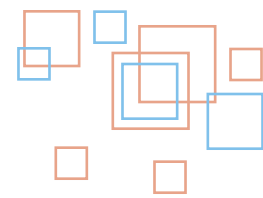


# CHAD



## FLAG AND MAP



## HEALTH PROBLEMS

- HIV/AIDS
- Malaria
- Tuberculosis
- Schistosomiasis
- Trypanosomiasis
- Leishmaniasis
- Cholera
- Amoebiasis
- Typhoid Fever
- Leprosy
- Onchocerciasis
- Lymphatic Filariasis
- Paragonomiasis
- Meningitis

## DEMOGRAPHIC AND SOCIO-ECONOMIC INFORMATION <sup>a, b, c, d</sup>

**Population <sup>a</sup>:** 8,376,571 (2002)

### Age structure <sup>a</sup>:

0-14 years	48%
15-64 years	49%
65 years and over	3%

**Population growth rate <sup>a</sup>:** 3.07% (2002-2005)

### Life expectancy at birth (2000-2005) <sup>a</sup>:

Total population	46.3 years
Male	45.1 years
Female	47.5 years

### Infant and child mortality (per 1000 LB) <sup>c, d</sup>:

Neonatal mortality rate (96/97)	43.9
Infant mortality rate (2001)	117
Childhood mortality rate (96/97)	102.5
Under five mortality rate (2001)	200

### National Health Indicators (2000) <sup>b</sup>:

Per capita GDP in US dollars	623
Total expenditure on health as % of GDP	3.1
Per capita total expenditure on health in US dollars	19
Per capita government expenditure on health in US dollars	15
General Government expenditure on health as % of total general government expenditure	13.5
Total national budget for malaria as % of total national health budget	N/A

### Global Fund support to fight Malaria:

The country has applied for the third round.

**Number of districts in the country:** 54

N/A: Not available

Sources: <sup>a</sup> United Nation Population Division - 2000 World Population Prospects: Population Database: The 2002 Revision, <http://esa.un.org/unpp>

<sup>b</sup> WHO Statistical Information System (WHOSIS): Country Official Health Indicators, <http://www.who.int/whosis>

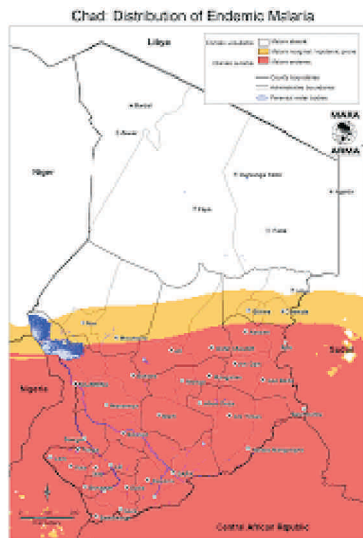
<sup>c</sup> Human Development Report, UNDP (2003)

<sup>d</sup> Demographic and Health Survey in Chad (1996/97)

## MALARIA EPIDEMIOLOGY:

### Malaria Risk, Vector & Parasite Species and Transmission Season:

#### Endemicity <sup>a</sup>:



#### Anopheles Species <sup>b</sup>:

Thirteen (13) Anopheles species have been documented in the country. The following anopheles species are malariavectors: *An. Funestus*, *An. Arabiensis*, *An. Nili*, *An. Coustani*, *An. Pharoensis*

#### Malaria Parasite Species:

The main parasite is *Plasmodium falciparum*.

#### Malaria Transmission Season <sup>a</sup>:

Only half of the country is concerned with malaria as the desert is in the north. The transmission occurs in the Southern part and lasts from 2-8 months from May to December.

