

### Overview of malaria control activities and programme progress

Malaria is a major public health problem in Malawi with all Malawians living in areas at risk and pregnant women and children especially vulnerable. Many achievements were made in the fight against malaria in 2003, including the training of 647 health personnel for improved malaria service delivery and care. Approximately 86 000 inpatients and an estimated 3 million outpatient malaria cases were treated in 2003. Progress in vector control activities has also been achieved, including the distribution of 1 052 338 ITNs countywide in 2003, and an additional 674 200 during the first half of 2004.

Activities related to increasing awareness of prevention of malaria in pregnancy and ensuring supplies of IPT medications improved in 2003 with the development of information, education and communication materials and a project to assist in the quantification and procurement of the necessary drug supplies.

Epidemic preparedness and emergency response for malaria was aided by the purchase of additional vehicles and computers and the mobilization of emergency buffer stocks of malaria commodities, especially ITNs. District health management teams were trained on data management to improve monitoring of the malaria situation. Information, education and communication activities in 2003 included the observation of SADC malaria week and Africa Malaria Day in April, and the development of new information, education and communication materials for IPT during pregnancy.

Several new initiatives are in the development stages that will potentially assist the MoH and NMCP in malaria control efforts in the near future including: (i) decentralizing activities within the government; (ii) implementing a sector wide approach; (iii) initiating integrated disease surveillance and response efforts; and (iv) receiving approved malaria proposals from the GFATM.

The NMCP still faces major constraints in implementing malaria control activities and its strategic plan. These include inadequate resources—human, material and financial—and incomplete information at all levels for monitoring and evaluation and for effective decision making. There is also a noticeably high level of staff turnover at all levels, resulting in lack of continuity of collection efforts and need for training and re-enforcement within the programme. In addition, more recent evidence is suggesting a declining efficacy of the first-line drug used in malaria treatment.

### National malaria policy and strategy environment

#### National malaria strategy overview for 2003

	Strategy
<b>Treatment and Diagnosis Guidelines</b>	Yes
Published/updated in	1997
<b>Monitoring antimalarial drug resistance</b>	Yes
Number of sites currently active	6
<b>Home management of malaria</b>	Yes
<b>Vector control using insecticides</b>	
<b>Monitoring insecticide resistance</b>	Yes
Number of sites currently active	6
<b>Insecticide-treated mosquito nets (ITNs)</b>	Yes
<b>Intermittent preventive treatment (IPT)</b>	Yes
<b>Epidemic preparedness</b>	Yes

#### Current antimalarial drug policy

	Current policy
<b>Uncomplicated malaria</b>	
<i>P. falciparum</i> (unconfirmed)	SP
<i>P. falciparum</i> (lab confirmed)	SP
<i>P. vivax</i>	
<b>Treatment failure</b>	Q(7d)
<b>Severe malaria</b>	Q(7d)
<b>Pregnancy</b>	
Prevention	SP (IPT)
Treatment	SP or Q

## EPIDEMIOLOGICAL DATA

Following WHO recommendations, malaria case reporting is carried out in most countries. The data presented below reflect aggregated malaria cases at the national level and are presented by gender, age and subnational level as submitted to WHO. Malaria reporting from national surveillance systems varies in quality and reporting completeness and may have limited value in understanding the actual malaria burden, but may be useful for understanding trends in the relative burden of malaria in the public health sector.

### Reported malaria cases (annual)

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
3 870 904		7 590 313	4 686 201	4 736 974	6 164 666	6 183 290	2 761 269	2 985 659	4 193 145
2000	2001	2002	2003						
3 774 982	2 955 627	2 853 317		Date of last report: 15 December 2004					

### Reported malaria by type and quality

For most recent year

Reported malaria cases	2 853 317
Reported malaria deaths	6 993

#### Probable or clinically diagnosed

Malaria cases	2 853 317
Severe (inpatient or hospitalized) cases	100 213
Malaria deaths	6 993

