

# Country profile overview

## General indicators

■ Population: estimates are based on United Nations Population Division (2000 revision estimates), available online at: <http://www.un.org/popin/>.

■ Population growth rate: expressed as percent per year, is based on estimates published annually in the World Health Report, available online at: <http://www.who.int/whr/2002/en/>.

■ Infant mortality rate: expressed as number of infants per 1000 dying before first birthday. See:

- UNICEF, State of the world's children 2003, available online at <http://www.unicef.org/sowc03/>
- Hill K. al. Trends in child mortality in the developing world: 1960 to 1996, available online at: <http://childinfo.org/cmr/revis/kh98meth.html>.

■ Under-5 mortality rate: expressed as number of under-5s per 1000 dying before fifth birthday. See:

- UNICEF, State of the World's Children 2003, available online at <http://www.unicef.org/sowc03/>
- Hill K et al. Trends in child mortality in the developing world: 1960 to 1996, available online at: <http://childinfo.org/cmr/revis/kh98meth.html>.

■ Crude birth rate: the number of births per year per 1000 population; further information is available at <http://unstats.un.org/unsd/>.

■ Population at risk: expressed as percentage of population living where the climate is suitable for malaria transmission. Estimates from Mapping Malaria Risk in Africa (MARA) (see <http://www.mara.org.za/>) derived from a theoretical model of the distribution of endemic and epidemic malaria based on climate conditions (long-term mean rainfall and temperature) suitable for malaria transmission. Classification of risk as endemic, epidemic or overall is based on (8,9).

## Malaria morbidity and mortality

■ Hospital deaths due to malaria: the percentage of recorded inpatient deaths that are attributed to malaria; derived from Ministry of Health reports where data are available.

■ Malaria admissions: the percentage of recorded health facility admissions that are attributed to malaria; derived from Ministry of Health reports where data are available.

■ Malaria outpatient attendance: the percentage of recorded outpatient visits to health facilities that are attributed to malaria; derived from Ministry of Health reports where data are available.

■ Outpatient malaria cases per 1000 persons: the total number of outpatient malaria cases among all age groups reported in a country in a year, expressed per 1000 total population per year; total population is based on the United Nations Population Division estimates for the same year as the case reporting.

■ Inpatient malaria cases per 1000 persons: the total number of inpatient malaria cases (i.e. hospital admissions) among all age groups reported in a country in a year, expressed per 1000 total population; total population is based on the United Nations Population Division estimates for the same year as the case reporting.

## Nets and insecticide-treated nets (ITNs)

■ Households with mosquito nets (or ITNs): the percentage of households that possess one or more nets, treated or not (or one or more ITNs). Estimates are derived from nationally representative household surveys, such as MICS or DHS.

■ Under-5s using mosquito nets (or ITNs): the percentage of children under 5 years old who slept under nets (or ITNs) the night before the survey. Estimates are derived from nationally representative household surveys such as MICS or DHS.

## Antimalarial treatment

■ Under-5s receiving any antimalarial: the percentage of children under 5 years old,

with reported fever in the previous 2 weeks, who received any antimalarial for the fever. Estimates are derived from nationally representative household surveys such as MICS or DHS.

■ Under-5s receiving chloroquine: the percentage of children under 5 years old, with reported fever in the previous 2 weeks, who received chloroquine for the fever. Estimates are derived from nationally representative household surveys such as MICS or DHS.

■ Under-5s receiving antimalaria within 24 hours: the percentage of children under 5 years old, with reported fever in the previous 2 weeks, who received any antimalarial for the fever within 24 hours of onset of the fever symptoms. Estimates are derived from nationally representative household surveys such as MICS or DHS.

### Attending health facility

■ Under-5s receiving any antimalarial: the percentage of children under 5 years old, with reported fever in the previous 2 weeks, who were taken to a health facility and received any antimalarial for the fever. Estimates are derived from nationally representative household surveys such as MICS or DHS.

