

Overview of malaria control activities and programme progress

In the past, vivax malaria was endemic in the Republic of Korea. However, as a result of the successful implementation of the NMCP in the 1960s, which received technical assistance from WHO, malaria was eradicated, with no indigenous cases since 1978. In 1993, however, malaria has re-emerged when the first case was diagnosed in a soldier stationed near the Demilitarized Zone. Since then, the annual incidence of malaria has increased, reaching a peak of 4142 cases in 2000. An in-depth analysis of its re-emerging pattern suggested it to be the borderline type, which mainly occurs among military personnel, residents, and travelers in areas adjacent to the country.

In 2001, the government established and initiated a 10-year programme with an aim to re-eradicate malaria by 2010. The main targets are: (i) enhancing the system for case detection and treatment; (ii) reinforcing the vector control effort; (iii) strengthening collaboration between civilian and military sectors; and (iv) supporting the NMCP.

To enhance malaria case detection and treatment system, the government designated counties with annual parasite rate of more than 100/100 000 as high-risk areas and subsequently built up case investigation and parasitological diagnosis capacity. Currently, the government programme to provide ITNs is not needed as much since housing and lifestyles have become modernized. Instead, the government enhanced the mosquito surveillance and control programme not only for adult mosquitoes, but also for larvae. For a strengthened intersectoral collaboration, joint anti-malaria committees were set up and operate at both central and regional levels. The central level committees involve all relevant ministries, private health institutions and the military, whereas the regional level committees are led by local governments of areas at risk. Since 2001, the country has provided ITNs, diagnostic kits and consumables and antimalarial drugs to support the malaria control project. With the implementation of these programmes, the number of malaria patients is decreasing by about 30% each year, after a peak in 2000.

In addition to re-emerging vivax malaria, imported cases of falciparum malaria is another malarial problem confronting the country. There are no vector mosquitoes of falciparum malaria in the country, so it is highly unlikely to experience local transmission. To protect the Korean people, however, the government has designated drugs for falciparum malaria as orphan drugs and supports drug distribution. In addition, KCDC/NIH leads the research and development efforts, such as developing malaria a rapid diagnosis test kit, not only to support Korea but also the global malaria control efforts.

National malaria policy and strategy environment

National malaria strategy overview for 2003

	Strategy
Treatment and Diagnosis Guidelines	Yes
Published/updated in	2003
Monitoring antimalarial drug resistance	no
Number of sites currently active	0
Home management of malaria	NA
Vector control using insecticides	Yes
Monitoring insecticide resistance	No
Number of sites currently active	
Insecticide-treated mosquito nets (ITNs)	Yes
Intermittent preventive treatment (IPT)	NA
Epidemic preparedness	

Current antimalarial drug policy

	Current policy
Uncomplicated malaria	
<i>P. falciparum</i> (unconfirmed)	
<i>P. falciparum</i> (lab confirmed)	
<i>P. vivax</i>	CQ+PQ(14d)
Treatment failure	
Severe malaria	
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
0	0	0	1	21	107	396	1 724	3 992	3 621
2000	2001	2002	2003	Date of last report: 28 February 2005					
4 142	2 556	1 799	1 171						

Reported malaria by type and quality

For most recent year

Reported malaria cases	1 171
Reported malaria deaths	0

Probable or clinically diagnosed

Malaria cases
Severe (inpatient or hospitalized) cases
Malaria deaths
Slides taken
Rapid diagnostic tests (RDTs) taken

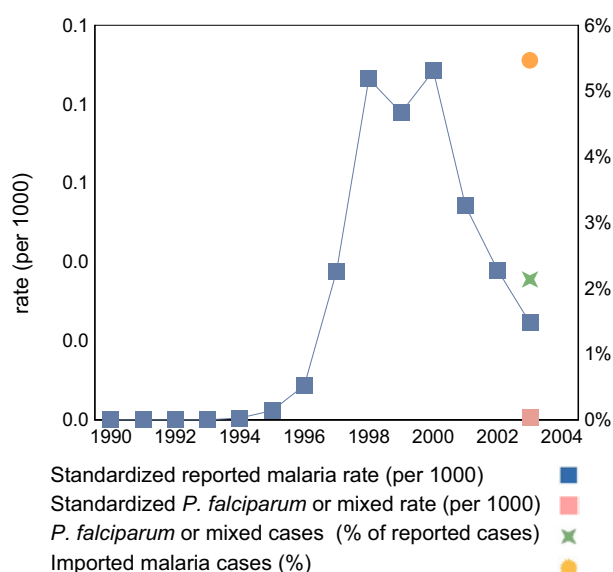
Laboratory confirmed

Malaria cases 1 171
P. falciparum or mixed 25
P. vivax 1 146
Severe (inpatient or hospitalized) cases
Malaria deaths 0

Investigations

Imported cases 64

Estimated reporting completeness (%)



