

# NIGER

Malaria transmission is more intensive in the south, occurring seasonally between January and April. The desert areas in the north are malaria-free. Almost all cases are caused by *P. falciparum*, but only a fraction of the suspected cases are parasitologically tested. The numbers of reported cases and deaths fluctuated over the period 2001–2008, mostly showing increasing trends, probably due to better reporting. During 2006–2008, the national malaria control programme delivered nearly 4 million LLINs, of which 1.7 million were delivered during a mass campaign in 2007. The 2006 demographic and health survey reported that 69% of households owned a mosquito net and 43% an ITN, but only 7% of children under 5 years slept under an ITN. After the adoption of ACTs as first-line treatment in 2005, the programme delivered 1.4 million ACT treatment courses in 2007 and 1.6 million in 2008, adequate to treat about 80% of the reported suspected malaria cases in the public sector. In the survey, only one third of children with fever were given antimalarial medicine. The programme provided little information about funding in recent years but reported a major award from the Global Fund in 2004.

## I. EPIDEMIOLOGICAL PROFILE

### Population, endemicity and malaria burden

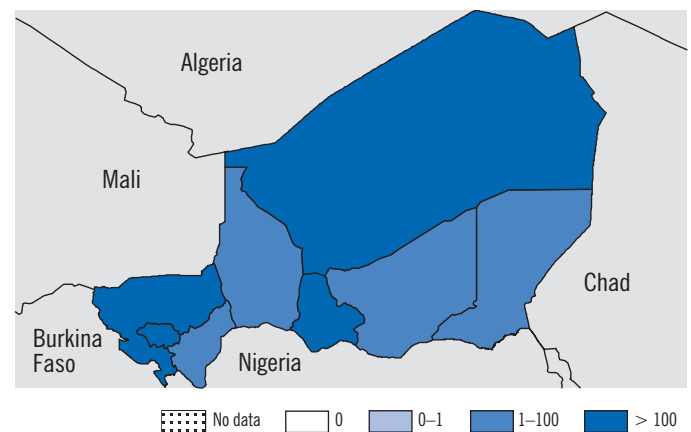
Population (in thousands)	2008	%
All age groups	14 704	
< 5 years	3 121	21
≥ 5 years	11 584	79

Population by malaria endemicity (in thousands)	2008	%
High transmission ≥ 1/1000	10 146	69
Low transmission (0–1/1000)	4 558	31
Malaria-free (0 cases)	0	0
Rural population	12 283	84

#### Vector and parasite profiles

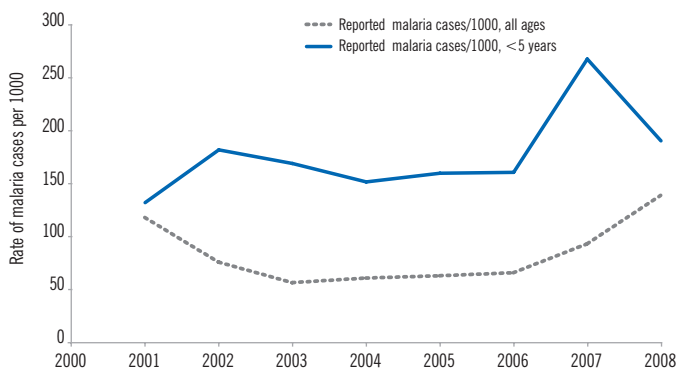
Major <i>Anopheles</i> species	<i>gambiae</i> , <i>arabiensis</i> , <i>funestus</i> , <i>coustani</i> , <i>moucheti</i> , <i>moucheti</i> , <i>nili</i> , <i>pharoensis</i>
<i>Plasmodium</i> species	<i>falciparum</i> , <i>vivax</i>

Stratification of burden (reported cases, per 1000)

