but, as the next round of standardized UNICEF-supported Multiple Indicator Cluster Surveys will be conducted in 2005-2006, a thorough evaluation of global or regional progress will be possible only by the end of 2006. There is a need to strengthen efforts at the national level for programmatic monitoring and evaluation to improve performance.

14. In most countries it is unlikely that the targets set in the Abuja Declaration on Roll Back Malaria in Africa of at least 60% coverage will be reached in 2005. A proposal from a Roll Back Malaria Partnership consultation resets the target at ensuring that 80% of those at risk of or suffering from malaria benefit from available interventions by 2010, in order to ensure equitable access. For countries in Africa to attain this goal will require international investments of on average US\$ 2000 million per year and for 30 countries endemic for malaria outside Africa with a heavy burden of disease about US\$ 700 million per year. The concern for the disease-endemic countries is whether those investments will grow to cover the needs and whether they will be maintained for sufficient time. Assurance may be drawn from an analysis by a high-level panel of economists which ranked malaria control as the fourth-best project out of 17 to improve the living conditions of people in the world.<sup>2</sup>

15. Current malaria control is based on large-scale application of antimalarial medicines and insecticides. Novel antimalarial agents will probably become available over the coming decades thanks to a rich research effort and the systematic development work of the Medicines for Malaria Venture, but there is an urgent need to discover and develop new classes of insecticides and to investigate how they can be applied to delay onset of resistance. The advent of effective vaccines could lessen the use of insecticides and medicines. The results of recent field trials give reasons for optimism and renewed investment in vaccine research, but this optimism should not reduce investments in the development and application of other control interventions.

## **ACTION BY THE EXECUTIVE BOARD**

16. The Board is invited to consider the following draft resolution:

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<sup>1</sup> Arrow KJ, Panosian CB, Gelband H; *Institute of Medicine. Saving lives, buying time: economics of malaria drugs in an age of resistance*. Washington DC, The National Academies Press, 2004.

<sup>2</sup> [www.copenhagenconsensus.com](http://www.copenhagenconsensus.com).

The Executive Board,

Having considered the report on malaria;<sup>1</sup>

Noting that few countries endemic for malaria are likely to reach the targets set in the Abuja Declaration on Roll Back Malaria in Africa (25 April 2000) of ensuring that at least 60% of those at risk of or suffering from malaria benefited from suitable preventive and curative interventions by 2005, but that there is rapidly increasing momentum for expanding malaria-control interventions in African countries,

RECOMMENDS to the Fifty-eighth World Health Assembly the adoption of the following resolution:

The Fifty-eighth World Health Assembly,

Having considered the report on malaria;

Concerned that malaria continues to cause more than one million preventable deaths a year, especially in Africa among young children and other vulnerable groups;

Recalling that the period 2001-2010 has been proclaimed the Decade to Roll Back Malaria in Developing Countries, Particularly in Africa by the United Nations General Assembly,<sup>2</sup> and that combating HIV/AIDS, malaria and other diseases is included in the United Nations Millennium Development Goals;

Mindful that the global burden of malaria needs to be decreased in order to reach the Millennium Development Goal of reducing child mortality by two thirds by 2015 and to help achieve the Millennium Development Goals of improving maternal health and eradicating extreme poverty,

1. URGES Member States:

- (1) to establish national policies and operational plans to ensure that at least 80% of those at risk of or suffering from malaria benefit from major preventive and curative interventions by 2010 in accordance with WHO technical recommendations so as to ensure a reduction in the burden of malaria of at least 50% by 2010 and 75% by 2015;
- (2) to adopt policies for free, or highly subsidized, provision of insecticide-treated mosquito nets and antimalarial medicines for vulnerable groups in poor areas so as to ensure that these products are fully affordable for all groups at risk;
- (3) to assess the need for human resources at all levels of the health system in order to achieve the targets set in the Abuja Declaration and the Millennium

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<sup>1</sup> Document EB115/10.

<sup>2</sup> Resolution 55/284.

Development Goals, and to take the necessary steps to ensure the recruitment, training and retention of health personnel;

(4) to further enhance their financial support and development assistance to malaria activities in order to achieve the above targets and goals.

2. REQUESTS the Director-General:

(1) to reinforce and expand the Secretariat's work to improve existing national capabilities, and to cooperate with Member States, in collaboration with Roll Back Malaria partners, in order to ensure the full and cost-effective use of increased financial resources for achieving international goals and targets including the Millennium Development Goals related to malaria;

(2) to collaborate with malaria-affected countries and Roll Back Malaria partners to ensure that countries receive full support for necessary monitoring and evaluation;

(3) to collaborate with Roll Back Malaria partners, industry, and development in order to ensure sufficient quantities of artemisinin-based combination therapies are available;

(4) to strengthen collaboration with partners in industry and academia for development of affordable high-quality products for malaria control, including sensitive and specific diagnostic tests; an effective malaria vaccine; novel, effective and safe antimalarial medicines; and new insecticides and delivery modes to enhance effectiveness and delay the onset of resistance.

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