

MALI

While the entire population is at risk, over 90% of the population live in high-transmission areas. Malaria transmission is more intensive in the southern part of the country, with seasonal peaks between May and November. Almost all cases are caused by *P. falciparum*, but most suspected cases are not parasitologically tested, despite recent improvements in diagnostic services. The number of reported suspected malaria cases has increased in recent years, and the number of reported deaths increased more than twofold between 2001 and 2008. It is not known whether the increase was due to improved reporting or to an increase in incidence. During 2006–2008, the national malaria control programme distributed nearly 3.7 million LLINs, of which 3 million were delivered in the 2007 mass campaign. The programme conducted IRS in 2007, covering 87 000 households and protecting over 405 000 people at risk. Over 2.8 million ACT treatment courses were delivered in 2008, adequate to treat all the malaria cases reported from the public sector. In the 2006 demographic and health survey, 50% of households owned an ITN and 41% of children under 5 had slept under an ITN the previous night. In the 2006 demographic and health survey, 32% of febrile children received any antimalarial medicine, but only 2% received ACT. Although Government expenditure on malaria control is unknown, funding for malaria increased to US\$ 27 million in 2008, mainly from the Global Fund, the World Bank, the United States President's Malaria Initiative, United Nations agencies and other bilateral agencies and nongovernmental organizations.

I. EPIDEMIOLOGICAL PROFILE

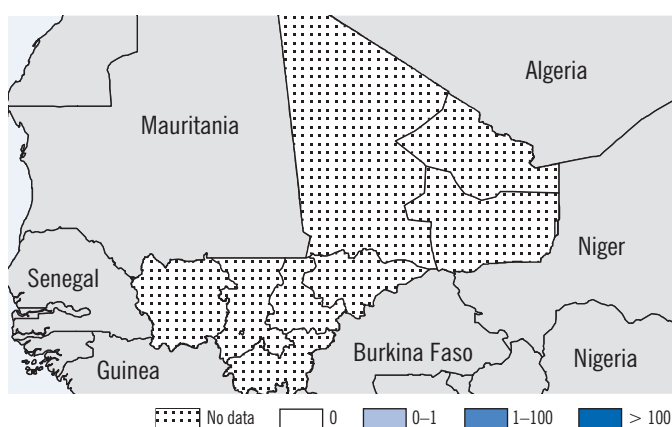
Population, endemicity and malaria burden

Population (in thousands)	2008	%
All age groups	12 706	
< 5 years	2 207	17
≥ 5 years	10 499	83

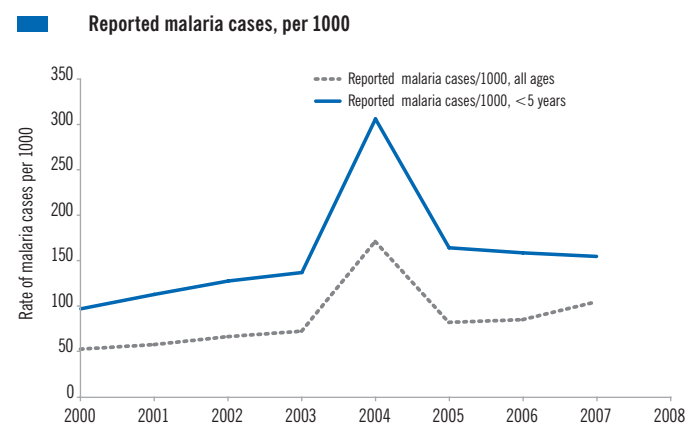
Population by malaria endemicity (in thousands)	2008	%
High transmission ≥ 1/1000	11 435	90
Low transmission (0–1/1000)	1 271	10
Malaria-free (0 cases)	0	0
Rural population	8 620	68

Vector and parasite profiles	
Major <i>Anopheles</i> species	<i>gambiae</i> , <i>arabiensis</i> , <i>funestus</i> , <i>brochieri</i> , <i>coustani</i> , <i>flavicosta</i> , <i>hancocki</i> , <i>nili</i> , <i>paludis</i> , <i>pharoensis</i>
<i>Plasmodium</i> species	<i>falciparum</i> , <i>vivax</i>

