United Republic of Tanzania

COUNTRY PROFILE

Overivew of malaria control activities and programme progress

Malaria is still a major public health problem in the United Republic of Tanzania, as the leading cause of outpatient and inpatient health service attendance and the leading cause of death in both children and adults. The NMCP strategic plan is based on four main components: (i) prompt and effective treatment; (ii) vector control, especially ITNs; (iii) prevention of malaria in pregnancy; and (iv) malaria epidemic prevention and control. In late 2001, the national antimalarial drug policy changed to SP as a result of increasing evidence of resistance of CQ as the first-line antimalarial drug. In 2004, the antimalarial drug policy was revised again with support from successful proposals and available funds from the GFATM.

The NMCP has conducted training of MCH coordinators in IPT, follow-up after training of prescribers on case management, orientation of laboratory technologists for malaria diagnosis and training of tutors on nursing care of malaria and district trainers on supervisory skills. The NMCP, in collaboration with one of the primary health-care institutions, has developed malaria epidemiology tools for council health management, which will guide local teams in planning for malaria control. The NMCP conducts annual meetings on Malaria/Integrated Management of Childhood Illnesses for all district medical officers and partners in malaria control in the country.

Vector control and ITN-related activities have been supported with the production of the first draft of the guidelines for integrated vector control, initial work on testing for vector resistance to pyrethroids and the tendering for scaling up of ITNs through the nationwide voucher scheme. Emergency stocks of antimalarial drugs, insecticides and sprayers were procured and distributed to 10 epidemic prone districts and capacity building of CHMTs on the system for early detection began in earnest in 2003 and 2004.

The NGO community involved in malaria control has formed an alliance called the Tanzania NGO Alliance Against Malaria. Another achievement during this implementation period was the NMCP collaboration with the Centre for the Enhancement of Effective Malaria Interventions in developing a 12-week malaria control module for training malaria focal workers and who have been appointed in all districts in the country. The first training session with 20 participants took place in November–December 2004.Constraints faced by the NMCP include a lack of a concrete malaria communication strategy and insufficient participatory involvement of other key ministries. At local level, few NGOs and community-based organizations have been incorporated in malaria control activities for promotion and advocacy of malaria prevention strategies. There are continued human resource constraints at all levels.

National malaria policy and strategy environment

National malaria strategy overview for 2003

	Strategy
Treatment and Diagnosis Guidelines	Yes
Published/updated in	2001
Monitoring antimalarial drug resistance	Yes
Number of sites currently active	8
Home management of malaria	No
Vector control using insecticides	Yes
Monitoring insecticide resistance	Yes
Number of sites currently active	
Insecticide-treated mosquito nets (ITNs)	Yes
Intermittent preventive treatment (IPT)	Yes
Epidemic preparedness	Yes

Current antimalarial drug policy

	Current policy
Uncomplicated malaria	
P. falciparum (unconfirmed)	ATM-LUM* ASU+AQ (Zanzibar)
P. falciparum (lab confirmed)	ATM-LUM* ASU+AQ (Zanzibar)
P. vivax	NA
Treatment failure	Q(7d) ATM-LUM (Zanzibar)
Severe malaria	Q(7d)
Pregnancy	
Prevention	SP (IPT)
Treatment	SP

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
10 715 736	8 715 736	7 681 524	8 777 340	7 976 590	2 438 040	4 969 273	1 131 655	30 504 654	423 967

2000	2001	2002	2003
		7 489 890	10 712 526

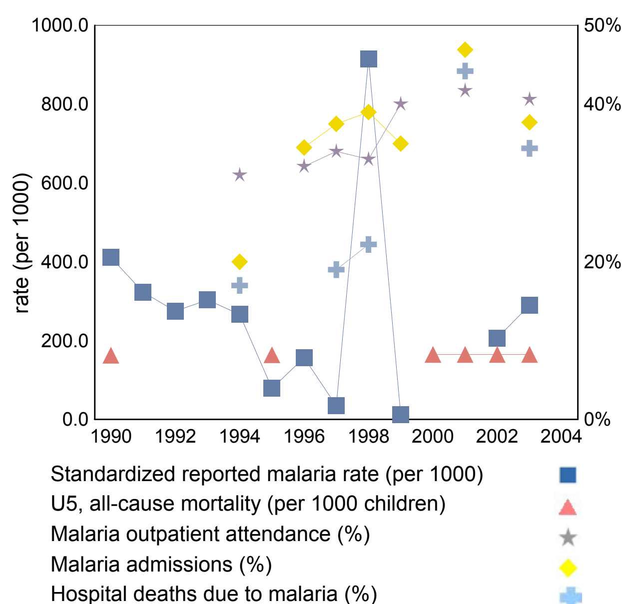
Date of last report: 15 December 2004

Reported malaria by type and quality

For most recent year: 2003

Reported malaria cases	10 712 526
Reported malaria deaths	14 156

Probable or clinically diagnosed	
Malaria cases	10 712 526
Severe (inpatient or hospitalized) cases	521 019
Malaria deaths	14 156
Slides taken	3 116 332
Rapid diagnostic tests (RDTs) taken	
Laboratory confirmed	
Malaria cases	1 509 236
P. falciparum or mixed	
P. vivax	
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			7 489 890	10 712 526	100
Age	<5 years			3 394 763	4 800 768	45
	5> years			4 095 127	5 897 601	55