Reported malaria cases by age and gender

Group	Subgroup	2000	2001	2002	2003	%
	Total	4 142	2 556	1 799	1 171	100
Gender	Male		2 199	1 487	948	81
	Female		368	312	223	19
Age	<10 years		20	22	18	2
	10-19 years		102	56	44	4
	20-29 years		1 572	1 010	630	54
	30-39 years		246	218	154	13
	40-49 years		300	219	168	14
	50-59 years		138	130	67	6
	60-69 years		125	100	54	5

Reported malaria cases by selected subnational area

15 of 17 areas	2000	2001	2002	2003	%
Kyeonggi-do		914	756	518	44
Seoul		376	285	170	15
Inchon		273	267	166	14
Kang-won-do		545	216	132	11
Pusan		69	49	27	2
Kyongsangbuk-do		43	29	24	2
Chollanam-do		38	19	20	2
Ulsan		32	10	18	2
Kwangju		32	17	17	1
Chungchongnam-do		35	22	16	1
Kyongsangnam-do		64	32	13	1
Taegu		30	25	13	1
Chollabuk-do		40	27	12	1
Chungchongbuk-do		25	22	9	1
Taejon		32	18	9	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

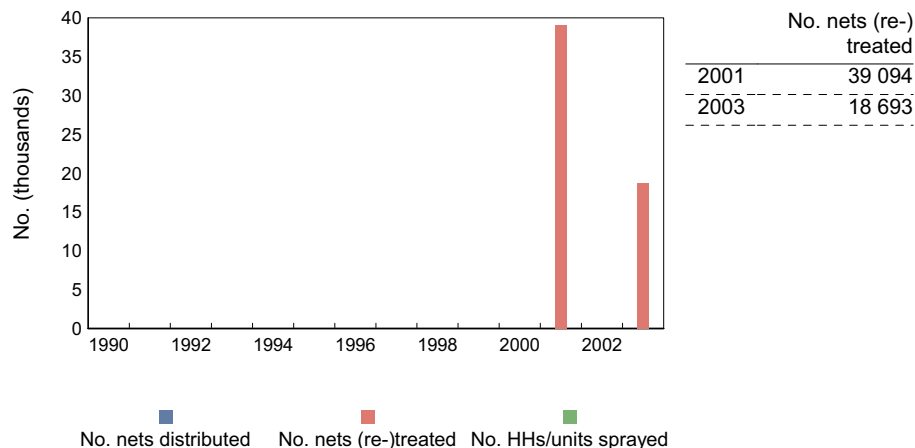
ITNs are one of the key interventions promoted by RBM. Coverage of ITNs is best assessed through household (HH) surveys which ask questions on possession and use of nets, as well as insecticide treatment status, among the target populations of children under 5 years of age (U5) and pregnant women. Data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

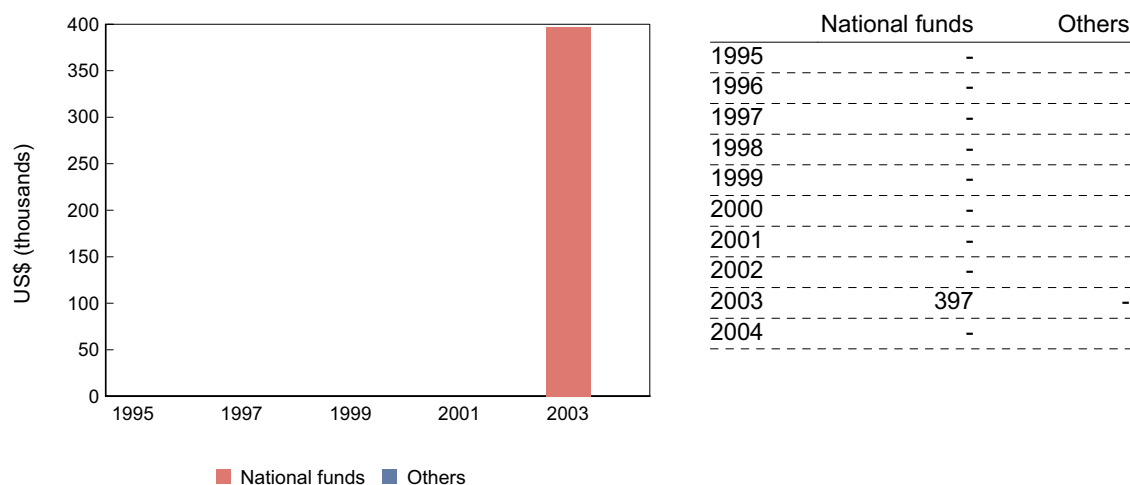
Monitoring antimalarial drug efficacy is important for understanding the impact of antimalarial treatment being delivered and the need for drug policy change, essential for ensuring prompt access to effective treatment. Median, range and quartiles are based on percentage clinical failure for uncomplicated *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.

No studies on the efficacy of antimalarial drugs are currently available or there is no reported P. falciparum transmission.

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 reflect the Central Government budget only.

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.

No funding was approved for malaria control by the GFATM.

General notes and remarks

See explanatory notes at the beginning of the section.