

Overview of malaria control activities and programme progress

Malaria remains a serious public health problem in China. The provinces of Yunnan and Hainan are the areas where malaria has been the most endemic with high transmission of *P. falciparum*. Malaria resurgence has occurred for 3 consecutive years since 2000. In addition to the southern mountainous area of Hainan and the border area of Yunnan, malaria is also prevalent in several provinces of central China where *A. anthropophagus* is the principal transmitting vector. Fluctuating incidence has been recorded in the past several years with focal epidemics from time to time and these are the key areas for malaria control at present. Although the annual incidence has been reduced to less than 1/10 000 in most areas where *A. sinensis* plays a role as the major vector, focal resurgence or outbreaks were reported in some areas as a result of increased population movement.

The Reporting System of Communicable Diseases and Unexpected Public Health Events established by the China Centres for Disease Control in 2004 provides an information and surveillance system and requests that communicable diseases, including malaria, are "online, by case and directly reported". The coverage of the system has reached county level in general, and township level in some endemic regions. With an added special malaria reporting procedure, the accuracy of malaria incidence reporting has been considerably improved. In addition, some special-purpose investigations, such as the baseline survey supported by the GFATM, has helped rectify the figures from the routine reports.

A 3-year malaria control programme is being developed under the National Eleventh Five-Year Plan of Development. The national control programme will be integrated with other relevant projects, such as the malaria control project in the high transmission region funded by the GFATM and the disease surveillance project in the Mekong Region.

National malaria policy and strategy environment

National malaria strategy overview for 2003

	Strategy
Treatment and Diagnosis Guidelines	Yes
Published/updated in	
Monitoring antimalarial drug resistance	Yes
Number of sites currently active	4
Home management of malaria	NA
Vector control using insecticides	Yes
Monitoring insecticide resistance	
Number of sites currently active	
Insecticide-treated mosquito nets (ITNs)	Yes
Intermittent preventive treatment (IPT)	NA
Epidemic preparedness	Yes

Current antimalarial drug policy

	Current policy
Uncomplicated malaria	
<i>P. falciparum</i> (unconfirmed)	CQ/ATM(5d)/DHA (Yunnan, Hainan)
<i>P. falciparum</i> (lab confirmed)	ATM/ASU(5d)/DHA (Yunnan, Hainan)
<i>P. vivax</i>	CQ+PQ(8d)
Treatment failure	ATM/ASU(7d).Q/PYR (Yunnan, Hainan)
Severe malaria	ATM (Yunnan, Hainan) or QC
Pregnancy	
Prevention	
Treatment	Q(7d)/CQ (Yunnan, Hainan)

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
117 359	101 600	73 955	58 569	62 101	49 669	37 168	34 645	31 319	29 039
2000	2001	2002	2003	Date of last report: 11 April 2005					
24 088	26 945	35 298	40 681						

Reported malaria by type and quality

For most recent year

Reported malaria cases	40 681
Reported malaria deaths	52

Probable or clinically diagnosed

Malaria cases
Severe (inpatient or hospitalized) cases
Malaria deaths

Slides taken
Rapid diagnostic tests (RDTs) taken

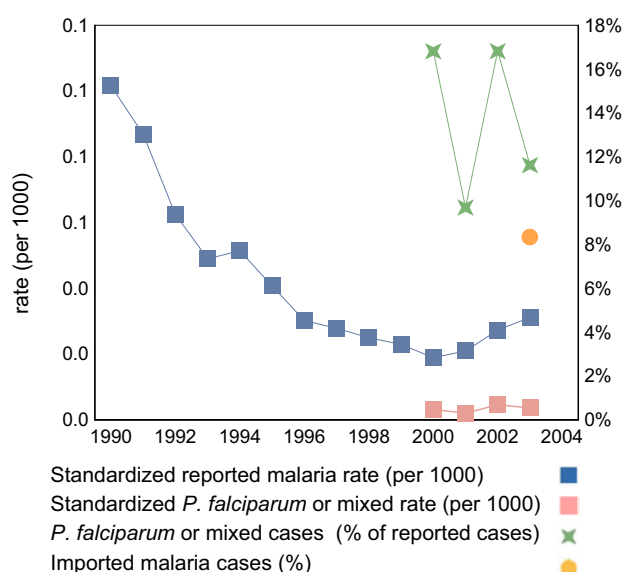
Laboratory confirmed

Malaria cases 40 681
P. falciparum or mixed 4 727
P. vivax 35 953
 Severe (inpatient or hospitalized) cases
 Malaria deaths 52