Slides taken  
Rapid diagnostic tests (RDTs) taken

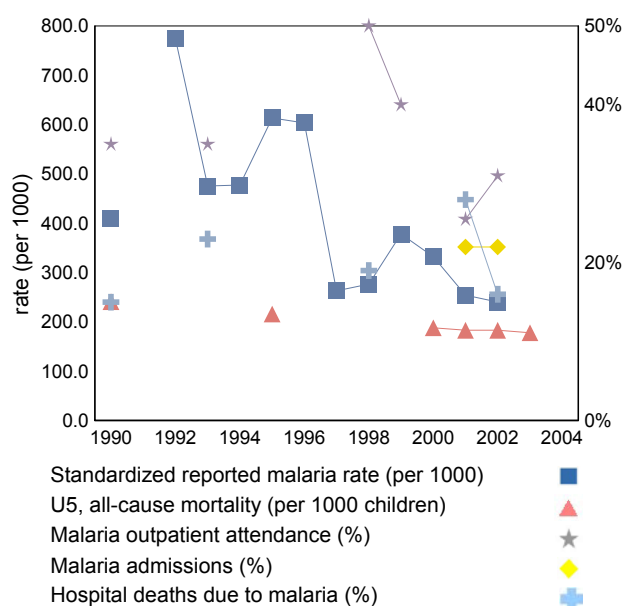
#### Laboratory confirmed

Malaria cases	
<i>P. falciparum</i> or mixed	
<i>P. vivax</i>	
Severe (inpatient or hospitalized) cases	
Malaria deaths	

#### Investigations

Imported cases

Estimated reporting completeness (%)



### Reported malaria cases by age and gender

Group	Subgroup	2000	2001	2002	2003	%
	Total	3 774 982	2 955 627	2 853 317		100
Age	<5 years		1 053 061			36
	5> years		1 209 856			41

### Reported malaria cases by selected subnational area

15 of 26 areas	2000	2001	2002	2003	%
Blantyre			274 271		10
Mangochi			254 075		9
Lilongwe			196 477		7
Mchinji			158 082		6
Kasungu			137 829		5
Mzimba			134 952		5
Zomba			123 332		4
Mulanje			122 862		4
Chikwawa			119 437		4
Ntcheu			112 399		4
Machinga			108 383		4
Dowa			102 973		4
Salima			96 140		3
Ntchisi			96 032		3
Nkhotakot			93 439		3

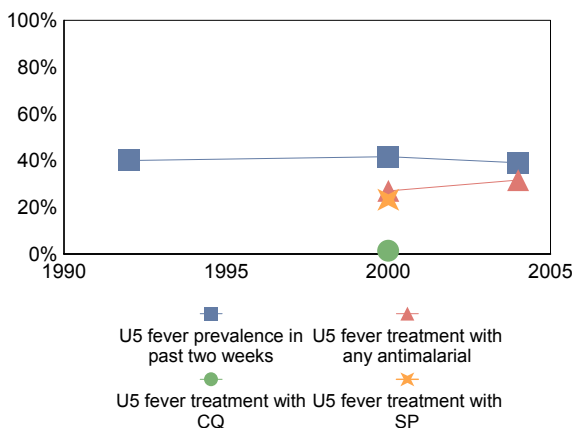
## COVERAGE OF ROLL BACK MALARIA INTERVENTIONS

Information related to the coverage of RBM key interventions is presented here. This includes coverage of antimalarial treatment, possession and use of insecticide-treated nets (ITNs), and use of intermittent preventive treatment (IPT) among pregnant women (PW) where national policy indicates.

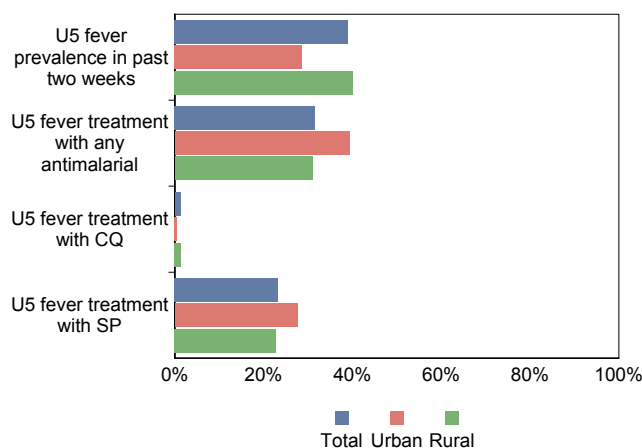
### Fever prevalence and treatment with antimalarials

Prompt access to effective treatment is one of the key interventions promoted by RBM. Information presented below is from household surveys on fever prevalence and reported treatment of fever with antimalarials among children under 5 years of age (U5) within the previous 2 weeks.

