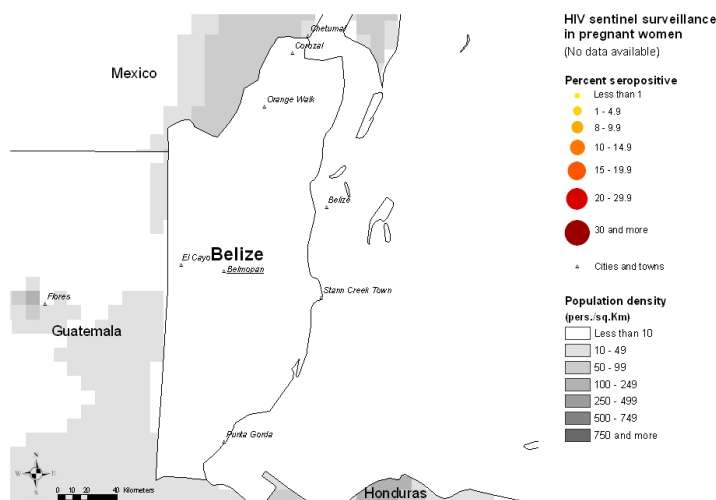


Estimated number of people needing antiretroviral therapy (0-49 years), 2005: <1 000  
 Antiretroviral therapy target declared by country: universal access



World Health Organization

Map Data Source:  
 WHO/UNAIDS Epidemiological Fact Sheets  
 and the United States Census Bureau  
 Map production:  
 Public Health Mapping & GIS  
 Communicable Diseases (CDS)  
 World Health Organization

### 1. Demographic and socioeconomic data

	Date	Estimate	Source
Total population (millions)	2004	0.26	United Nations
Population in urban areas (%)	2005	48.6	United Nations
Life expectancy at birth (years)	2003	68	WHO
Gross domestic product per capita (US\$)	2002	3 371	United Nations
Government budget spent on health care (%)	2002	5.3	WHO
Per capita expenditure on health (US\$)	2002	176	WHO
Human Development Index	2003	0.753	UNDP

<sup>°</sup>= Percentage of young people 15-24 years who correctly identify two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), who reject the two most common local misconceptions about HIV transmission, and who know that a healthy looking person can transmit HIV.

<sup>\*\*</sup>=Percentage of young people 15-24 years reporting the use of a condom during sex with a non-regular partner in the last 12 months.

### 2. HIV indicators

	Date	Estimate	Source
Adult prevalence of HIV/AIDS (15-49 years)	2003	0.8 - 6.9%	WHO/UNAIDS
Estimated number of people living with HIV/AIDS (0-49 years)	2003	1200 - 10 000	WHO/UNAIDS
Reported number of people receiving antiretroviral therapy (0-49 years), 2005	Dec 2005	180	WHO/UNAIDS
Estimated number of people needing antiretroviral therapy (0-49 years), 2005	Dec 2005	<1 000	WHO/UNAIDS
HIV testing and counselling sites: number of sites		NA	
HIV testing and counselling sites: number of people tested at all sites		NA	
Knowledge of HIV prevention methods (15-24 years)% - female <sup>°</sup>		NA	
Knowledge of HIV prevention methods (15-24 years)% - male <sup>°</sup>		NA	
Reported condom use at last higher risk sex (15-24 years)% - female <sup>**</sup>		NA	
Reported condom use at last higher risk sex (15-24 years)% - male <sup>**</sup>		NA	