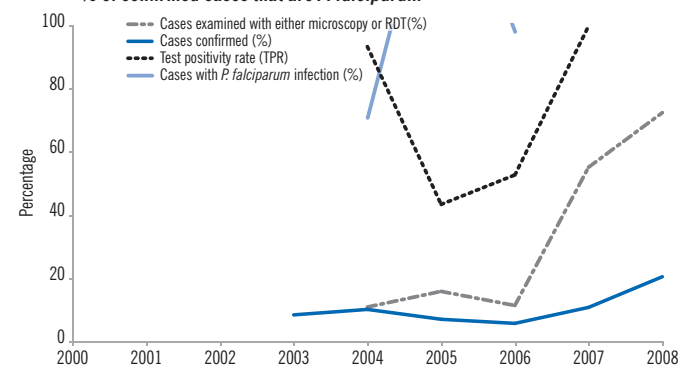


### Trends in malaria morbidity and mortality

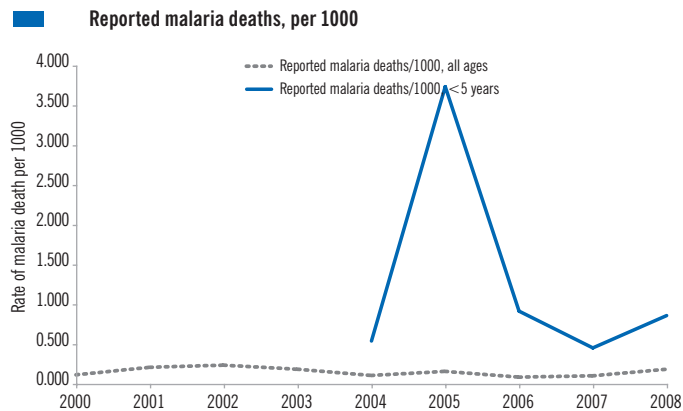
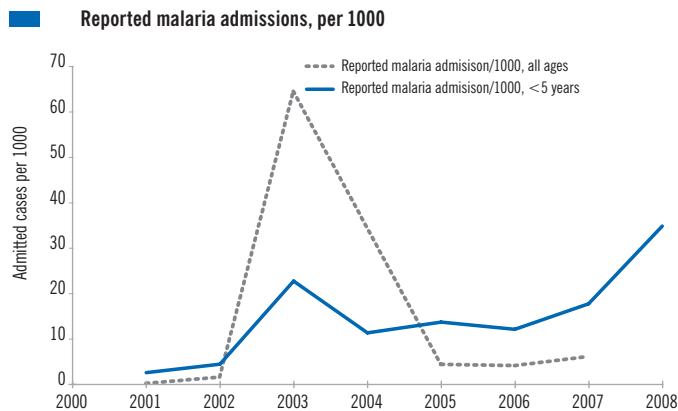
#### Reported malaria cases, per 1000



#### 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									100
2001	1 340 142	304 032	4 989 176	2 137 498					100
2002	888 345	431 710	4 827 380	2 080 927					100
2003	681 783	414 284	3 996 584	1 847 222		56 460			100
2004	760 718	385 674	1 663 367	731 299	81 814	76 030	53 637		100
2005	817 707	424 691	2 595 771	833 437	128 322	56 043	74 129		100
2006	886 531	449 044	3 458 631	1 627 033	99 670	49 624	44 612		100
2007	1 308 234	790 448	5 119 076	1 957 624	718 215	138 902			100
2008	2 033 971	593 153			1 466 095	413 252			100



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					1 244					
2001	1 665	5 888	15 979		2 366					
2002	17 777	10 500	44 649		2 769					
2003	786 159	55 754			2 248					
2004		28 876			1 333	1 382				
2005	56 613	36 424	127 894		2 060	9 958				
2006	55 127	33 853			1 150	2 570				
2007	85 404	52 390			1 420	1 349				
2008		108 692			2 691	2 691				

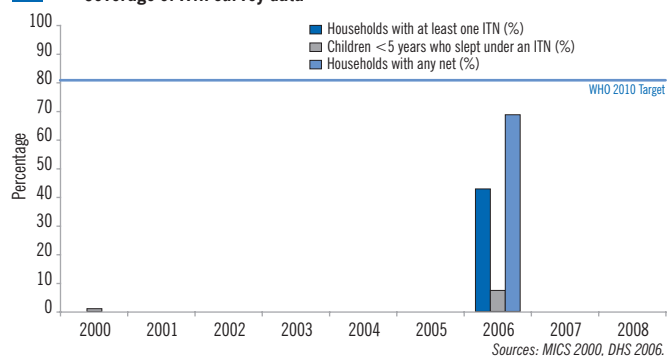
## II. INTERVENTION POLICIES AND STRATEGIES

