

United Republic of TANZANIA

ZANZIBAR

Malaria transmission in Zanzibar, UR Tanzania, is perennial with seasonal peaks; most cases are caused by *P. falciparum*. Morbidity and mortality have been substantially reduced, with a decrease of $\geq 75\%$ in the numbers of malaria cases, inpatient malaria cases and deaths in 2009 compared to the average for 2000–2004. This decline is strongly linked to the scale-up of LLINs, IRS and ACT from 2004. The programme delivered 500 000 LLINs during 2007–2009, enough to replace old nets for the entire population at risk, implemented IRS in several rounds protecting 90% of population at risk, and delivered ACTs. Detailed funding information was not provided but expenditure on malaria in 2009 was US\$ 450 000 mainly funded by PMI and UNICEF.

I. EPIDEMIOLOGICAL PROFILE

Population and epidemiological profile

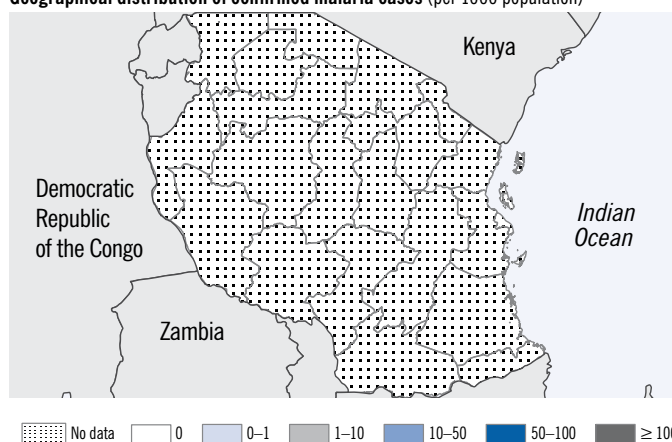
Population (in thousands)*	2009	%
All ages	1 321	
< 5 years	235	18
Rural	979	74
Population by malaria endemicity (in thousands)	2009	%
High transmission (≥ 1 case per 1000 population)	1 321	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria-free (0 cases)	0	0

Vector and parasite species

Major <i>Anopheles</i> species	<i>gambiae</i>
Major <i>Plasmodium</i> species	<i>falciparum</i>

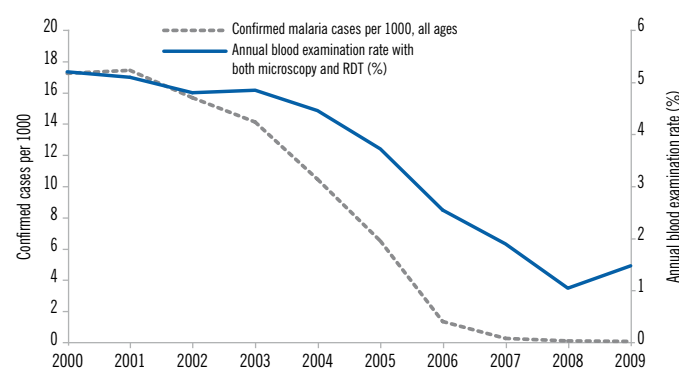
* UN Population Division estimates

Geographical distribution of confirmed malaria cases (per 1000 population)

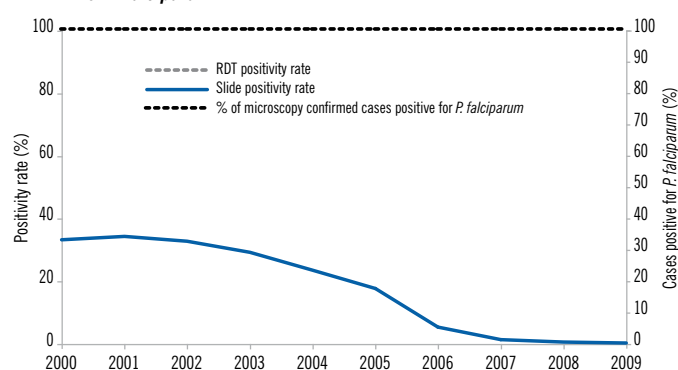


Trends in malaria morbidity and mortality

Confirmed malaria cases, per 1000 and annual blood examination rate



Malaria test positivity rate and % of microscopy confirmed cases positive for *P. falciparum*



