INDONESIA

Malaria transmission is higher in the forest areas, particularly in the eastern part of the country, where about 113 million people of the 214 million total population at risk live. The number of reported cases decreased from 2.8 million in 2001 to 1.2 million in 2008. Only 20% of the reported cases were confirmed, of which nearly 50% were due to *P. falciparum*. Inpatient data are incomplete, so that trends in admissions or deaths cannot be assessed. Widescale vector control against malaria was not reported, other than the delivery of 2 million LLINs in 2006 and 250 000 conventional ITNs in 2007. IRS implementation is not recorded consistently, although it remains a national policy. The programme delivered 327 000 ACT courses in 2008, sufficient to treat all confirmed *P. falciparum* cases in the public sector. In the 2008 demographic and heath survey, 65% of households had at least one ITN and 68% of children under 5 had slept under an ITN the previous night. External funding for malaria control appears to have increased, from less than US$ 2 million in 2000 to more than US$ 15 million in 2008, mainly from the Global Fund, United Nations agencies and the Government.

I. EPIDEMIOLOGICAL PROFILE

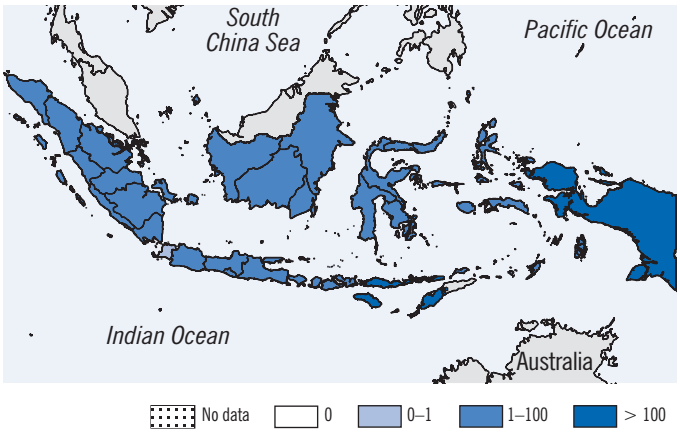
Population, endemicity and malaria burden

Population (in thousands)	**2008**	**%**
All age groups	227 345	
< 5 years	20 891	9
≥ 5 years	206 454	91

Population by malaria endemicity (in thousands)	**2008**	**%**
High transmission ≥ 1/1000	83 536	37
Low transmission (0–1/1000)	30 760	14
Malaria-free (0 cases)	113 049	50
Rural population	110 149	48

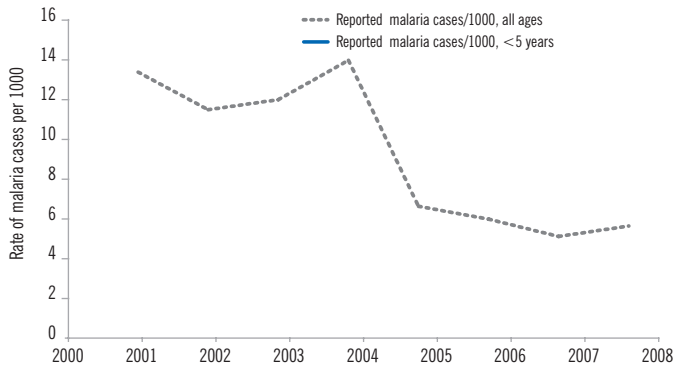
Vector and parasite profiles	
Major *Anopheles* species	*acoitnus, balabacensis, bancrofti, , barbirostris, farauti, ftuviatilis, karwari, koliensis, letifer, maculatus, minimus, nigerrimus, punctulatus, subpictus, sundaicus, umbrosus*
Plasmodium species	*falciparum, vivax*

Stratification of burden (reported cases, per 1000)

