

Democratic People's Republic of Korea

I. EPIDEMIOLOGICAL PROFILE

Population, endemicity and malaria burden

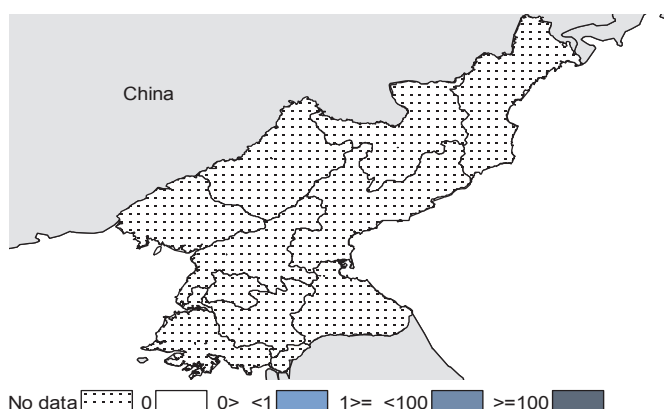
Population (000)	2006	%
All age groups	23 708	
< 5 years	1 606	7
≥ 5 years	22 101	93

Population by malaria endemicity (000)	2006	%
High transmission ≥ 1/1000	2 754	12
Low transmission (0-1/1000)	9 121	38
Malaria-free (0 cases)	11 832	50
Rural population	9 027	38

Vector and parasite profile

Major Anopheles species	<i>lesteri, lindesayi, japonicus, loreiens, sinensis, sineroides, yatsushiroensis</i>
Plasmodium species	<i>vivax</i> risk only

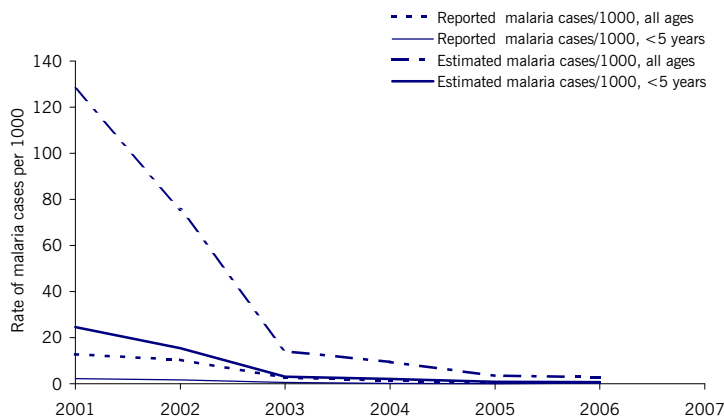
Stratification by burden (reported cases/1000)



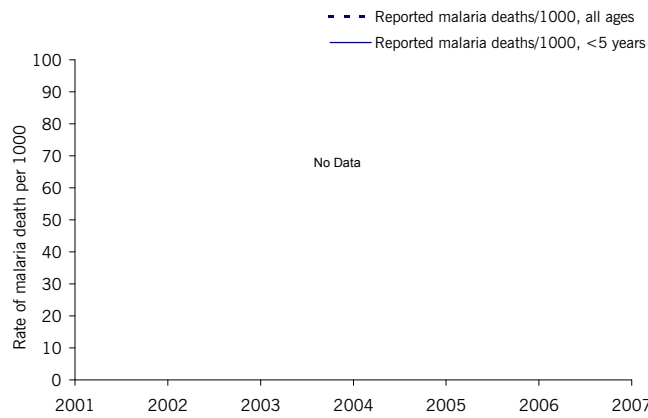
Estimated burden of malaria	Age group	Estimated cases and deaths (2006)			Estimated cases and deaths per 1000 (2006)		
		Numbers	Lower	Upper	Rate per 1000	Lower	Upper
Fever suspected of being malaria	All ages	177 000	42 000	500 000	7	2	21
	<5 years	2 900	680	8 200	2	0.423	5
Malaria cases	All ages	70 000	20 000	185 000	3	0.844	8
	<5 years	1 100	330	3 000	0.685	0.205	2
Malaria deaths	All ages						
	<5 years						
Malaria-case-fatality rate (%)	All ages				-	-	-
	<5 years				-	-	-