All ages

Year	All-cause outpatient consultations	Suspected cases (tested + probable)	Probable cases (not tested)	Total cases tested (microscopy + RDT)	Total confirmed cases (microscopy + RDT)	Malaria cases (confirmed + probable)	Examined by microscopy	Microscopy positive	<i>P. falciparum</i>	Examined by RDT	RDT positive
2000	116 932	53 533		53 533	17 734	17 734	53 533	17 734	17 734		
2001	112 462	53 804		53 804	18 385	18 385	53 804	18 385	18 385		
2002	116 030	51 968		51 968	16 983	16 983	51 968	16 983	16 983		
2003	109 634	53 899		53 899	15 705	15 705	53 899	15 705	15 705		
2004	112 496	50 976		50 976	11 936	11 936	50 976	11 936	11 936		
2005	104 864	43 642		43 642	7 628	7 628	43 642	7 628	7 628		
2006	102 831	30 676		30 676	1 585	1 585	30 676	1 585	1 585		
2007	95 913	23 511		23 511	293	293	23 511	293	293		
2008	110 542	13 183		13 183	67	67	13 183	67	67		
2009	135 424	19 328		19 328	40	40	19 328	40	40	383	6

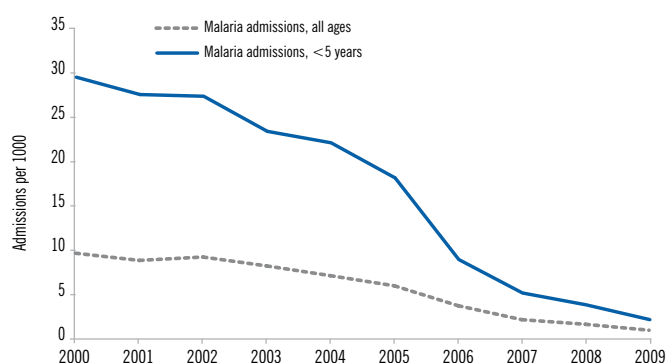
< 5 years

Year	All-cause outpatient consultations	Malaria cases (confirmed + probable)
2000	54 921	23 350
2001	54 718	23 396
2002	53 546	22 200
2003	52 118	21 039
2004	53 396	16 424
2005	48 470	13 990
2006	46 110	8 650
2007	37 559	4 691
2008	41 411	4 689
2009	44 946	3 830

Note: Reporting completeness of outpatient health facilities (%) in 2009: 97.22%

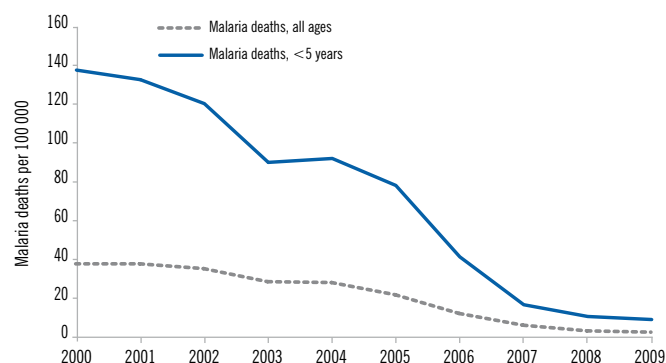
I. EPIDEMIOLOGICAL PROFILE (continued)

Reported malaria admissions, per 1000 population



Admissions	All ages		<5 years	
	All-cause admissions	Malaria admissions	All-cause admissions	Malaria admissions
Year				
2000	23 525	9 806	10 552	5 407
2001	22 856	9 177	9 200	5 173
2002	25 132	9 815	10 835	5 273
2003	25 074	8 981	9 558	4 634
2004	24 721	7 994	11 564	4 500
2005	25 241	6 834	12 127	3 793
2006	22 245	4 336	7 873	1 916
2007	18 392	2 477	6 501	1 128
2008	19 402	1 878	5 250	861
2009	19 430	1 083	5 056	493