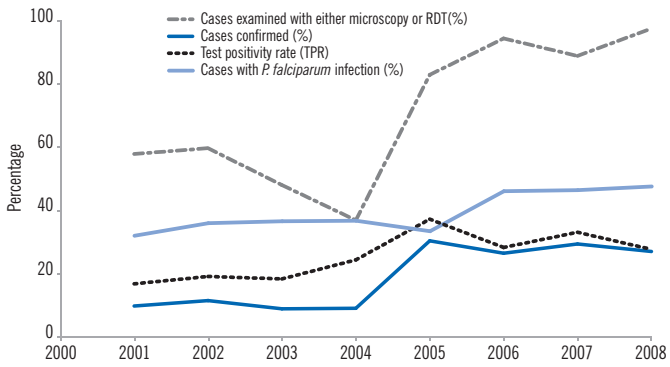


Trends in malaria morbidity and mortality

Reported malaria cases, per 1000



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

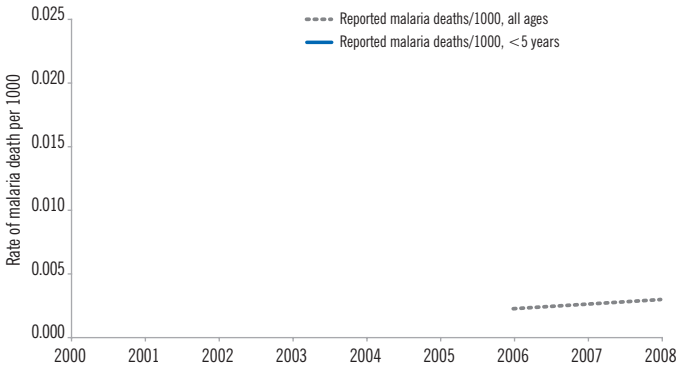


Year	Reported malaria cases, all ages	Reported malaria cases, < 5 years	All-cause outpatient consultations, all ages	All-cause outpatient consultations, < 5 years	Examined	Positive	*P. falciparum*	Reporting completeness of outpatient health facilities (%)	Reporting completeness of districts (%)
2000									
2001	2 776 477				1 604 573	267 592	85 596		
2002	2 416 039				1 440 320	273 793	98 430		
2003	2 554 223				1 224 232	223 074	81 591		
2004	3 016 262				1 109 801	268 852	98 729		
2005	1 445 831				1 197 621	437 323	146 209		
2006	1 320 581				1 246 324	347 597	160 147		
2007	1 140 424				1 012 681	333 793	155 050		
2008	1 275 192				1 243 744	343 048	163 222		

Reported malaria admissions, per 1000

No data

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										
2001										
2002							88 441			
2003							81 943			
2004							99 615			
2005							85 567			
2006			55 398		494	494	84 214			
2007										
2008					669		92 917			

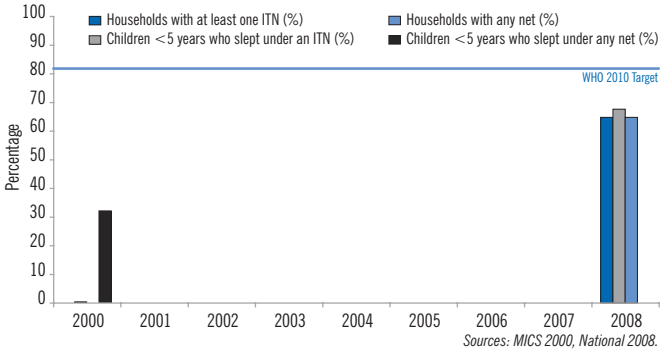
II. INTERVENTION POLICIES AND STRATEGIES

Intervention	WHO-RECOMMENDED POLICIES / STRATEGIES	Yes or No	Year adopted	OPTIONAL POLICIES / STRATEGIES	Yes or No	Year adoped
Insecticide-treated nets (ITN)	Distribution of ITN/LLINs – Free	Yes	2003	Distribution – Antenatal care	Yes	2005
	Targeting all age groups	Yes	2003	Distribution – EPI routine and campaign	Yes	2005
				Targeting children < 5 years and pregnant women	Yes	2005
				ITN distribution is subsidized	–	–
Indoor residual spraying (IRS)	IRS is a primary vector control intervention	No	–	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	2000
				IRS is used for prevention and control of epidemics	Yes	2000
Intermittent preventive treatment (IPT)	IPT used to prevent malaria during pregnancy	No	–			
Case management	Oral artemisinin monotherapies banned (prohibited from registration or removed from the system)	Yes	2003	Parasitological confirmation for patients ≥ 5 years only	–	–
	Parasitological confirmation for patients of all ages	Yes	2000	Malaria diagnosis is free of charge in the public sector	Yes	–
	ACT is free of charge for < 5 years old in the public sector	Yes	2003	ACT is free of charge for patients ≥ 5 years in the public sector	Yes	–
	Diagnosis of malaria of inpatients is based on parasitological confirmation	No	–	ACT is delivered at community level through community agents (beyond the health facilities)	No	–
	Pre-referral treatment with quinine or artemether IM or artesunate suppositories	Yes	2004	Uncomplicated malaria cases are admitted	Yes	2000
	Oversight regulation of case management in the private sectors	–	–			
	RDTs used at community level	No	–			

			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 *P. falciparum* (unconfirmed)	CQ+PQ	2004							
First-line treatment of *P. falciparum* (confirmed)	DHA-PPQ, AS+AQ+PQ	2009							
Treatment failure of *P. falciparum*	QN+D+PQ	2004							
Treatment of severe malaria	AM, QN	2004							
Treatment of *P. vivax*	CQ+PQ(14d)	2004							

