

Overview of malaria control activities and programme progress

The Eritrea NMCP implements a range of control strategies based on the global RBM strategies including: (i) case management—early diagnosis and prompt and effective treatment; (ii) vector control—environmental and larviciding; (iii) ITNs; (iv) information, education, and communication materials; (v) training; (vi) epidemic forecasting and preparedness; (vii) operations research, and (viii) monitoring, evaluation and supervision. Targets set for the above strategies are broadly in line with, or exceed those contained in the Abuja Declaration, including 60% of pregnant women sleeping under an ITN and 75% of children under 5 years of age sleeping under an ITN. The target for chemoprophylaxis in pregnancy is only 15%, compared with the Abuja target of 60%.

A situation analysis of malaria in pregnancy was completed in 2002 but the results have not yet been transformed into policy. Given the difficulties of developing an appropriate policy for malaria in pregnancy under conditions of seasonal transmission and moderate proportion of *P. vivax* infection (7%), the following three-pronged approach has been proposed: (i) promotion of the use of ITNs by pregnant women; (ii) early diagnosis and effective treatment; and (iii) anaemia prevention through iron folate supplementation and nutrition counselling. Further development of the malaria in pregnancy policy is required.

The GFATM proposal sets higher targets for ITN coverage than the Abuja Declaration: by the end of 2007 to increase the percentage of households in malaria-endemic areas with at least two ITNs to 90%, ITN (re-)treatment rates from 20% to 90% in malaria-endemic areas and the percentage of pregnant women in malarious areas sleeping under ITNs from 40% to 80%. Malaria prevention and control strategies are implemented by the NMCP under the Communicable Disease Control Unit and will be integrated with other disease control initiatives such as control of tuberculosis, HIV/AIDS, CDD/ARI Integrated Management of Childhood Illnesses and child survival at the zonal, sub-zonal and community levels. The current malaria strategy and the GFATM proposal include the provision of free ITNs to pregnant women attending antenatal clinic services or giving birth at health facilities.

Since 1998, reported malaria cases and deaths have been on a downward trend. Low rainfall totals for most years since 1998 are likely to have contributed to this trend. In addition, variations in reporting rates and the appropriateness of the indicators being used—e.g. proportion of total disease/mortality burden attributed to malaria—are also a factor. However, it is probable that the increased coverage of interventions has also contributed to this reported decline in the malaria burden.

National malaria policy and strategy environment

National malaria strategy overview for 2003

	Strategy
Treatment and Diagnosis Guidelines Published/updated in	Yes
Monitoring antimalarial drug resistance Number of sites currently active	Yes
Home management of malaria	Yes
Vector control using insecticides	Yes
Monitoring insecticide resistance Number of sites currently active	Yes
Insecticide-treated mosquito nets (ITNs)	Yes
Intermittent preventive treatment (IPT)	No
Epidemic preparedness	Yes

Current antimalarial drug policy

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

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
					81 183	129 908		255 150	147 062
2000	2001	2002	2003	Date of last report: 23 April 2004					
119 155	125 746	75 386	72 023						

Reported malaria by type and quality

For most recent year

Reported malaria cases	72 023
Reported malaria deaths	78

Probable or clinically diagnosed

Malaria cases	72 023
Severe (inpatient or hospitalized) cases	
Malaria deaths	78

Slides taken
Rapid diagnostic tests (RDTs) taken

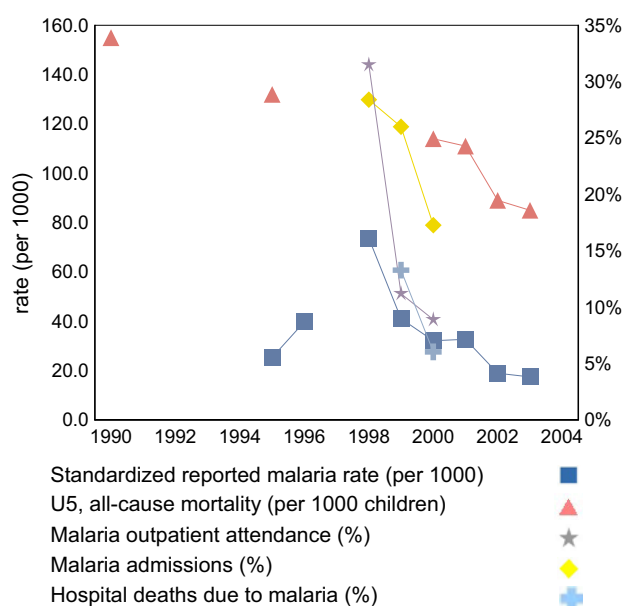
Laboratory confirmed

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	119 155	125 746	75 386	72 023	100
Age	<5 years	23 081	25 895		17 382	24
	5> years	96 074	99 851		54 641	76