Reported malaria deaths, per 100 000 population



Deaths	All ages		<5 years	
	All-cause deaths	Malaria deaths	All-cause deaths	Malaria deaths
Year				
2000	736	379	490	252
2001	702	390	439	249
2002	696	374	420	232
2003	597	308	305	178
2004	657	312	321	187
2005	613	247	319	163
2006	451	137	243	88
2007	388	64	187	36
2008	379	29	186	23
2009	266	21	139	20

II. INTERVENTION POLICIES AND STRATEGIES

Intervention	WHO-RECOMMENDED POLICIES / STRATEGIES	YES or NO	Year adopted	OTHER POLICY / STRATEGY	YES or NO	Year adopted
Insecticide-treated nets (ITN)	ITNs/LLINs are distributed free of charge	YES	2005	ITNs/LLINs are distributed through antenatal clinics	–	–
	ITNs/LLINs are distributed to all age groups	YES	2008	ITNs/LLINs are distributed through EPI clinics	–	–
				ITNs/LLINs are distributed through mass campaigns to < 5 only	–	–
Indoor residual spraying (IRS)	IRS is recommended by malaria control programme	YES	2006	IRS is only used to prevent and control epidemics	–	–
	DDT is used for IRS	–	–	Where IRS is conducted, ITNs are also applied	YES	2006
				Insecticide resistance monitoring is undertaken	YES	2006
Intermittent preventive treatment (IPT)	IPT is used to prevent malaria during pregnancy	YES	2004			
Case management	Patients of all ages should receive diagnostic tests	YES	2006	Malaria diagnosis is free of charge in the public sector	YES	2004
	RDTs are used at community level	–	–	ACT is delivered by community agents	–	–
	ACT is free of charge for all age groups in the public sector	YES	2003	Therapeutic efficacy monitoring is undertaken	–	–
	Pre-referral treatment with parenteral quinine or artemisinin derivatives or artesunate suppositories is provided	YES	2004			
	Oral artemisinin-based monotherapies are not registered	–	–			

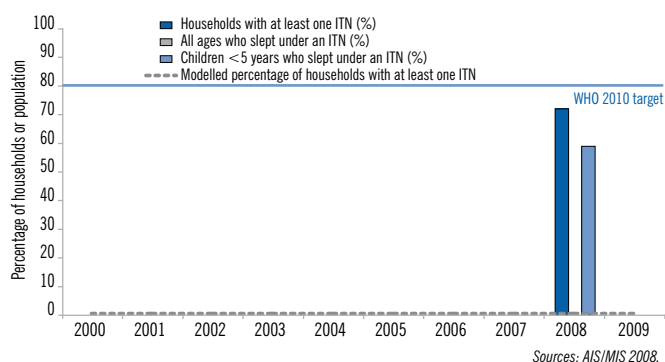
Antimalarial policy	Type of medicine	Year adopted
First-line treatment of <i>P. falciparum</i> (unconfirmed)	AS + AQ	2004
First-line treatment of <i>P. falciparum</i> (confirmed)	AS + AQ	2004
Treatment failure of <i>P. falciparum</i>	QN	2004
Treatment of severe malaria	QN	2004
Treatment of <i>P. vivax</i>	–	–

Therapeutic efficacy studies (percentage of clinical and parasitological failure)

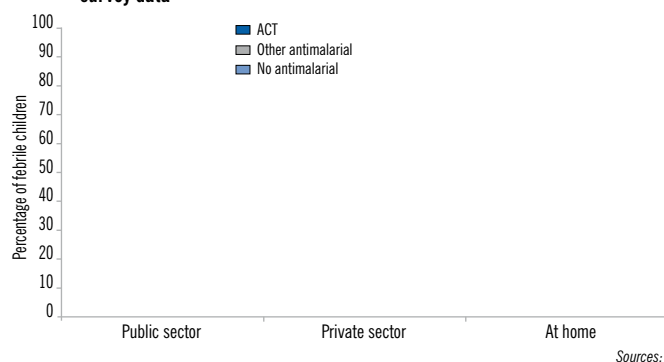
Name of first-line antimalarial medicine	Study year	No. of studies	Failure rate			Follow-up	Remarks
			Minimum	Median	Maximum		
Artesunate + amodiaquine (AS + AQ)	2002–2005	2	10.8	12.1	13.4	42 days	

