



Map data sources: WHO/UNAIDS Epidemiological Fact Sheets and the United States Census Bureau  
Map production: WHO

## 1. Demographic and socioeconomic data

	Date	Estimate	Source
Total population (millions)	2004	34.3	United Nations
Population in urban areas (%)	2003	38.4	United Nations
Life expectancy at birth (years)	2002	57.1	WHO
Gross domestic product per capita (US\$)	2001	390	CNS/BOS/MOF
Government budget spent on health care (%)	2001	4.6	WHO
Per capita expenditure on health (US\$)	2001	14	WHO
Human Development Index	2001	0.503	UNDP

## 3. Situation analysis

- Epidemic level, trend and gender data.** According to national sources, at the end of December 2003, 10 959 cases of HIV/AIDS had been reported to the Sudanese National AIDS Control Programme since the beginning of the epidemic. A total of 1437 were reported in 2003, representing an increase of about 13% in the cumulative total. According to WHO/UNAIDS estimates, adult prevalence is in the range of 0.7–7.2%, and the main mode of transmission is heterosexual. The overall HIV prevalence in southern Sudan is difficult to estimate, as the civil strife of the past 50 years has led to the collapse of infrastructure, creating pockets of relatively isolated areas along with widespread poverty and illiteracy.
- Major vulnerable and affected groups.** According to national estimates, prevalence among vulnerable groups is estimated to be 1% among antenatal care attendees, 10% among tea sellers in the southern district of Juba, 2% among prisoners, 1% among truck drivers, 1.3% among street children, 4.3% among sex workers and 4% among refugees. These figures represent data from government-controlled states. The existing data from southern Sudan show varying HIV prevalence rates: 0.9% in the general population in Rumbek (2003), 0.3% in a group of people with tuberculosis in Upper Nile (2001), 7.2% in the general population in Yambio (2000) and 2.7% in the general population in Yei County on the border (2003) with Uganda. The southern states are hardest hit with HIV/AIDS because of the lack of health services and health awareness, in addition to their proximity to high-prevalence neighbouring countries.
- Policy on HIV testing and treatment.** There is no clear policy on testing and counselling,

## 2. HIV indicators

	Date	Estimate	Source
Adult prevalence of HIV/AIDS (15–49 years)	2003	0.7 – 7.2%	WHO/UNAIDS
Estimated number of people living with HIV/AIDS (0–49 years)	2003	120 000 – 1 300 000	WHO/UNAIDS
Cumulative number of reported AIDS cases	2001	4 004	WHO/UNAIDS
Reported number of people receiving antiretroviral therapy (15–49 years)	June 2004	400	WHO
Estimated total number needing antiretroviral therapy in 2005	2003	43 000	WHO/UNAIDS
HIV testing and counselling sites: number of sites		not available	
HIV testing and counselling sites: number of people tested at all sites		not available	
Prevalence of HIV among adults with tuberculosis (15–49 years)	2002	13.8%	WHO

but the Ministry of Health is committed to strengthening access to voluntary testing and counselling services. The Health Secretariat of the Sudan People's Liberation Army drafted an HIV/AIDS policy in 2001 for the south that was endorsed by the leadership of that movement. In 2002, the New Sudan National AIDS Council was created to monitor and evaluate the implementation of the policy. A national treatment plan is being developed. Treatment guidelines are available but need to be updated. Although political commitment is high in Sudan, resources are scarce.

- Antiretroviral therapy: first-line drug regimen, cost per person per year.** The current cost of a first-line treatment regimen is US\$ 516 per person per year, using zidovudine + lamivudine + nevirapine.
- Assessment of overall health sector response and capacity.** The Sudanese National AIDS Control Programme was established in 1987 and has been significantly strengthened in recent years. With strong political commitment from the highest levels, the Sudanese National AIDS Control Programme has developed a National Strategic Plan for 2003–2007 emphasizing multisectoral collaboration and community mobilization for a coordinated national response. In close collaboration with civil society, four parallel health service delivery systems work towards reducing the morbidity and mortality related to HIV/AIDS: the public health system (primary health care structure, with 300 rural hospitals and referral structures at state level); the health services of the police (including access to all 43 state prisons); the Armed Forces health services, (also treating civilians); and the health services of nongovernmental organizations, working with many of the 4 million internally displaced people.



- *Critical issues and major challenges.* In general, Sudan's health system suffers from a weak infrastructure in terms of human resources, health service coverage and funds. It is characterized by major disparities in the distribution of services and resources between and within states, between rural and urban areas and in states affected by conflict. Major bottlenecks for scaling up treatment and care include stigma and discrimination, a lack of entry points (services for voluntary testing and counselling), poor health care services and lack of human capacity in the public system and civil society. Blood-banking facilities and regulations for blood testing do not exist in the south, which also suffers from a serious lack of health care personnel trained in antiretroviral therapy. The delay in finalizing the peace process is an additional challenge to reaching those in need. An estimated 3.5 million refugees are expected to return once the peace agreement is signed.