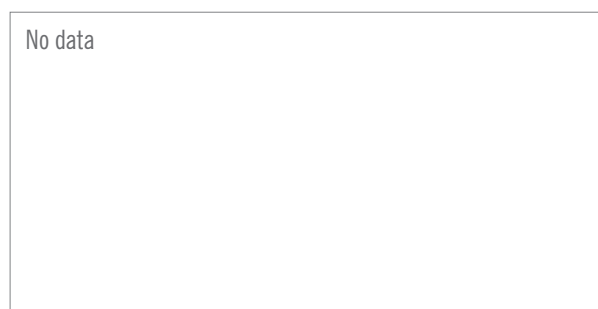
Stratification of burden (reported cases, per 1000)



Trends in malaria morbidity and mortality

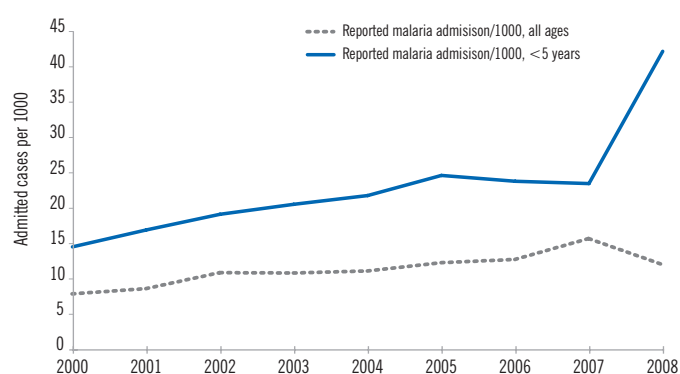


Rate of examination, case confirmation, malaria test positivity, % of confirmed cases that are *P. falciparum*

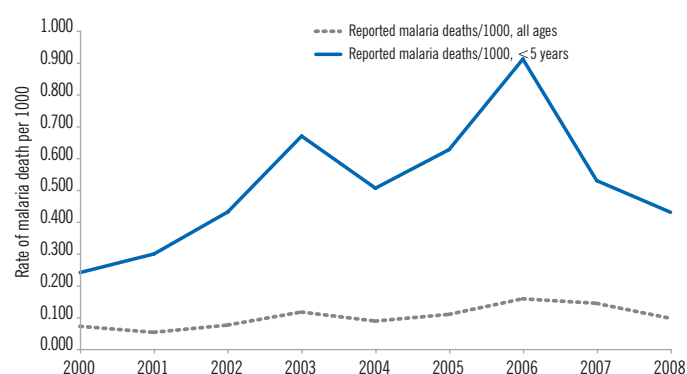


Year	Reported malaria cases, all ages	Reported malaria cases, < 5 years	All-cause outpatient consultations, all ages	All-cause outpatient consultations, < 5 years	Examined	Positive	<i>P. falciparum</i>	Reporting completeness of outpatient health facilities (%)	Reporting completeness of districts (%)
2000	546 634	177 969	1 685 072	548 814					
2001	612 896	211 018	2 065 677	665 692					
2002	723 077	243 390	2 289 524	736 139					
2003	809 428	267 133	2 533 291	794 023					
2004	1 969 214	611 680	2 626 206	815 931					
2005	962 706	335 701	2 652 526	870 359					
2006	1 022 592	332 495	3 126 181	902 043					
2007	1 291 853	332 262	3 442 514	980 295					
2008								33	100

Reported malaria admissions, per 1000



Reported malaria deaths, per 1000



Year	Reported malaria admissions, all ages	Reported malaria admissions, < 5 years	All-cause admissions, all ages	All-cause admissions, < 5 years	Reported malaria deaths, all ages	Reported malaria deaths, < 5 years	All-cause deaths, all ages	All-cause deaths, < 5 years	Reporting completeness of inpatient health facilities (%)	Reporting completeness of districts (%)
2000	81 994	26 695	546 624	177 969	748	444	2 920	966		
2001	91 934	31 653	612 896	211 018	562	562	17 925	7 303		
2002	118 962	36 509	793 077	243 390	826	826	2 561	999		
2003	121 414	40 070	809 428	267 133	1 309	1 309	3 095	1 461		
2004	127 608	43 464	850 723	289 762	1 012	1 012	2 664	1 073		
2005	144 406	50 355	962 706	335 701	1 285	1 285	3 896	1 637		
2006	153 389	49 874	1 022 592	332 495	1 914	1 914	5 132	2 207		
2007	193 778	50 441	1 291 853	336 272	1 782	1 141	3 304	1 563		
2008	151 910	92 997	1 012 730	281 150	1 227	951	1 446	1 446		