### 3. Situation analysis

#### Epidemic level and trend and gender data

A former British colony that became independent in 1981, Belize is now a member of the Commonwealth. Since the first case of HIV was diagnosed in 1986, Belize has seen a constant increase in the rate of infection. Between 1986 and 2002, 2297 people were reported to be infected with HIV, and more than 70% of these were detected between 1995 and 2002. By the end of 2003, 603 AIDS cases had been reported. Almost 50% of the reported cases were among women. The new reported HIV infections for 2000-2004 were 226, 330, 431, 447 and 457, respectively. The new reported AIDS cases for this same time period were 46, 72, 109, 109 and 63, respectively. The deaths related to AIDS were 38, 32, 77, 84 and 86, respectively. Belize has a small population, and the country reports a small absolute number of HIV cases due to stigma and discrimination and the nature of this disease. However, the prevalence of HIV infection is the highest in Central America, estimated at 2.4% at the end of 2003. The Belize District is the most populous and shows the highest prevalence rates, followed by the Stann Creek District and the Cayo District, but all districts are now affected. The epidemic is generalized and affects both urban and rural populations. The Garifuna ethnic group in southern Belize has been particularly affected. Among the 6088 women who were enrolled in the programme to prevent the mother-to-child transmission of HIV in 2003 (92% of the total antenatal care attendees), 0.9% were HIV-positive. Health indicators in Belize are generally considered to be underreported.

#### Major vulnerable and affected groups

HIV is largely transmitted through heterosexual contact. The population infected in Belize is mostly within the age group 15-49 years; most people living with HIV/AIDS are 20-29 years old (40% of new infections in 2002). In 2003, more women were reported with new HIV infections than men in the age groups of 15-19, 20-24 (almost three times as many), 25-29 and 30-34 years, but more men were reported with new infections in the age groups 35-54 years and older. Similarly, in 2004, more women were reported with new HIV infections than men in the age groups of 15-19 (twice as many), 20-24, 25-29 and 30-34 years, but more men were reported with new infections in the age groups 35-39 years (almost four times as many) and older. Thus, among those tested, women were infected at a younger age than men, which has serious implications for women in their reproductive years. Even though more men still continue to be diagnosed with HIV, the increasing proportion of women in the epidemic has resulted in about a 1:1 sex ratio, resulting in women and youth being considered vulnerable groups.

#### Policy on HIV testing and treatment

There are no national policies on comprehensive antiretroviral therapy or on HIV testing, but the National AIDS Commission has developed a national policy and legislation with support from the UNDP that was recently passed by the Cabinet. Treatment guidelines for the clinical management of HIV/AIDS were developed in 2003 based on adapting standards proposed by the Pan American Health Organization (PAHO)/WHO and the United States Centers for Disease Control and Prevention. Guidelines for preventing the mother-to-child transmission of HIV have been in place since 2001. Guidelines on postexposure prophylaxis were developed and expanded countrywide in 2003. HIV rapid tests were introduced in 2003, and the National AIDS Programme of the Ministry of Health is conducting an official validation of HIV rapid tests to determine an algorithm. On 1 December 2004, the Minister of Health declared the government's commitment to providing universal access to antiretroviral therapy free of charge.

Antiretroviral therapy: first-line drug regimen, cost per person per year



Since September 2003, the first-line drug regimen for adults has included zidovudine + lamivudine + nevirapine (or indinavir). In late 2004, stavudine was included and plans are to include efavirenz in 2005 and to introduce the use of second-line medicines. The first-line drug regimen for children is: zidovudine + lamivudine + nevirapine. The first-line regimen for adults costs about US\$ 200 per person per year on average in the public sector and about US\$ 225 in the private sector. In July 2002, the government waived all forms of taxes on imported antiretroviral drugs. The government is fully participating in regional initiatives to accelerate access to antiretroviral drugs, and high-quality medicines are now available at reduced and affordable prices. Recently the Ministry of Health signed an agreement with PAHO/WHO to procure antiretroviral drugs through the Regional Strategic Fund for Medical Supplies. As a member of the Caribbean Community (CARICOM), Belize signed an agreement with six pharmaceutical companies in July 2002 that allows price reductions for antiretroviral drugs.