Trends in malaria morbidity and mortality

Reported and estimated malaria cases, per 1000



Reported malaria deaths, per 1000



	2001	2002	2003	2004	2005	2006	2007
Reported malaria cases, all ages	296 540	241 190	60 559	33 803	11 507	9 353	
Reported malaria cases, <5 years	4 266	3 124	962	323	85	355	

Reported malaria deaths, all ages							
Reported malaria deaths, <5 years							

All-cause outpatient consultations, all ages						15 423	
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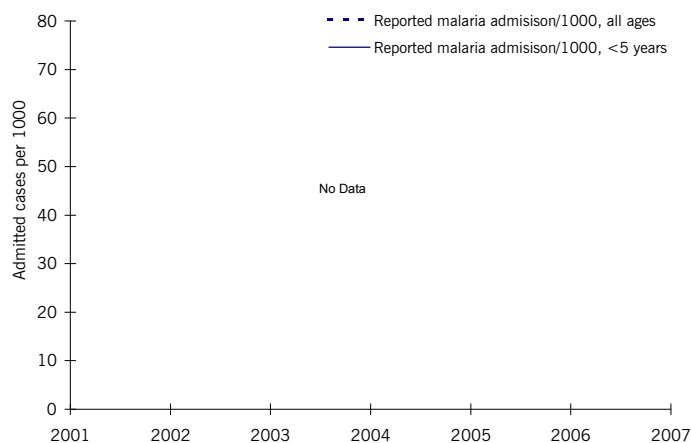
All-cause deaths, all ages							
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All-cause outpatient consultations, <5 years							
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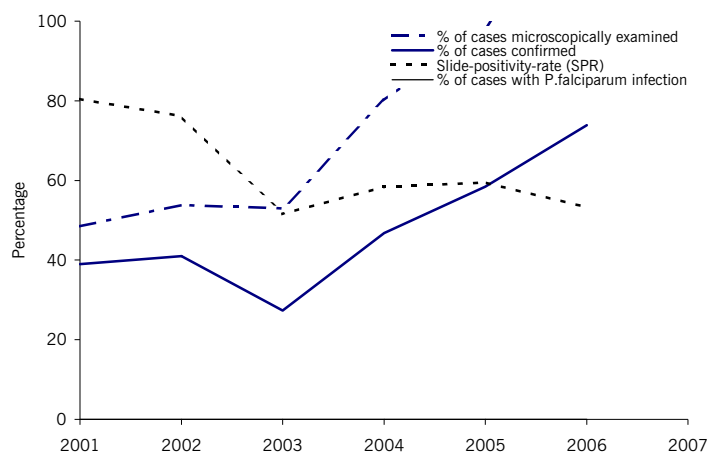
All-cause deaths, <5 years							
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I. EPIDEMIOLOGICAL PROFILE (continued)

Reported malaria admissions, per 1000



Slide examination, case confirmation, *Plasmodium spp*



Reported malaria admissions, all ages
Reported malaria admissions, <5 years

All-cause admissions, all ages
All-cause admissions, <5 years

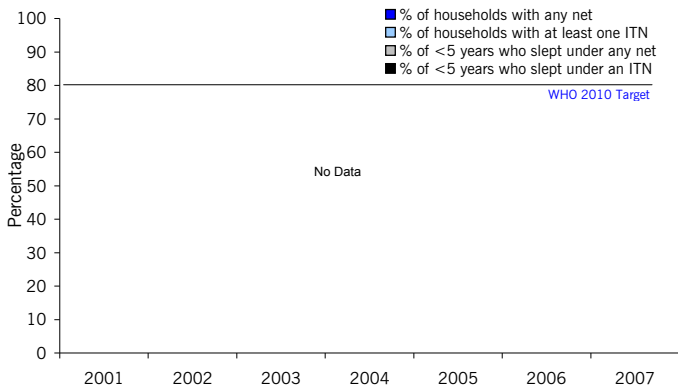
	2001	2002	2003	2004	2005	2006
Examined	143 674	129 889	32 083	27 090	11 315	12 983
Positive	115 615	98 852	16 538	15 827	6 728	6 913
<i>P. falciparum</i>	0	0	0	0	0	0