Reported malaria cases by selected subnational area

4 areas	2000	2001	2002	2003	%
Lushoto	65 442	80 115		48 351	<1
Iringa rural	47 329	53 107	25 392		<1
Muleba	164 642	145 000	54 722	30 907	<1
Babati	92 581	67 557	8 988		<1

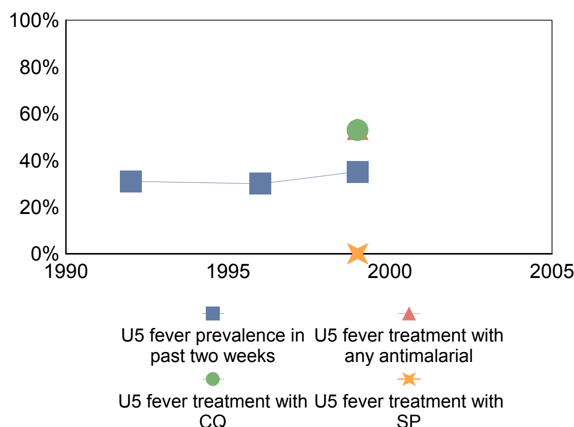
COVERAGE OF ROLL BACK MALARIA INTERVENTIONS

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.

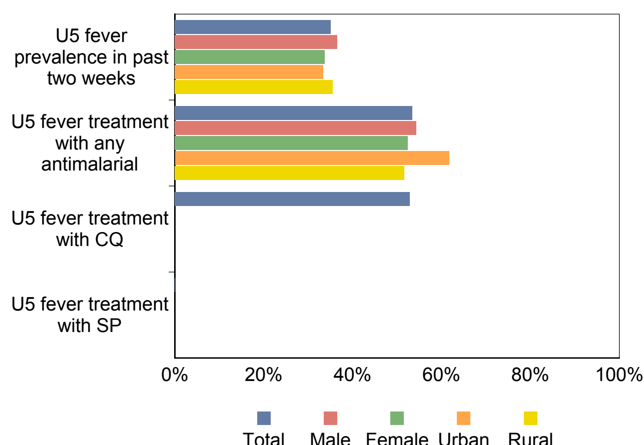
Fever prevalence and treatment with antimalarials

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 1999
Sample size (U5s): 2 898
Field work: Sep-Nov 1999
Scale: national
Supporting organization: Macro DHS

DHS 1996
Sample size (U5s): 6 188
Field work: Jul-Nov 1996
Scale: national
Supporting organization: Macro DHS

DHS 1991-92
Sample size (U5s): 7 256
Field work: Oct 1991-Mar 1992
Scale: national
Supporting organization: Macro DHS

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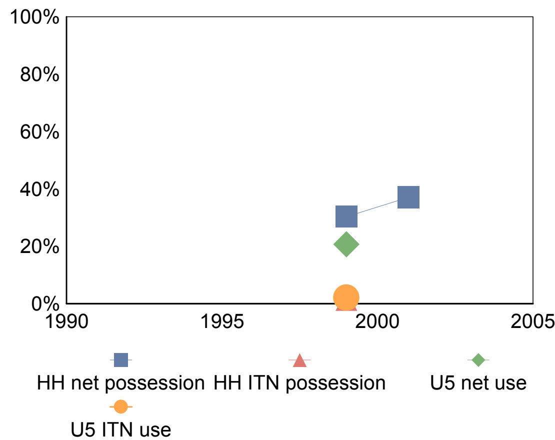
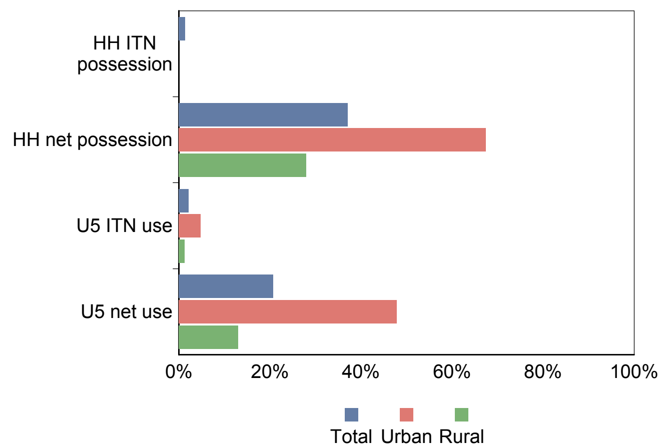
Insecticide-treated nets