#### Assessment of overall health sector response and capacity

The Ministry of Health established the National AIDS Programme and National AIDS Committee in 1987 as the government's first response to the HIV/AIDS epidemic. In 2000, the government appointed the multisectoral National AIDS Commission, which was mandated to coordinate and monitor the prevention and control of HIV/AIDS. The National AIDS Commission replaced the National HIV/AIDS Task Force, which was established in January 1997 to strengthen the national capacity for an expanded response to the HIV/AIDS epidemic. The Task Force proposed Belize's first strategic plan as part of the preliminary national response to the HIV/AIDS epidemic. The National AIDS Commission is placed in the Office of the Prime Minister, is chaired by the Ministry of Human Development and has representation at the highest levels of government, nongovernmental organizations, business, religious leaders, community-based organizations, multilateral and bilateral agencies and people living with HIV/AIDS. The National AIDS Commission is headed by the Ambassador/Special Envoy for Children, Gender Affairs and HIV/AIDS, underscoring the high level of political commitment to combating HIV/AIDS. The National AIDS Commission is finalizing the National Strategic Plan on HIV/AIDS for 2005-2009, which constitutes the national framework for HIV/AIDS. Belize's approach to HIV/AIDS is considered unique in Central America and the Caribbean in that the National AIDS Commission was under the Ministry of Human Development but has since moved to the Prime Minister's Office, unlike most other countries, which locate their commission under the health ministry. This strategy has proven to be effective in fostering a multidimensional, human development approach to HIV/AIDS rather than focusing on the epidemic as a health issue alone. Through this approach, Belize has encouraged multisectoral collaboration and has successfully mobilized key sectors to become involved. Decentralization by establishing eight district-level commissions has also served to heighten awareness and improve capacity and coordination at the local and national levels. The Ministry of Health is the largest provider of health services, with 8 hospitals, 44 health centres and 49 rural health posts in 2004. It has successfully implemented a universal programme for preventing mother-to-child transmission, based on technical cooperation with the Bahamas in 2001, with technical and financial support from PAHO. In 2003, the National AIDS Programme officially embarked on a voluntary counselling and testing programme with assistance from the United States National Institutes of Health, the University of Alabama and the Belize Association for Improved Healthcare, to decrease the risk and impact of HIV/AIDS in Belize. This programme includes the comprehensive management of people living with HIV/AIDS, and an integral component is the availability of antiretroviral therapy for those who satisfy certain criteria. The first voluntary counselling and testing centre, with specific human resources, was officially established at the Cleopatra White Health Centre in Belize City in September 2003. Since then, each of the six districts has had at least one voluntary counselling and testing site, but the Belize District has at least four sites, including private-sector participation. The National AIDS Programme of the Ministry of Health is currently extending the voluntary counselling and testing centres, with specific human resources, to the other three regions of Belize. The National AIDS Programme has just completed the fieldwork of determining the HIV seroprevalence and risk factors in inmates at the Kolbe Foundation, Belize Central Prison. The seroprevalence and sociobehavioural patterns of sexually transmitted infections and HIV are being determined among sex workers and men who have sex with men. Financial resources have already been allocated to determine the HIV seroprevalence among pregnant mothers in Belize through sentinel surveillance and to conduct behavioural surveillance among urban youth. The Government's Central Medical Laboratory currently provides HIV diagnosis and free testing for CD4, CD8 and CD3 levels through the support of the Japanese Embassy. Training was conducted in 2004, with technical support from the Caribbean Epidemiology Centre, to improve the Laboratory's capacity for the diagnosis of opportunistic infections. The next steps therefore involve developing guidelines and procuring the specific kits. The Caribbean Epidemiology Centre and PAHO are financing the validation of an HIV rapid test algorithm. The private sector and PAHO have provided funds for procuring a DNA polymerase chain reaction (PCR) testing device to determine the HIV status of newborns of mothers living with HIV/AIDS. In early 2005, the Ministry of Health in collaboration with PAHO and Caribbean Epidemiology Centre and the Global AIDS Program of the United States Centers for Disease Control and Prevention conducted a rapid assessment of care and treatment that also focused on the community-based response. One of the main purposes of the assessment was to critically examine HIV and AIDS services within the health system and to make recommendations for the integration of HIV/AIDS into the primary health care system.