Reported malaria cases by selected subnational area

6 areas	2000	2001	2002	2003	%
Gash Barka	60 981				51
Dehub	27 391				23
North Red Sea	16 898				14
Anseba	7 924				7
Maekal	4 773				4
South Red Sea	1 265				1

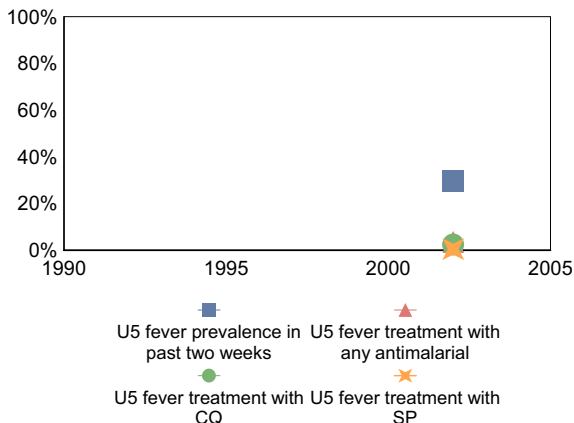
COVERAGE OF ROLL BACK MALARIA INTERVENTIONS

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.

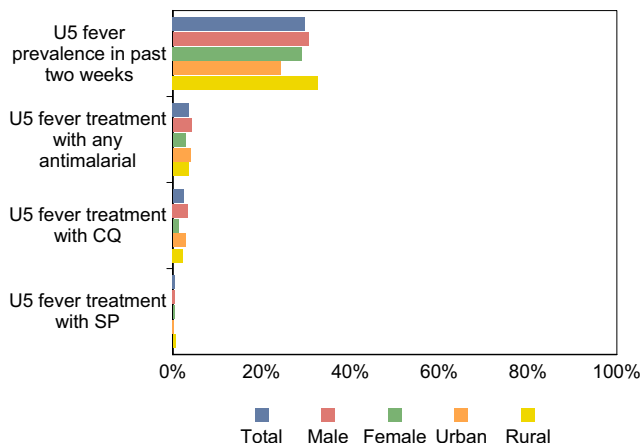
Fever prevalence and treatment with antimalarials