Investigations

Imported cases 3 391

Estimated reporting completeness (%)



Reported malaria cases by age and gender

Group	Subgroup	2000	2001	2002	2003	%
	Total	24 088	26 945	35 298	40 681	100

Reported malaria cases by selected subnational area

15 of 20 areas	2000	2001	2002	2003	%
Yunnan	8 775	8 709	12 218	15 431	38
Anhui		1 732	5 999	8 025	20
Hainan	1 600	3 205	5 354	6 357	16
Hubei		612	5 101	5 344	13
Henan		1 882	2 921	2 448	6
Jiangsu		663	686	638	2
Guizhou		461	713	577	1
Guangxi	53	370	392	337	1
Zhejiang		196	229	291	1
Sichuan		435	443	289	1
Guangdong		649	403	246	1
Hunan		215	313	180	<1
Shanghai			131		<1
Chongqing			86		<1
Fujian			85		<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.

Insecticide-treated nets

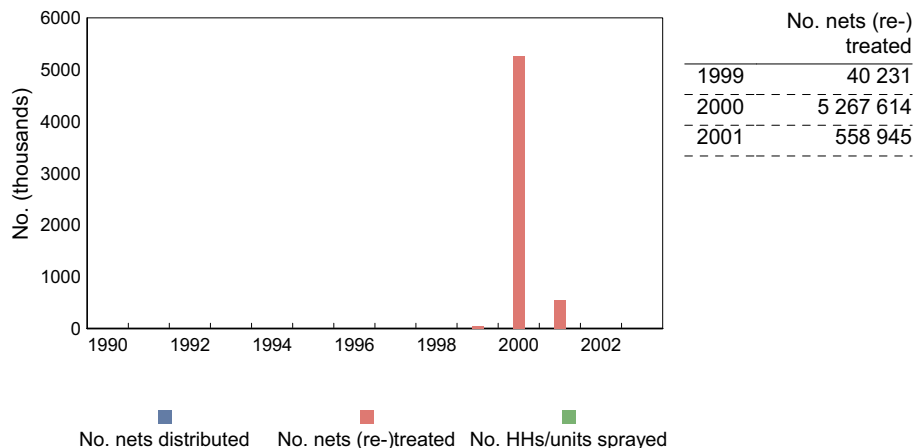
ITNs are one of the key interventions promoted by RBM. Coverage of ITNs is best assessed through household (HH) surveys which ask questions on possession and use of nets, as well as insecticide treatment status, among the target populations of children under 5 years of age (U5) and pregnant women. Data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

No survey-based estimates of mosquito net or ITN coverage are currently available.

SERVICE DELIVERY AND MALARIA-RELATED COMMODITIES

General malaria-related services delivered

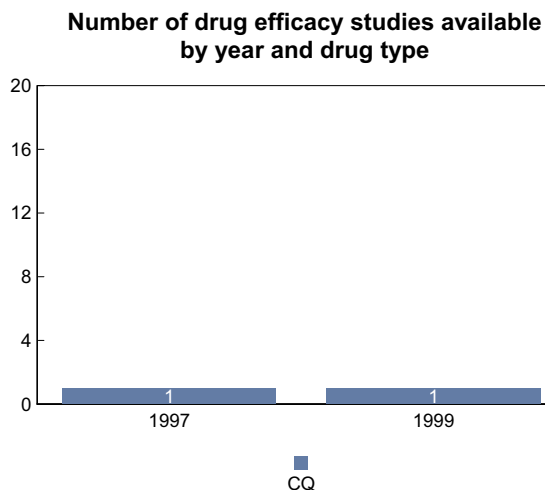
Services delivered for malaria control include numbers of nets and insecticides delivered or sold, numbers of nets (re-)treated with insecticide and numbers of households (HHs)/units sprayed during IRS campaigns. These services and service-related commodities mostly reflect core malaria control activities 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
CQ						
1997-1999	2	29.6	18.4	40.7	18.4	40.7



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).

No data are currently available.

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	3 523 662	MoH	Yes	30-Jan-03	3 523 662	7	3 523 662	100.0%

General notes and remarks

See explanatory notes at the beginning of the section.