III. IMPLEMENTING MALARIA CONTROL

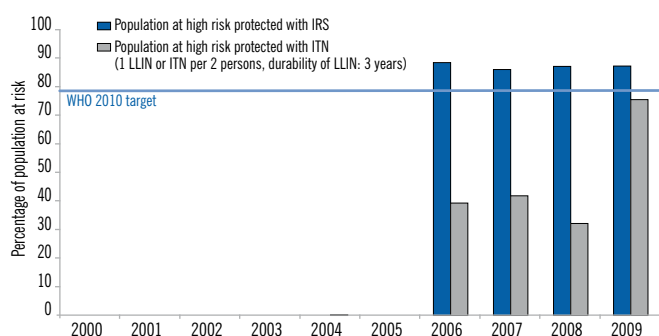
Coverage with ITNs from survey or model data



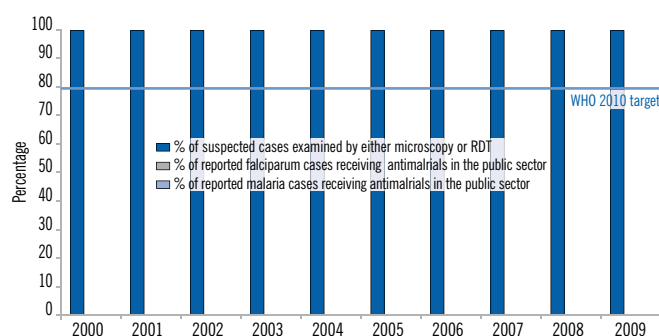
Source of treatment for febrile children and antimalarial received from survey data



Coverage with IRS and ITNs from programme data



Access to effective treatment from programme data: percentage of cases tested and number of ACT courses delivered relative to cases



Preventive interventions: programme and survey data

Year	No. of ITNs and/or LLINs delivered	No. of people protected by IRS	Pregnant women who slept under any net (%)	Pregnant women who slept under an ITN (%)
2000	0			
2001	0			
2002	0			
2003	0			
2004	1 500			
2005	0			
2006	244 970	1 071 361		
2007	23 520	1 071 194		
2008	189 317	1 117 590		
2009	289 121	1 152 235		

Survey sources:

Diagnostics and treatment courses: programme and survey data

No. of RDTs delivered	No. of first-line treatment courses delivered	No. of ACT treatment courses delivered	Febrile children < 5 years (%)	Febrile children < 5 years treated in public health facility (%)
100 000				
150 000				
200 000				
200 000				12
200 000				
121 248				

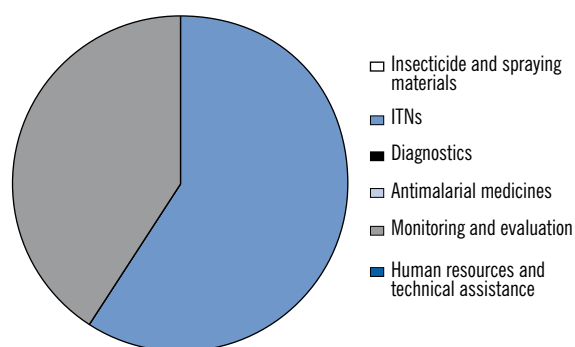
Survey sources: AIS/MIS 2008.

IV. FINANCING MALARIA CONTROL

Governmental and external financing

Funding by source (US\$ m)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Other*										
USAID/PMI										
UNICEF										
WHO										
World Bank										
Global Fund										
Government**										

Breakdown of expenditure by intervention in 2009



* Bilaterals: DFID, JICA, and EU, UN agencies, etc.

** Governmental expenditure may not include costs at sub-national level and costs related to health systems, human resources, etc.