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

NSO 2001
Sample size (HHs or U5s):
Supporting Organization: National Statistics Office
Field work:
Scale: national

DHS 1999
Sample size (HHs or U5s): 3 615
Supporting Organization: Macro DHS
Field work: Sep-Nov 1999
Scale: national

Available sub-national surveys

Nathan R., et al. 2004
Sample size (HHs or U5s): 11 970
Supporting Organization: MoH, SDC, CDC
Field work:
Scale: 2 districts: Kilombero, Ulanga

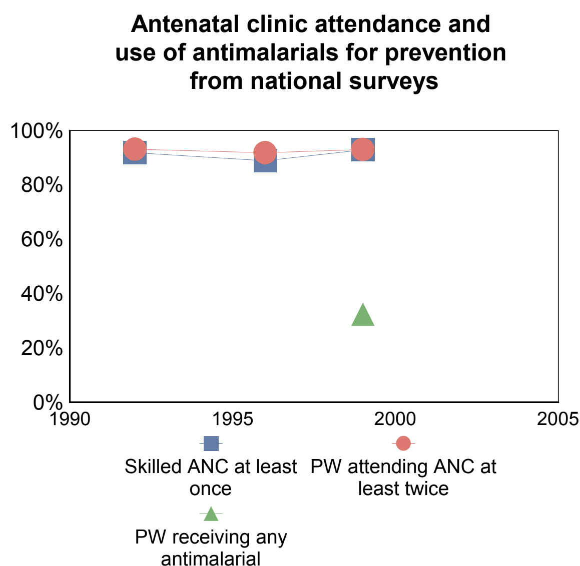
PSI 2000
Sample size (HHs or U5s): 5 262
Supporting Organization: Population Services International
Field work:
Scale: 4 areas: Dar es Salaam region; Morogoro, Dodoma, Mtwara districts

PSI 1998
Sample size (HHs or U5s): 4 506
Supporting Organization: Population Services International
Field work:
Scale: 4 areas: Dar es Salaam region; Morogoro, Dodoma, Mtwara districts (rural areas)

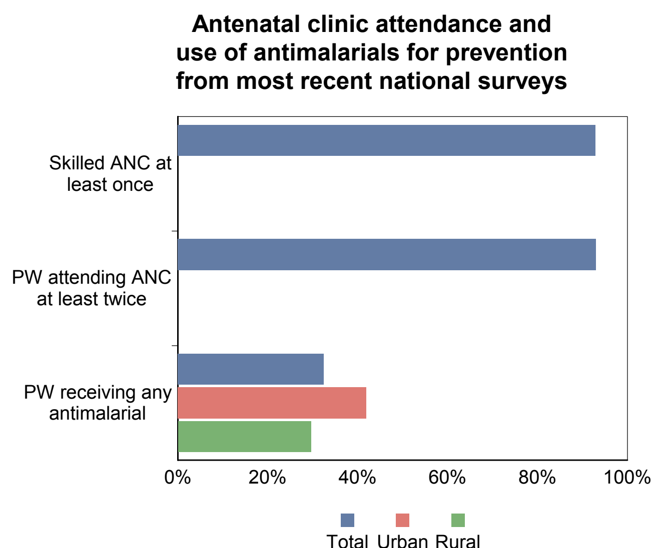
Intermittent preventive treatment during pregnancy

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.

Antenatal clinic attendance and use of antimalarials for prevention from national surveys



Antenatal clinic attendance and use of antimalarials for prevention from most recent national surveys



Available national surveys

DHS 1999
Sample size (PW): 2 183 — Supporting organization: Macro DHS
Field work: Sep-Nov 1999
Scale: national

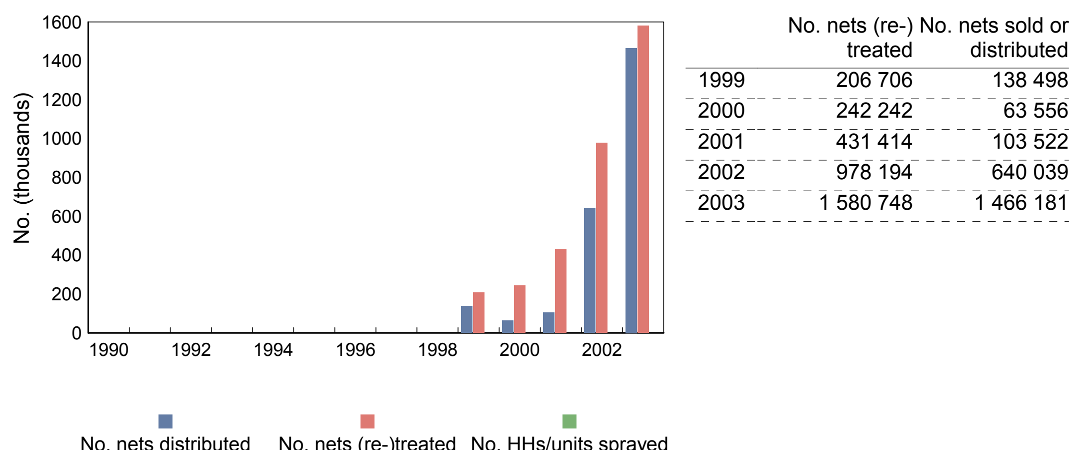
DHS 1996
Sample size (PW): 4 286 — Supporting organization: Macro DHS
Field work: Jul-Nov 1996
Scale: national