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

DHS 2002

Sample size (U5s): 1 714

Field work: Mar-Jun 2002

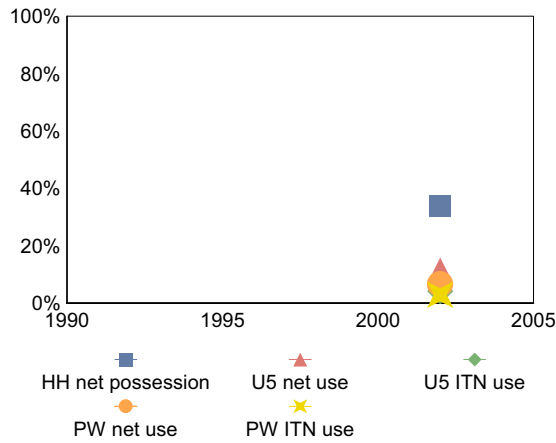
Scale: national

Supporting organization: Macro DHS

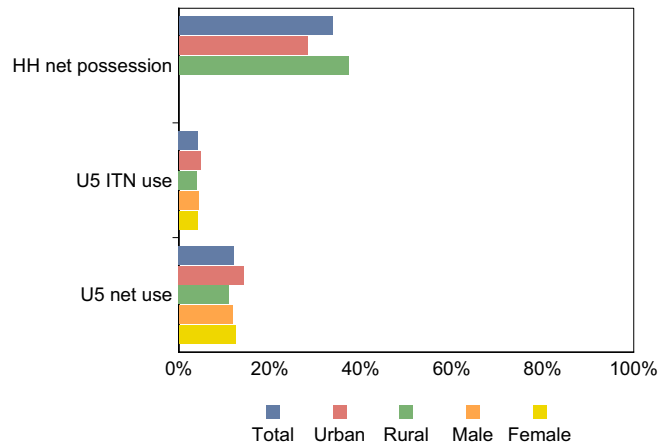
Insecticide-treated nets

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

DHS 2002

Sample size (HHs or U5s): 9 389
Field work: Mar-Jun 2002
Scale: national

Supporting Organization: Macro DHS

Available sub-national surveys

MoH 2003

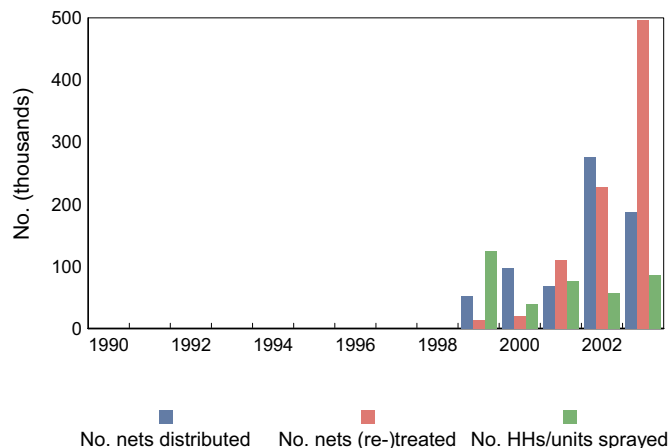
Sample size (HHs or U5s): 2 341
Field work: Aug-Sep 2003
Scale: 3 zobas: Anseba, Gash Barka, Debub

Supporting Organization: Tulane University

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.

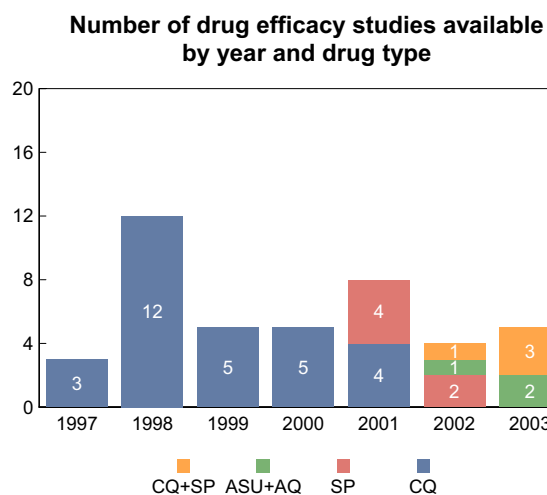


	No. HHs/units sprayed	No. nets (re-) treated	No. nets sold or distributed
1999	125 498	12 711	51 517
2000	39 838	20 437	97 324
2001	76 754	110 371	67 708
2002	56 336	227 750	276 038
2003	86 574	497 117	187 709

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.

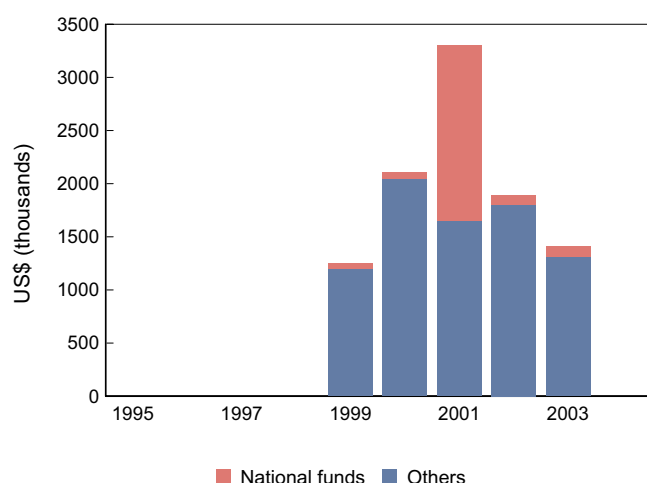
Study years	Number of studies	Median	Range		Percentile	
			Low	High	25th	75th
CQ						
1997-2001	29	42.8	12.6	66.6	28.6	47.3
SP						
2001-2002	6	3.1	0.0	15.4	0.0	10.3
CQ+SP						
2002-2003	4	6.5	0.0	10.2	1.9	9.7
ASU+AQ						
2002-2003	3	0.0	0.0	1.4	0.0	1.4



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	50	1 200
2000	60	2 048
2001	1 652	1 652
2002	85	1 800
2003	98	1 316
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	2 617 633	MoH	Yes	28-Jul-03	2 617 633	1	324 063	12.4%

General notes and remarks

See explanatory notes at the beginning of the section.