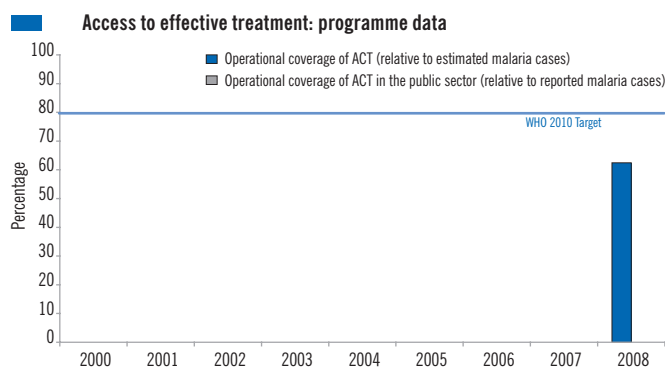
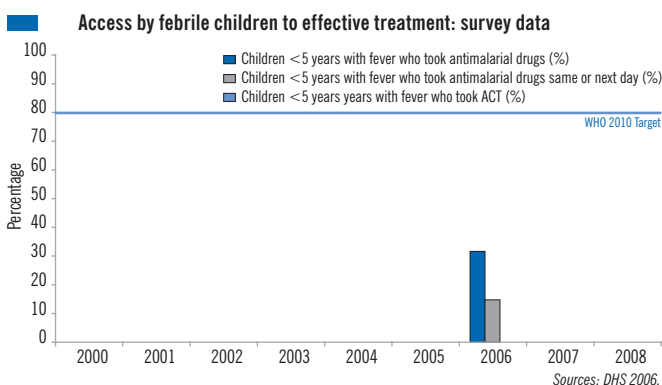
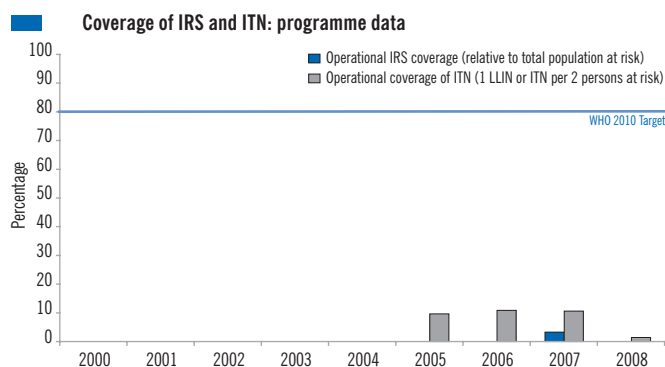
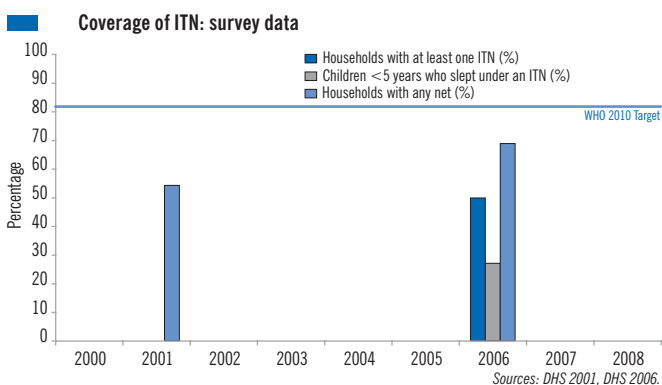
II. INTERVENTION POLICIES AND STRATEGIES