#### Malaria Risk <sup>a</sup>:

Population at Risk of malaria	N/A
Negligible Risk	0
Epidemic Risk	3%
Endemic Risk	97%

Sources: <sup>a</sup> Adapted from Mara Arma (2001) and WHO/AFRO (2002)

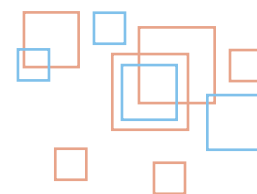
<sup>b</sup> Software of the Anopheline mosquitoes of the Afro tropical Region, ORSTOM/OCEAC (1998)

## MALARIA MORBIDITY AND MORTALITY:

Population Data in thousands <sup>a</sup>	1990	1997	1998	1999	2000	2001	2002
Total population	5829	7166	7392	7625	7885	8127	8377
Annual population growth rate (per 100)	2.89	3.15	3.15	3.15	3.07	3.07	3.07
Pop. less than 5 years	1084	1347	1390	1433	1490	1536	1583
Pop. 5 years and above	4745	5819	6002	6191	6395	6591	6793
Women population aged 15-49 years	2553	3139	3238	3340	3462	3568	3677
Number of clinical malaria cases reported <sup>b</sup>							
Total	212554	343186	395205	392815	369263	386197	-
Under five years	-	-	-	-	-	-	-
Five and above	-	-	-	-	-	-	-
Pregnant women	-	-	-	-	-	-	-
Number of admitted malaria cases reported							
Total	-	-	-	-	17682	19463	-
Under five years	-	-	-	-	6651	8305	-
Five and above	-	-	-	-	9787	9751	-
Pregnant women	-	-	-	-	1244	1407	-
Number of malaria deaths reported							
Total	-	-	-	-	1277	1001	-
Under five years	-	-	-	-	914	605	-
Five and above	-	-	-	-	348	379	-
Pregnant women	-	-	-	-	15	17	-

Sources: <sup>a</sup> United Nation Population Division - 2000 World Population Prospects: Population Database: The 2002 Revision, <http://esa.un.org/unpp>

<sup>b</sup> Ministry of Health



## CASE MANAGEMENT AND DRUG POLICY:

### Antimalarial Drug Policy:

Chloroquine is the first line drug for uncomplicated Malaria. It is also used for the prevention of malaria in pregnancy. Sulphadoxine-pyrimethamine is the second-line (treatment failure) drug and Quinine is recommended for Severe Malaria.

### Drug Therapeutic Efficacy Testing Profile in Selected Sentinel Sites:

YEAR	SENTINEL SITE	DRUG	ETF (%)	LTF (%)	ACR (%)	Sample Size
1995	N'Djamena	CQ	10	16.7	73.3	30
1999	N'djamena	SP	11	16	73	30
2002	Bongor	CQ	8.1	33.4	58.4	99
2002	Bongor	SP	14.6	10.7	74.7	103
2002	Bongor	AQ	4.9	6.1	89	82

Source: WHO/AFRO (2002) and Ministry of Health (2003)

## SUMMARY OF CORE IMPACT AND CORE OUTCOME INDICATORS:

Core Impact Indicators <sup>a, b</sup>	2000 <sup>b</sup>	2001 <sup>a</sup>	2002	2003	2004	Global Target in 2010
Under five crude death rate (per 1000)	-	194.0	-			Half of 2000 figures
Proportion of deaths attributed to malaria among children under five in selected health facilities	-	28.1%	-			
Under five Case Fatality Rate in selected health facilities	-	12.8%	-			
Proportion of morbidity inpatients attributed to malaria in Under five in selected health facilities	-	25.0%	-			
Core Outcome Indicators (Abuja Indicators)						Abuja Target in 2005
Proportion of children under five with uncomplicated malaria correctly managed in health facilities	-	13.7%	-			
Proportion of health facilities surveyed with no stockout of nationally recommended antimalarial drugs continuously for one week during the last three months at the time of survey	-	60%	-			
Proportion of under five with fever/malaria receiving correct treatment within 24 hours of onset of fever in communities surveyed in 2001	-	12.2%	-			60%
Proportion of children under five sleeping under mosquito nets	56.8%	43.3%	-			
Proportion of children under five sleeping under ITNs	2.0%	6.7%	-			60%
Proportion of pregnant women sleeping under mosquito nets	53.1%	45.5%	-			
Proportion of pregnant women sleeping under ITNs	2.3%	7.2%	-			60%

Sources: <sup>a</sup> Ministry of Health - RBM Baseline Survey in selected districts (Bongor, Moundou, Sarh, Abeche, Biltine) in Chad (2001)

<sup>b</sup> Ministry of Health - Rapport sur l'évaluation de la promotion des moustiquaires imprégnés dans trois districts (Bol, Bongor, N'djamena) au Tchad (2000)

