

## Overview of malaria control activities and programme progress

The first attempt to control malaria in Nepal was initiated in 1954 through the Insect Borne Disease Control Programme, supported by USAID. In 1958, the malaria eradication programme was launched—the first national public health programme in the country—with the objective of eradicating malaria from the country within a limited time period. As a result of various constraints, this objective could not be achieved and consequently the programme reverted to malaria control in 1978. Prevailing ecological, epidemiological and socioeconomic factors required changes in the malaria control strategy, and as a result it was revised in accordance with the Global Malaria Control Strategy 1992 of WHO. Malaria control services are provided to approximately 15.6 million people in areas at risk of malaria in 64 districts of the country.

The current malaria control strategies include: (i) early diagnosis and prompt and effective treatment of uncomplicated malaria cases and development of referral systems for complicated and severe cases; (ii) developing laboratory facilities for strengthening early diagnosis of cases in health-care institutions; (iii) selective application of indoor residual spraying—in the case of epidemics, epidemic-prone new settlements, falciparum malaria abundant areas and drug resistant foci; (iv) promoting personal protection through information, education and communication materials; (v) encouraging communities for minor environmental manipulations facilitating malaria control; (vi) promoting the use of ITNs wherever possible as a method of vector control and transmission risk reduction; (vii) developing the skills of peripheral level health staff on different aspects of malaria control—e.g. early diagnosis and prompt and effective treatment, vector control, referral services, and prevention and control of epidemics; (viii) developing the skills of MOs and DHOs in the management of severe and drug-resistant malaria; (ix) promoting operational field research on malaria on a regular basis; and (x) developing and strengthening the monitoring mechanisms for the susceptibility of vectors to insecticides, drug-resistant malaria and vector bionomics.

### National malaria policy and strategy environment

#### National malaria strategy overview for 2003

	Strategy
<b>Treatment and Diagnosis Guidelines</b>	Yes
Published/updated in	2001
<b>Monitoring antimalarial drug resistance</b>	Yes
Number of sites currently active	3
<b>Home management of malaria</b>	NA
<b>Vector control using insecticides</b>	Yes
<b>Monitoring insecticide resistance</b>	NA
Number of sites currently active	
<b>Insecticide-treated mosquito nets (ITNs)</b>	No
<b>Intermittent preventive treatment (IPT)</b>	NA
<b>Epidemic preparedness</b>	Yes

#### Current antimalarial drug policy

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

## 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
22 856	29 135	23 234	16 380	9 442	9 718	6 628	8 957	8 498	8 959
2000	2001	2002	2003	Date of last report: 13 September 2004					
7 616	6 408	12 786	9 394						

### Reported malaria by type and quality

For most recent year

Reported malaria cases	9 394
Reported malaria deaths	3

#### Probable or clinically diagnosed

Malaria cases	56 640
Severe (inpatient or hospitalized) cases	
Malaria deaths	
Slides taken	194 901
Rapid diagnostic tests (RDTs) taken	475

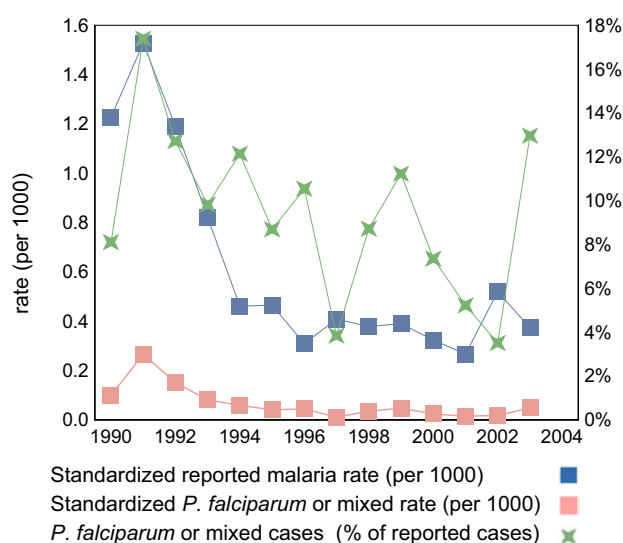
#### Laboratory confirmed

Malaria cases	9 394
<i>P. falciparum</i> or mixed	1 218
<i>P. vivax</i>	8 177
Severe (inpatient or hospitalized) cases	
Malaria deaths	3

#### Investigations

Imported cases

Estimated reporting completeness (%)



### Reported malaria cases by age and gender

Group	Subgroup	2000	2001	2002	2003	%
	Total	7 616	6 408	12 786	9 394	100
Gender	Male	4 738	3 650	6 712	4 900	52
	Female	3 067	2 610	5 546	4 494	48
Age	<1 year	74		65		1
	1-4 years	604	831	297		2
	<5 years				56	1
	5-9 years	977		1 266	279	3
	10-14 years	1 449			1 143	12
	15+ years			8 932	7 916	84
	15-19 years		2 111			33
	>19 years	4 701	3 454			54