DHS 1991-92
Sample size (PW): 5 131 — Supporting organization: Macro DHS
Field work: Oct 1991-Mar 1992
Scale: national

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.



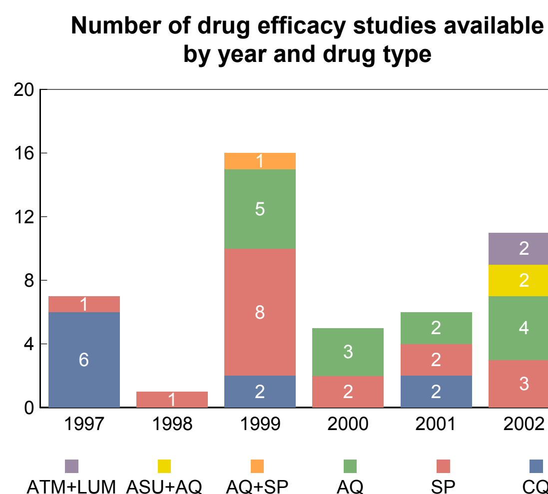
	No. nets (re-) treated	No. nets sold or distributed
1999	206 706	138 498
2000	242 242	63 556
2001	431 414	103 522
2002	978 194	640 039
2003	1 580 748	1 466 181

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 Low	Range High	Percentile 25th	Percentile 75th
Mainland						
CQ						
1997-1999	8	43.0	27.6	71.0	36.6	53.5
SP						
1997-2002	15	10.5	1.4	33.8	5.6	16.9
AQ						
1999-2002	12	3.7	0.0	10.8	1.6	6.9
AQ+SP						
1999	1	3.4				
Zanzibar						
CQ						
2001	2	60.5	60.2	60.8	60.2	60.8
SP						
2001	2	8.9	4.7	13.1	4.7	13.1
AQ						
2001	2	5.6	4.7	6.5	4.7	6.5
ATM+LUM						
2002	2	1.0	0.0	2.0	0.0	2.0
ASU+AQ						
2002	2	1.9	1.8	1.9	1.8	1.9

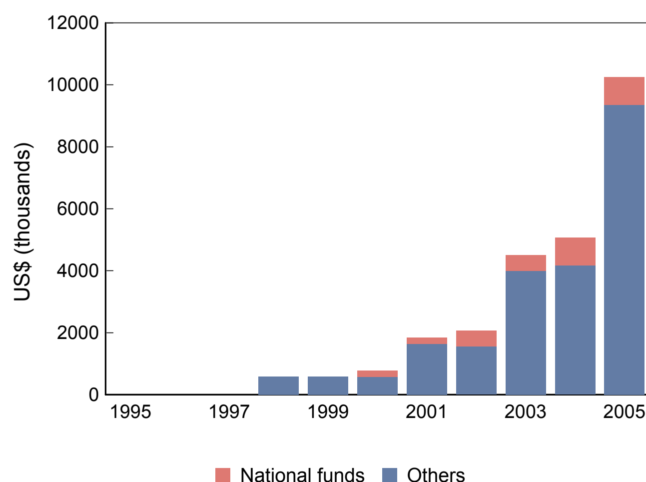
Number of drug efficacy studies available by year and drug type



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	-	590
1999	-	590
2000	200	573
2001	200	1 641
2002	500	1 566
2003	500	4 006
2004	900	4 176
2005	900	9 351

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	1	11 959 076	**MoH**	Yes	11-Dec-02	11 959 076	5	6 345 071	53.1%
CCM	4	54 201 787		No			-		
			MoH	Yes	23-Nov-04	5 089 361	1	2 792 077	54.9%

General notes and remarks

* policy adopted, not presently being deployed, implementation process ongoing.
See explanatory notes at the beginning of the section.
Malaria is not a notifiable disease in the country, so information on reported malaria is expected to be incomplete. Nevertheless, comprehensive reported malaria data are collected from 109 districts out of 114, representing about 96% coverage of all health facilities.