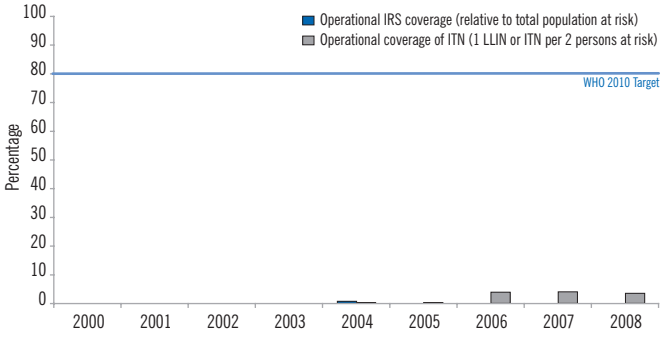
III. IMPLEMENTING MALARIA CONTROL

Coverage of ITN: survey data

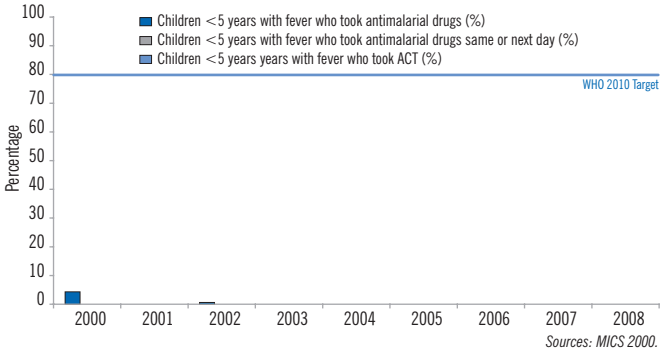


Sources: MICS 2000, National 2008.

Coverage of IRS and ITN: programme data

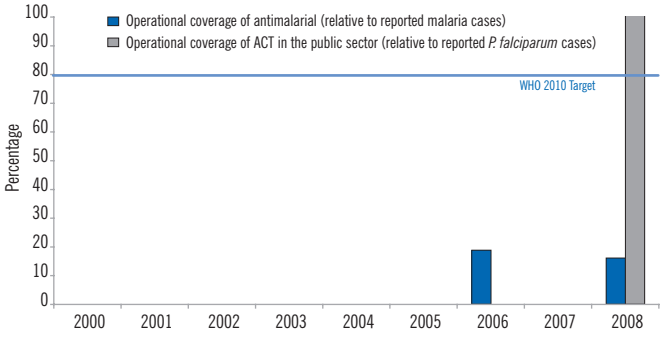


Access by febrile children to effective treatment: survey data



Sources: MICS 2000.

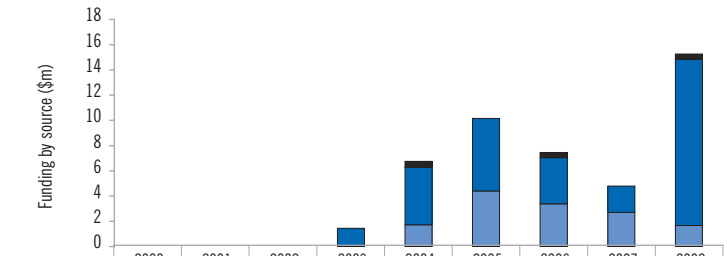
Access to effective treatment: programme data



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			–	–					
2001									
2002			–	–					
2003									
2004						749 500	155 000		
2005									
2006							2 000 000	250 000	
2007					40 000		250 000		
2008					1 383			338 629	327 440

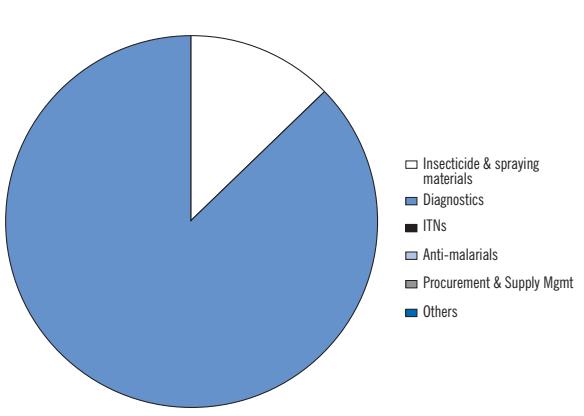
IV. FINANCING MALARIA CONTROL

Governmental and external financing



	2000	2001	2002	2003	2004	2005	2006	2007	2008
Other bilaterals									
PMI									
European Union									
WHO					460 000		406 000		406 000
World bank									
GFATM				1 435 987	4 556 562	5 762 318	3 655 692	2 079 162	13 199 217
Government					1 726 788	4 402 565	3 386 554	2 705 754	1 664 912

Breakdown of expenditure by intervention in 2008



V. SOURCE OF INFORMATION

PROGRAMME DATA		SURVEY AND OTHER DATA	
Reported cases	Surveillance data	**Insecticide-treated nets (ITN)**	MICS 2000
Operational coverage of ITNs, IRS and access to medicines	Programme report	**Treatment**	MICS 2000, DHS 2002-03
Financial data	Programme report	**Use of health services**	DHS 2002