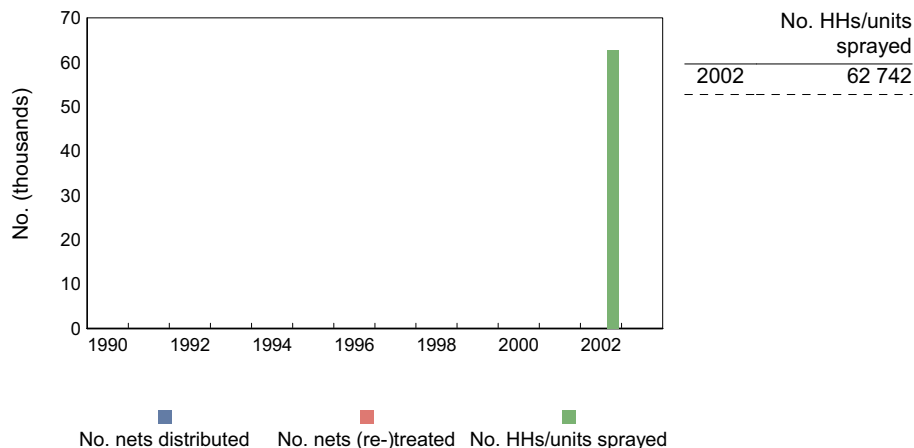
### Reported malaria cases by selected subnational area

5 areas	2000	2001	2002	2003	%
Far-western	750	2 987	8 856		69
Mid-western	1 449	1 009	1 392		11
Central	4 491	1 305	1 305		10
Eastern	1 007	834	1 106		9
Western	285	273	227		2

## SERVICE DELIVERY AND MALARIA-RELATED COMMODITIES

### General malaria-related services delivered

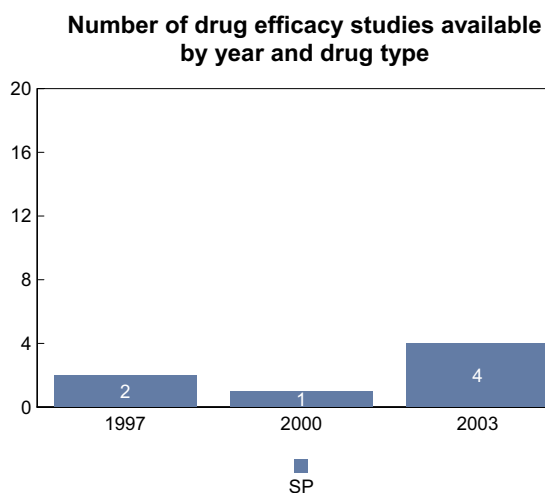
Services delivered for malaria control include numbers of nets and insecticides delivered or sold, numbers of nets (re-)treated with insecticide and numbers of households (HHs)/units sprayed during IRS campaigns. These services and service-related commodities mostly reflect core malaria control activities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

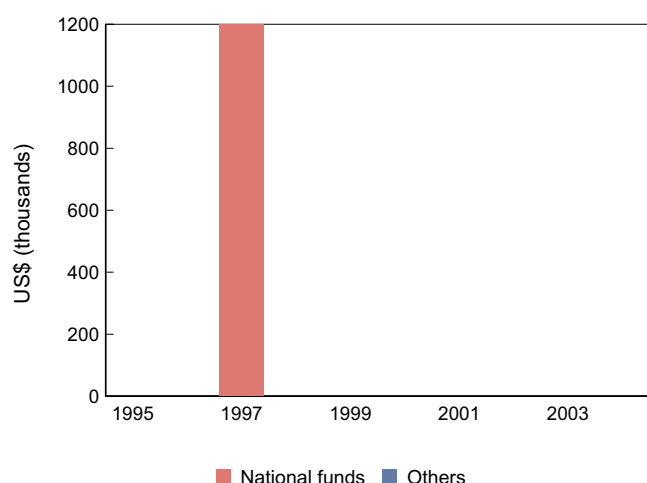
Study years	Number of studies	Median	Range		Percentile	
			Low	High	25th	75th
<b>SP</b>						
1997-2003	7	22.0	0.0	88.2	0.0	72.7



## 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).



	National funds	Others
1995	-	-
1996	-	-
1997	1 200	-
1998	-	-
1999	-	-
2000	-	-
2001	-	-
2002	-	-
2003	-	-
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	2 622 929	MoH	Yes	13-Aug-03	2 622 929	2	644 658	24.6%	

### General notes and remarks

See explanatory notes at the beginning of the section.