**Trend in fever prevalence and antimalarial coverage estimates from national surveys**



**Estimate of fever prevalence and treatment with antimalarials from most recent national survey**



### Available national surveys

#### MoH 2004

Sample size (U5s):

Field work: Jan-Mar 2004

Scale: national

Supporting organization:

Ministry of Health, UNICEF, CDC, Center for Social Research

#### DHS 2000

Sample size (U5s): 10 559

Field work: Jul-Nov 2000

Scale: national

Supporting organization:

Macro DHS

#### DHS 1992

Sample size (U5s): 3 789

Field work: Sep-Nov 1992

Scale: national

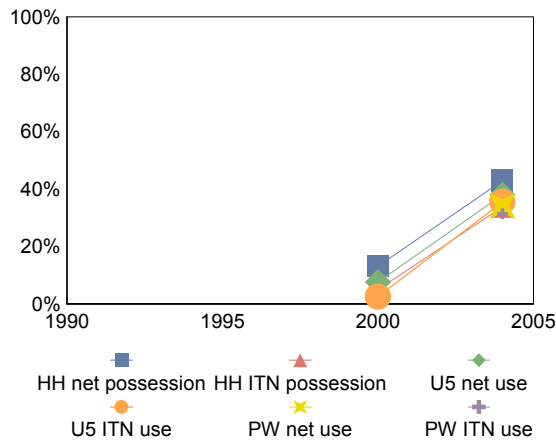
Supporting organization:

Macro DHS

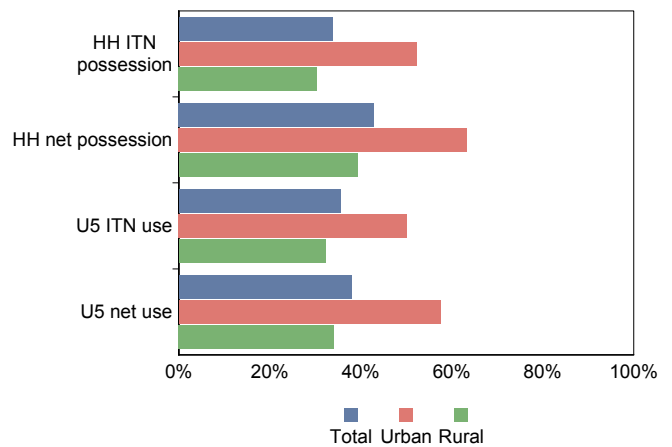
## Insecticide-treated nets

ITNs are one of the key interventions promoted by RBM. Coverage of ITNs is best assessed through household (HH) surveys which ask questions on possession and use of nets, as well as insecticide treatment status, among the target populations of children under 5 years of age (U5) and pregnant women. Data below represent available household survey results in which household possession and use of nets and ITNs have been assessed.

**Trend in mosquito net coverage estimates from national surveys**



**Estimates of ITN coverage from most recent national survey**



### Available national surveys

#### MoH 2004

Sample size (HHs or U5s):  
Field work: Jan-Mar 2004  
Scale: national

Supporting Organization: Ministry of Health, UNICEF, CDC, Center for Social Research

#### DHS 2000

Sample size (HHs or U5s): 14 213  
Field work: Jul-Nov 2000  
Scale: national

Supporting Organization: Macro DHS

### Available sub-national surveys

#### IMCI 2000

Sample size (HHs or U5s): 2 380  
Field work: Aug 2000  
Scale: 5 districts: Blantyre, Kasungu, Lilongwe, Mwanza