II. INTERVENTION POLICIES AND STRATEGIES

Intervention	WHO-recommended policies/strategies			Optional policies/strategies		
	Policy/strategy	Yes/No	Year adopted	Policy/strategy	Yes/No	Year adopted
Insecticide-treated nets (ITN)	Distribution of ITN/LLINs – Free	No	-	Distribution – Antenatal care	Yes	2004
	Targeting – All age groups	Yes	2001	Distribution – EPI routine and campaign	Yes	2001
	Targeting – Children under 5 years and pregnant women	Yes	2004		-	-
Indoor residual spraying (IRS)	DDT is used for IRS (public health) only	Yes	-	DDT is used alternately with other insecticides in the same area	No	-
	Insecticide-resistance management implemented	Yes	2005	IRS is the primary vector-control intervention	Yes	2007
				IRS is used for prevention and control of epidemics	Yes	2007
Intermittent preventive treatment (IPT)	Where IRS is conducted, other options are also implemented, e.g. ITN	No	-		No	-
	IPT used to prevent malaria during pregnancy	No	-	IPT implemented countrywide	No	-
	ACT is free or highly subsidized in public sector	No	-	Free malaria diagnosis and first-line treatment of malaria	Yes	2001
	Oral artemisinin monotherapies banned	No	-	Home management of malaria	Yes	2001
	Parasitological confirmation for all age groups	No	-	Prereferral treatment at health-facility level with quinine im or artesunate suppositories	No	-
Case management				RDTs in areas without microscopy	No	-
		Antimalarial policy	Type of medicine	Year Adopted		
	First-line treatment of <i>P. falciparum</i> (unconfirmed)	-	-			
	First-line treatment of <i>P. falciparum</i> (confirmed)	-	-			
	Treatment failure of <i>P. falciparum</i>	-	-			
	Treatment of severe malaria	-	-			
Treatment of <i>P. vivax</i>		CQ+PQ(14 d)				

III. IMPLEMENTING MALARIA CONTROL

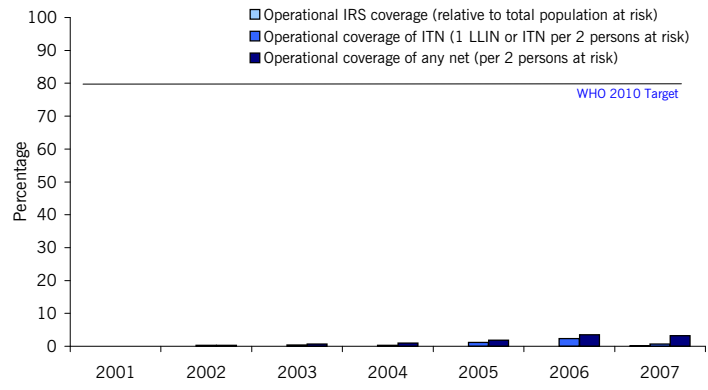
Coverage of ITN: survey data



Sources:

2001 2002 2003 2004 2005 2006 2007

Coverage of IRS and ITN: programme data

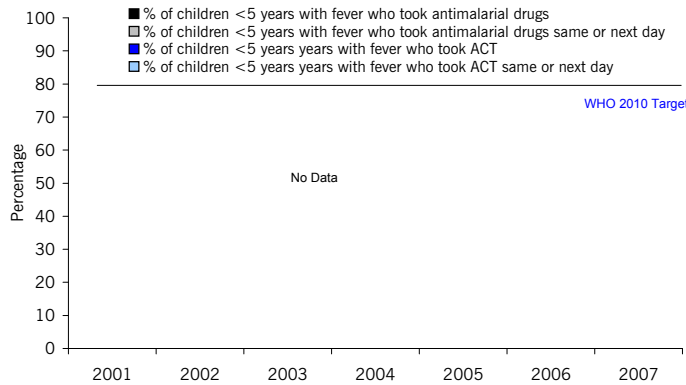


2001 2002 2003 2004 2005 2006 2007

Year	% of pregnant women who slept under any net	% of pregnant women who slept under an ITN
2001	No Data	No Data
2002	No Data	No Data
2003	No Data	No Data
2004	No Data	No Data
2005	No Data	No Data
2006	No Data	No Data
2007	No Data	No Data