#### 4. Resource requirements and funds committed for scaling up antiretroviral therapy in 2004–2005

- WHO estimates that the total funding required to support scaling up antiretroviral therapy to reach the WHO "3 by 5" treatment target of 21 500 people by the end of 2005 is between US\$ 41.5 million and US\$ 64.6 million.
- Sudan submitted a successful Round 3 proposal to the Global Fund to Fight AIDS, Tuberculosis and malaria focusing on prevention and advocacy in the context of a multisectoral national response to HIV/AIDS. A corresponding national plan of action has been developed. However, this proposal does not cover the need to scale up antiretroviral therapy, except for US\$ 400 000 per year for treating 400 people at the price of US\$ 1000 per person per year. This proposal further envisages the establishment of 12 voluntary counselling and testing centres. Total funding anticipated to be available to support scaling up antiretroviral therapy from the Global Fund grant is estimated to be US\$ 2.3 million during 2004–2005.
- Taking into account the funds committed to date to support scaling up antiretroviral therapy, WHO estimates that the total funding gap for Sudan to reach 21 500 people by the end of 2005 is between US\$ 39.2 million and US\$ 62.2 million.

#### 5. Antiretroviral therapy coverage

- Sudan's total treatment need for 2005 is estimated to be 43 000, and the WHO "3 by 5" treatment target is 21 500 people by the end of 2005 (based on 50% of need).
- The government is committed to providing treatment to 20 000 people by the end of 2005 and 40 000 people by the end of 2009.
- It is estimated that about 400 people are currently receiving antiretroviral therapy, mostly through the non-public sector.

#### 6. Implementation partners involved in scaling up antiretroviral therapy

- *Leadership and management.* The Ministry of Health and the Sudanese National AIDS Control Programme coordinate and manage the overall HIV/AIDS programme, including the provision of antiretroviral therapy. The Ministry of Health also coordinates the legal and policy framework, programme evaluation and planning of human resources. WHO, UNICEF and nongovernmental organizations contribute to the process of strengthening the health system.
- *Antiretroviral therapy service delivery.* The Ministry of Health provides leadership in delivering antiretroviral therapy services. The Ministry of Defence and the Ministry of the Interior collaborate closely with the Ministry of Health in providing testing and counselling and management of people living with HIV/AIDS at entry points. The Ministry of Health and partner nongovernmental organizations take the lead in planning and implementing activities related to capacity-building and site-level training. WHO and GTZ will assist in establishing a knowledge hub in Khartoum to support capacity-building activities at the national and state levels.
- *Community mobilization.* Civil society groups increasingly collaborate with the Ministry of Health and the Sudanese National AIDS Control Programme in activities related to programme communication, capacity-building for people living with HIV/AIDS and treatment adherence and psychosocial support.
- *Strategic information.* The Ministry of Health, in partnership with WHO, supports systems for monitoring antiretroviral drug resistance, patient tracking and operational research.

#### 7. WHO support for scaling up antiretroviral therapy

WHO's response so far

- Conducting a series of missions over the past 12 months to assess the HIV/AIDS situation and to support the development of a training course and materials on HIV/AIDS programme management
- Providing technical assistance for establishing a knowledge hub in Khartoum to support regional HIV/AIDS capacity-building with the support of WHO and GTZ
- Recruiting a National Programme Officer to assist the Ministry of Health in monitoring drug resistance related to HIV, tuberculosis and malaria

Key areas for WHO support in the future

- Establishing a "3 by 5" country team to support the government and other partners in scaling up antiretroviral therapy
- Developing national standards for HIV/AIDS treatment and care for different levels of the health care system, including national guidelines on antiretroviral therapy
- Developing a national operational plan for scaling up antiretroviral therapy, with clear roles for the partners
- Developing training courses for state-level HIV/AIDS managers
- Establishing a knowledge hub in Khartoum to support the development and implementation of capacity-building activities related to antiretroviral therapy

Staffing input for scaling up antiretroviral therapy and accelerating prevention

- One National Programme Officer was recruited recently through funding from the Norwegian Agency for Development Cooperation to coordinate activities related to drug resistance monitoring for HIV, tuberculosis and malaria. Recruitment of an international "3 by 5" Country Officer is currently underway.
- Additional Country Office staffing needs identified include one National Programme Officer and one general support staff.

#### For further information, please contact:

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This country profile was developed in collaboration with national authorities, the WHO Country Office for Sudan and the WHO Regional Office for the Eastern Mediterranean.