Supporting Organization: UNICEF

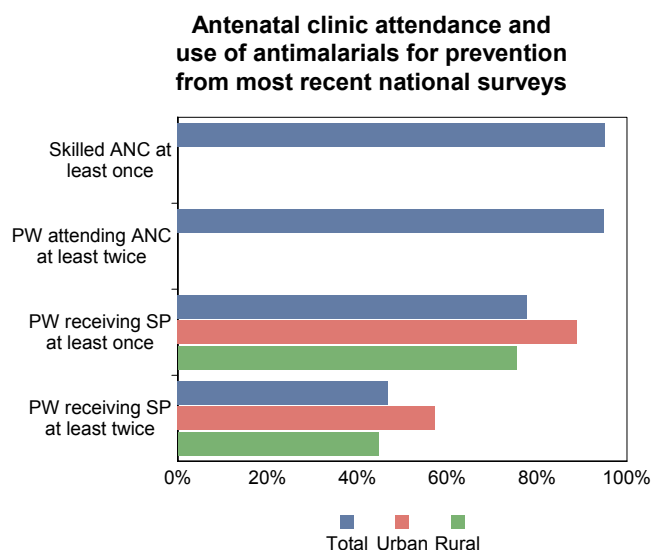
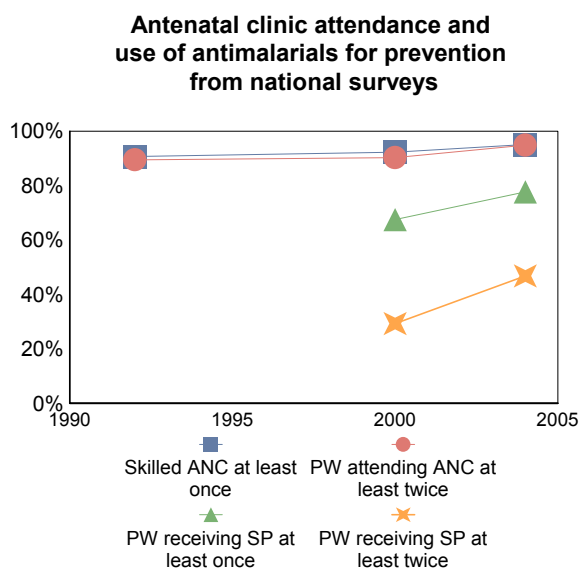
#### PSI 1998

Sample size (HHs or U5s): 1 126  
Field work:  
Scale: 1 district: Blantyre-urban, rural

Supporting Organization: Population Services International

## Intermittent preventive treatment during pregnancy

RBM promotes IPT with SP in countries with areas of stable malaria transmission as one of its key prevention strategies for pregnant women (PW). However, few surveys have assessed the coverage of IPT among pregnant women. Data below represent available household survey results in which indicators related to monitoring IPT have been assessed. The level of skilled antenatal attendance and the percentage of women attending antenatal clinics (ANC) at least twice are presented as a background for which improvements in IPT can be achieved.



### Available national surveys

#### MoH 2004

Sample size (PW): 8 057  
 Field work: Jan-Mar 2004  
 Scale: national  
 Supporting organization: Ministry of Health, UNICEF, CDC, Center for Social Research

#### DHS 2000

Sample size (PW): 8 057  
 Field work: Jul-Nov 2000  
 Scale: national  
 Supporting organization: Macro DHS

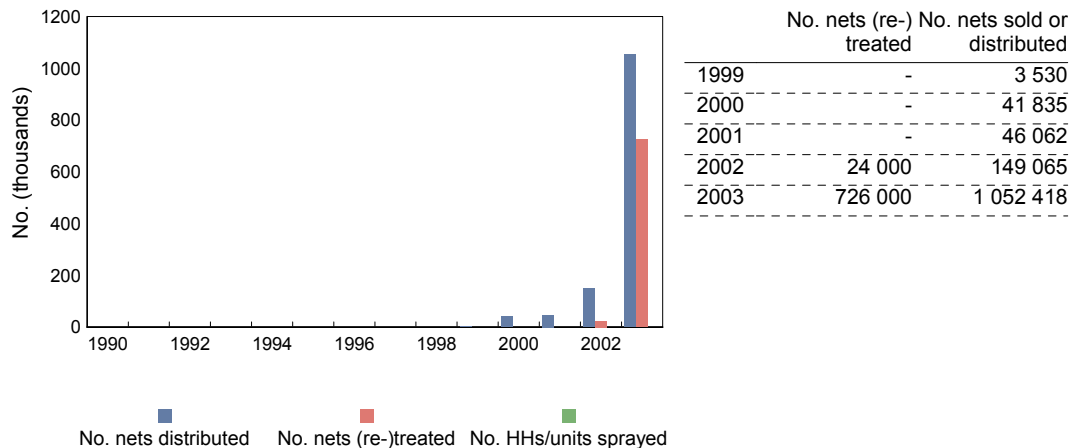
#### DHS 1992

Sample size (PW): 2 854  
 Field work: Sep-Nov 1992  
 Scale: national  
 Supporting organization: Macro DHS