Year	No. of HHs protected by IRS	No. of ITNs and or LLINs
2001	1 567	19 697
2002		20 000
2003		20 000
2004		69 947
2005		120 000
2006		
2007		

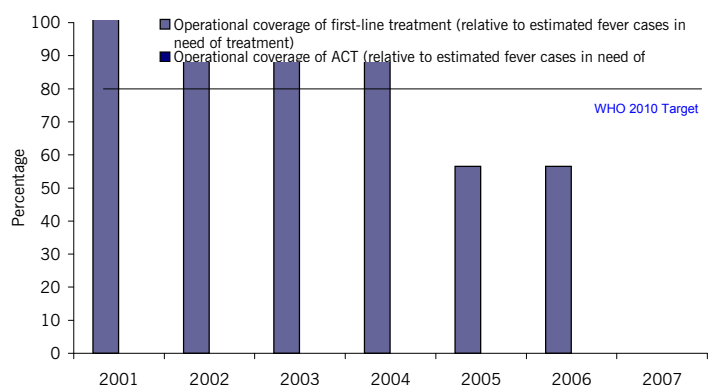
Access by febrile children to effective treatment: survey data



Source:

2001 2002 2003 2004 2005 2006 2007

Access to effective treatment: programme data

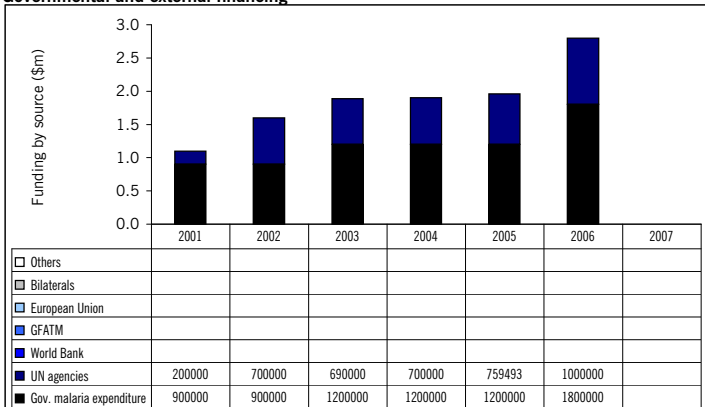


Year	% of children < 5 years with fever	% of febrile children < 5 years who sought treatment in HF
2001	No Data	No Data
2002	No Data	No Data
2003	No Data	No Data
2004	No Data	No Data
2005	No Data	No Data
2006	No Data	No Data
2007	No Data	No Data

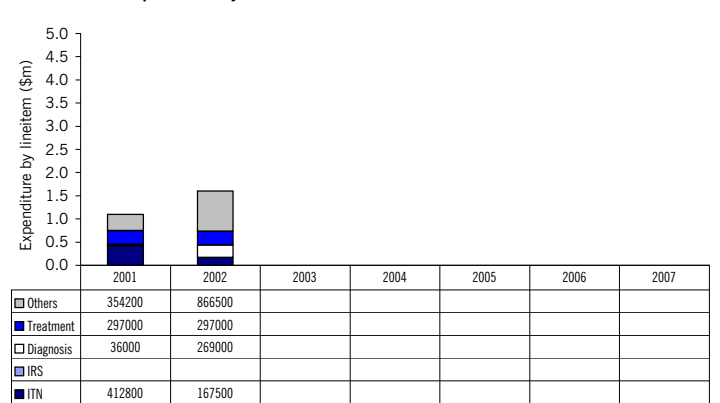
Year	No. of 1st-line treatment courses received	No. of ACT treatment courses received
2001	300 000	
2002	300 000	
2003	300 000	
2004	200 000	
2005	100 000	
2006	100 000	
2007		

IV. FINANCING MALARIA CONTROL

Governmental and external financing



Breakdown of expenditure by intervention



V. SOURCE OF INFORMATION

Programme data

Reported cases
Operational coverage of ITNs, IRS and access to medicines
Financial data

Surveillance data
Programme report
Programme report

Survey and other data

Insecticide-Treated Nets (ITN) No surveys
Treatment No surveys
Use of health services Imputed