■ Under-5s receiving chloroquine: the percentage of children under 5 years old, with reported fever in the previous 2 weeks, who were taken to a health facility and received chloroquine for the fever. Estimates are derived from nationally representative household surveys such as MICS or DHS.

### Malaria in pregnancy

■ Pregnant women receiving antenatal care at least once: the percentage of women with a live birth during the 3 years preceding the survey who received antenatal care during the pregnancy by a skilled attendant. Skilled attendant is defined as a doctor, trained nurse, or midwife; traditional birth attendants are not included in this analysis. For women with multiple pregnancies during the previous 3 years, only the most recent pregnancy is considered (DHS; for MICS the interval under consideration is the past 1 year). Estimates are derived from nationally representative household surveys such as MICS or DHS.

■ Pregnant women attending antenatal care at least twice: the percentage of women with

a live birth during the 3 years preceding the survey who reported at least two visits for antenatal care. This does not reflect the skill level of the care provider. For women with multiple pregnancies during the past 3 years, only the most recent pregnancy is considered. Estimates are derived from nationally representative household surveys such as MICS or DHS.

■ Pregnant women receiving Intermittent Preventive Treatment (IPT) at least once/twice: the percentage of women reportedly pregnant at the time of the survey who used sulfadoxine-pyrimethamine (SP) for malaria prevention during the pregnancy. The number of data points collected for this indicator so far is limited, because IPT has only recently been adopted nationally and internationally. Estimates are derived from nationally representative household surveys such as MICS or DHS.

■ Pregnant women using nets/ITNs: the percentage of women reportedly pregnant at the time of the survey who slept under a net/ITN the night before the survey. Estimates are derived from nationally representative household surveys such as MICS or DHS.

### Antimalarial treatment policy

Information on the current official antimalarial treatment policy. Date adopted reflects the date of recent policy change on the type of antimalarial drugs used for treatment. Treatment regimens are given, where information is available, for uncomplicated malaria (differentiated further as "probable" and parasitologically confirmed malaria), treatment failure, severe malaria, and prevention during pregnancy.

### Taxes and tariffs on insecticide-treated nets (ITNs)

Information on import tariffs and Value-Added Tax (VAT) on ITNs is based on currently available information. Data are available only from countries where a change of policy has been made. Date reflects the last year of known update or available information. If the change occurred before the April 2001 Abuja Summit, date is specified as "before Abuja".

### Proportional rank for selected indicators

Information on selected indicators expressed as the country's proportional rank among all countries in Africa south of the Sahara for which information is currently available.

## References

1. Demographic and Health Surveys (DHS). Calverton, MD, ORC Macro. <http://www.measuredhs.com>.
2. *End-decade multiple indicator cluster survey manual*. New York, United Nations Children's Fund, 2000 (available at <http://www.childinfo.org/index2.htm>).
3. *Population and health in developing countries. Vol. I. Population, health and survival at INDEPTH sites*. Ottawa, International Development Research Centre, 2002.
4. Snow RW et al. Estimating mortality, morbidity and disability due to malaria among Africa's non-pregnant population. *Bulletin of the World Health Organization*, 1999, 77(8):624–640.
5. Byass P et al. The role of demographic surveillance systems (DSS) in assessing the health of communities: an example from rural Ethiopia. *Public Health*, 2002, 116(3):145–150.
6. Adult Morbidity & Mortality Project - Phase 1 (AMMP-1). The policy implications of adult morbidity and mortality end of phase 1 report. 1997:
7. McCombie SC. Treatment seeking for malaria: a review of recent research. *Social Science and Medicine*, 1996, 43(6):933–945.
8. Snow RW et al. A preliminary continental risk map for malaria mortality among African children. *Parasitology Today*, 1999, 15:99–104.
9. Craig MH et al. A climate-based distribution model of malaria transmission in sub-Saharan Africa. *Parasitology Today*, 1999, 15:105–111.