## SERVICE DELIVERY AND MALARIA-RELATED COMMODITIES

### General malaria-related services delivered

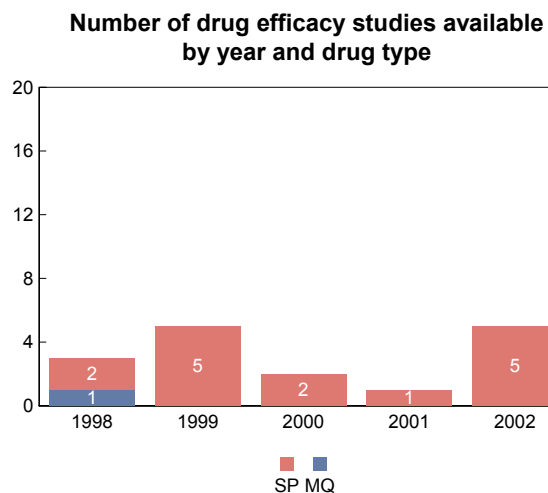
Services delivered for malaria control include numbers of nets and insecticides delivered or sold, numbers of nets (re-)treated with insecticide and numbers of households (HHs)/units sprayed during IRS campaigns. These services and service-related commodities mostly reflect core malaria control activities of national malaria control programmes. The information reflects annual, country-reported data.



## MONITORING ANTIMALARIAL DRUG EFFICACY

Monitoring antimalarial drug efficacy is important for understanding the impact of antimalarial treatment being delivered and the need for drug policy change, essential for ensuring prompt access to effective treatment. Median, range and quartiles are based on percentage clinical failure for uncomplicated *P. falciparum* malaria for countries in Africa south of the Sahara, and percentage total failure for all other areas. Included are studies that used WHO protocol among selected drugs.

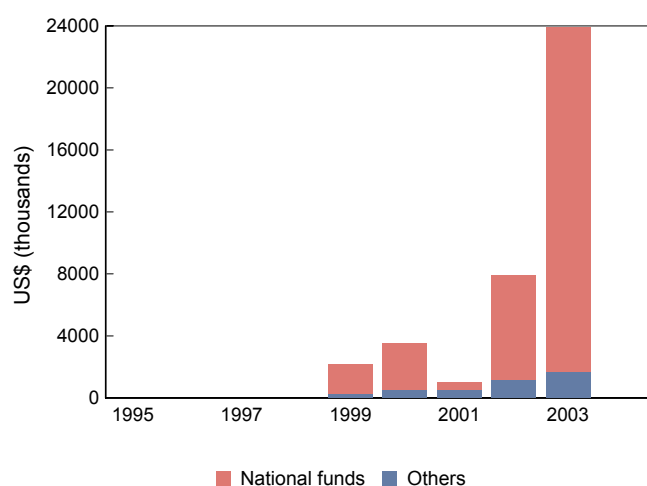
Study years	Number of studies	Median	Range		Percentile	
			Low	High	25th	75th
<b>SP</b>						
1998-2002	15	18.6	2.8	40.0	16.6	33.3
<b>MQ</b>						
1998	1	10.2				



## FINANCING FOR MALARIA

### Annual funding for malaria control

This information represents country-reported national and other resources budgeted or spent for national malaria control programme efforts. If information was reported in a different currency than US\$, the annual average of the official exchange rate from the World Development Index was used for conversion. Currency is presented in US\$ (thousands).



	National funds	Others
1995	-	-
1996	-	-
1997	-	-
1998	-	-
1999	1 880	300
2000	3 000	500
2001	500	500
2002	6 720	1 200
2003	22 238	1 700
2004	-	-

### Malaria funds from the Global Fund to Fight HIV, Tuberculosis, and Malaria

Information on additional resources provided to countries through GFATM from 2-year committed funds for malaria from successful proposals through the first four rounds is presented. The details on approved proposals, grant agreements and disbursements to date are provided. Figures are presented in US\$. These data are maintained and updated by GFATM.

Approved proposals			Grant agreements and disbursements (as of 13 January 2005)						
Source	Round	Total year 1-2 budgets	Principal recipient	Signed	Signature date	Grant amount	No. of disbursements	Total disbursed	% disbursed
CCM	2	20 872 000		No			-		

### General notes and remarks

See explanatory notes at the beginning of the section.