Intervention	WHO-RECOMMENDED POLICIES / STRATEGIES	WHO-RECOMMENDED POLICIES / STRATEGIES		OPTIONAL POLICIES / STRATEGIES	OPTIONAL POLICIES / STRATEGIES	
		Yes or No	Year adopted		Yes or No	Year adopted
Insecticide-treated nets (ITN)	Distribution of ITN/LLINs – Free	Yes	2005	Distribution – Antenatal care	Yes	2004
	Targeting all age groups	No	–	Distribution – EPI routine and campaign	Yes	2005
				Targeting children < 5 years and pregnant women	Yes	1998
				ITN distribution is subsidized	Yes	2003
Indoor residual spraying (IRS)	IRS is a primary vector control intervention	No	–	Insecticide-resistance management implemented	Yes	1998
	DDT is used for IRS (public health) only	No	–	Where IRS is conducted, other options are also implemented, e.g. ITN	Yes	2003
				IRS is used for prevention and control of epidemics	Yes	2000
Intermittent preventive treatment (IPT)	IPT used to prevent malaria during pregnancy	Yes	2005			
Case management	Oral artemisinin monotherapies banned (prohibited from registration or removed from the system)	Yes	2006	Parasitological confirmation for patients ≥ 5 years only	No	–
	Parasitological confirmation for patients of all ages	No	–	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	2005	ACT is free of charge for patients ≥ 5 years in the public sector	No	–
	Diagnosis of malaria of inpatients is based on parasitological confirmation	No	–	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	1998	Uncomplicated malaria cases are admitted	No	–
	Oversight regulation of case management in the private sectors	Yes	2000			
	RDTs used at community level	Yes	2006			

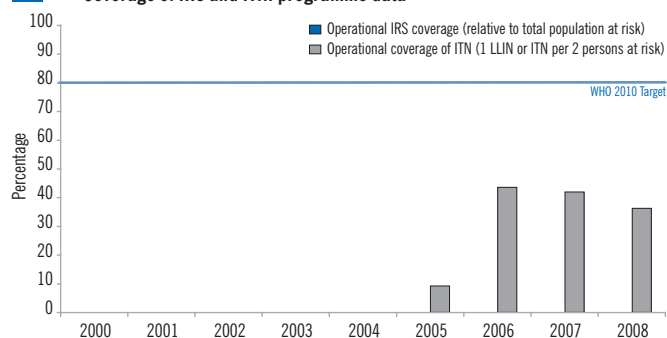
Antimalarial policy	Type of medicine	Year adopted	Study year	Results of therapeutic efficacy tests					
				No. of studies	Median	Minimum	Maximum	Percentiles: 25%	75%
First-line treatment of <i>P. falciparum</i> (unconfirmed)	AL	2005	2006	1	4.4	4.4	4.4	4.4	4.4
First-line treatment of <i>P. falciparum</i> (confirmed)	AL	2005							
Treatment failure of <i>P. falciparum</i>	QN(7d)	2005							
Treatment of severe malaria	QN(7d)	2005							
Treatment of <i>P. vivax</i>	–	–							