Intervention	WHO-RECOMMENDED POLICIES / STRATEGIES	Yes or No	Year adopted	OPTIONAL POLICIES / STRATEGIES	
				Yes or No	Year adopted
Insecticide-treated nets (ITN)	Distribution of ITN/LLINs – Free	Yes	2005	Distribution – Antenatal care	Yes 2006
	Targeting all age groups	No	–	Distribution – EPI routine and campaign	Yes 2005
				Targeting children < 5 years and pregnant women	Yes 2006
				ITN distribution is subsidized	Yes 2005
Indoor residual spraying (IRS)	IRS is a primary vector control intervention	Yes	2008	Insecticide-resistance management implemented	Yes 2000
	DDT is used for IRS (public health) only	No	–	Where IRS is conducted, other options are also implemented, e.g. ITN	Yes 2008
				IRS is used for prevention and control of epidemics	Yes 2005
Intermittent preventive treatment (IPT)	IPT used to prevent malaria during pregnancy	Yes	2003		
Case management	Oral artemisinin monotherapies banned (prohibited from registration or removed from the system)	No	–	Parasitological confirmation for patients ≥ 5 years only	No –
	Parasitological confirmation for patients of all ages	Yes	2008	Malaria diagnosis is free of charge in the public sector	No –
	ACT is free of charge for < 5 years old in the public sector	Yes	2006	ACT is free of charge for patients ≥ 5 years in the public sector	No –
	Diagnosis of malaria of inpatients is based on parasitological confirmation	Yes	1997	ACT is delivered at community level through community agents (beyond the health facilities)	Yes 2005
	Pre-referral treatment with quinine or artemether IM or artesunate suppositories	Yes	2009	Uncomplicated malaria cases are admitted	No –
	Oversight regulation of case management in the private sectors	No	–		
	RDTs used at community level	Yes	2005		

Results of therapeutic efficacy tests

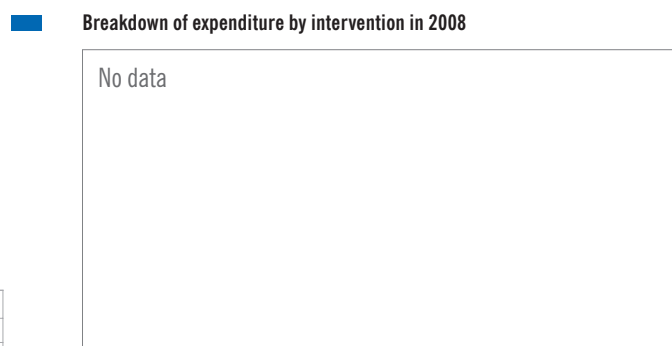
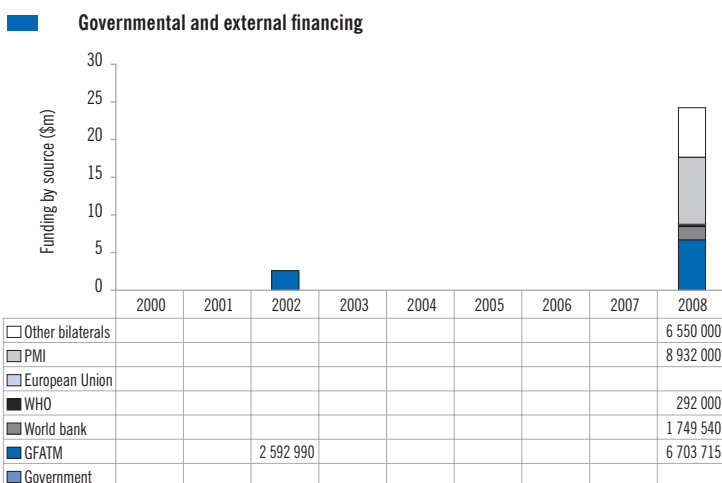
Antimalarial policy	Type of medicine	Year adopted	Study year	No. of studies	Median	Minimum	Maximum	Percentiles: 25% 75%	
First-line treatment of <i>P. falciparum</i> (unconfirmed)	AL	2004							
First-line treatment of <i>P. falciparum</i> (confirmed)	AL	2004							
Treatment failure of <i>P. falciparum</i>	AS+SP	2004							
Treatment of severe malaria	QN(7d)	2004							
Treatment of <i>P. vivax</i>	–	–							

III. IMPLEMENTING MALARIA CONTROL



Year	Pregnant women who slept under any net (%)	Pregnant women who slept under an ITN (%)	Children < 5 years with fever (%)	Febrile children < 5 years who sought treatment in HF (%)	Number of households protected by IRS	Number of people protected by IRS	Number of ITNs and/or LLINs	Number of 1st-line treatment courses received	Number of ACT treatment courses received
2000									
2001			—	—					
2002									
2003									
2004									
2005							572 556		
2006		29	—	—			90 900		
2007					87 198	405 936	2 982 346		
2008							682 461		2 842 500

IV. FINANCING MALARIA CONTROL



V. SOURCE OF INFORMATION

PROGRAMME DATA	SURVEY AND OTHER DATA
Reported cases	Surveillance data
Operational coverage of ITNs, IRS and access to medicines	Programme report
Financial data	Programme report
	Insecticide-treated nets (ITN)
	Treatment
	Use of health services