### III. IMPLEMENTING MALARIA CONTROL

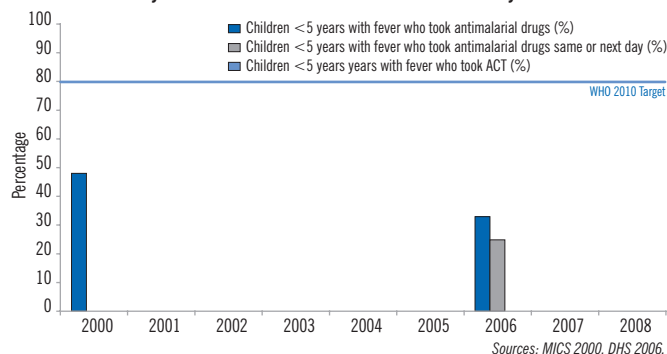
**Coverage of ITN: survey data**



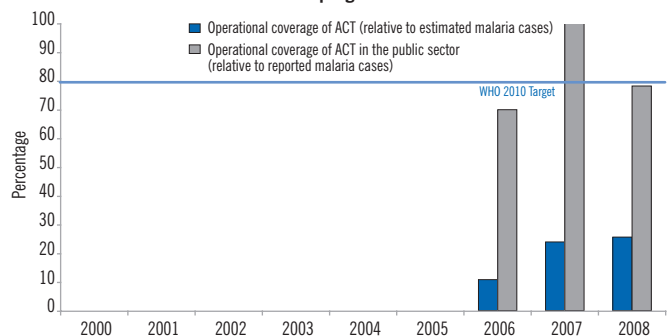
**Coverage of IRS and ITN: programme data**



**Access by febrile children to effective treatment: survey data**



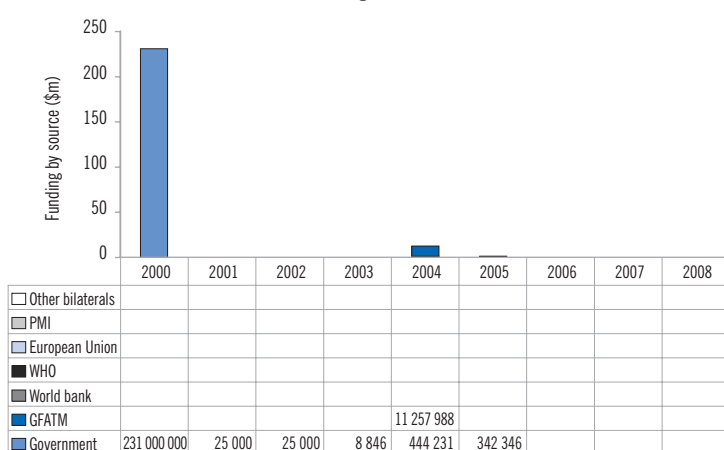
**Access to effective treatment: programme data**



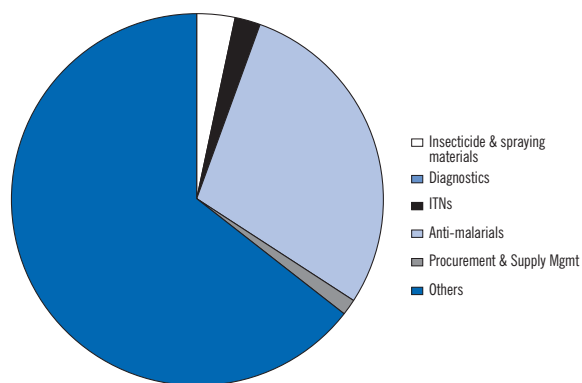
Year	Pregnant women who slept under any net (%)	Pregnant women who slept under an ITN (%)	Children < 5 years with fever (%)	Febrile children < 5 years who sought treatment in HF (%)	Number of households protected by IRS	Number of people protected by IRS	Number of ITNs and/or LLINs	Number of 1st-line treatment courses received	Number of ACT treatment courses received
2000								592 334	
2001								938 268	
2002								1 323 335	
2003								888 345	
2004								681 783	
2005							300 000	764 443	
2006	13	7					2 665 000	622 127	622 127
2007							710 000	1 162 636	1 431 358
2008							700 000	2 033 971	1 593 782

### IV. FINANCING MALARIA CONTROL

**Governmental and external financing**



**Breakdown of expenditure by intervention in 2008**



### V. SOURCE OF INFORMATION

**PROGRAMME DATA**

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

**SURVEY AND OTHER DATA**

Insecticide-treated nets (ITN)	No surveys
Treatment	No surveys
Use of health services	MICS 2000