#### Critical issues and major challenges

Factors favourable to HIV/AIDS programming in Belize include the high level of political commitment and the involvement of multiple sectors as well as an extensive service delivery infrastructure. However, certain programmatic areas require strengthening for successfully scaling up antiretroviral therapy. These areas include a communication strategy and mechanisms for coordinating behaviour change communication activities. Voluntary counselling and testing capacity is limited: few facilities offer services and human resources, especially those with technical capacity; case planning and management need to be scaled up; a proper referral and counterreferral system needs to be strengthened; psychosocial support and the continuum of care need to be improved; nutrition for people living with HIV/AIDS needs to be enhanced; efforts to reach vulnerable groups need to be expanded; and the coordination of youth-friendly counselling services needs to be improved. The programme for preventing mother-to-child transmission needs to be scaled up to MTCT-Plus, including new guidelines. Very few health care workers have expertise in antiretroviral therapy. Second-line antiretroviral drugs are urgently needed, including determining the DNA viral load using PCR and antiretroviral resistance testing. Collaboration with tuberculosis programmes needs to be improved; this needs to be strengthened to include culturing samples, and the sexually transmitted infection programme needs to be revamped and strengthened to reduce comorbidity. A national plan for training related to antiretroviral therapy, voluntary counselling and testing and preventing mother-to-child transmission was developed in 2003, but additional training is needed in HIV/AIDS programming, HIV/AIDS counselling, MTCT-Plus, voluntary counselling and testing services, treatment protocols and surveillance methods. Monitoring and evaluation are vital components in scaling up care and treatment to ensure that goals are achieved, and a monitoring and evaluation coordinator is therefore urgently needed. Although Belize initiated a nationwide campaign to "Know Your HIV Status, Get Tested Today" including free antiretroviral therapy, stigma and discrimination associated with HIV/AIDS, including in the health sector, remain a barrier to seeking treatment.

## 4. Resource requirements and funds committed for scaling up treatment and prevention in 2004-2005

- WHO estimates that between US\$ 1.4 million and US\$ 1.6 million was required to support scaling up antiretroviral therapy in Belize during 2004-2005 to meet the WHO "3 by 5" treatment target of 220 people.
- The main source of financing for antiretroviral drugs is the National AIDS Programme, complemented by funding from external sources. Expenditure on HIV/AIDS in Belize increased by 156% from 1998 to 2002, with the government as the main source of funds. In 2003, US\$ 1.6 million was spent on HIV/AIDS, about 41% on care.
- Belize submitted a successful proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria in Round 3 focusing on strengthening the multisectoral response to HIV/AIDS, with a total five-year funding request of about US\$ 2.4 million and two-year approved funding of US\$ 1.3 million. As of December 2005, about US\$ 570 000 has been disbursed.
- Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama submitted a successful proposal to the Global Fund in Round 4 (the Mesoamerican Project in Integral Care for Mobile Populations: Reducing Vulnerability of Mobile Populations in Central America to HIV/AIDS), with a total five-year budget of US\$ 4.7 million and two-year approved funding of US\$ 2.1 million. The grant agreement was signed in August 2005 and as of December 2005, close to US\$ 500 000 has been disbursed.

## 5. Treatment and prevention coverage

- In 2003, WHO/UNAIDS estimated Belize's total antiretroviral therapy need to be about 440 people, and the WHO "3 by 5" treatment target for 2005 was set at 220 people (based on 50% of estimated need). At the end of 2003, 32 individuals were receiving antiretroviral therapy. At the end of December 2004, the Ministry of Health estimated that 500 people may need antiretroviral therapy and that 174 were receiving treatment. By December 2005, 180 people were reported to be receiving antiretroviral therapy in Belize.
- Belize officially began to provide antiretroviral therapy in 2003 on a first-come, first-served basis. The National AIDS Programme provides almost all antiretroviral therapy. Quite notable is the fact that the National AIDS Programme is working very closely with a support group of people living with HIV/AIDS at the Kolbe Foundation, Belize Central Prison where more than 12 inmates are currently receiving antiretroviral drugs.
- In the fiscal year 2003/2004, the Government of Belize allocated funds through the Ministry of Health for procuring antiretroviral drugs to treat 200 people living with HIV/AIDS and some medicines for opportunistic infections. The Minister for Health officially declared universal access to antiretroviral therapy free of charge on 1 December 2004.
- The first voluntary counselling and testing centre, with specific human resources, was officially established at the Cleopatra White Health Centre in Belize City in September 2003. Since then, each of the six districts has had at least one voluntary counselling and testing site, but the Belize District has at least four sites, including private-sector participation. The National AIDS Programme is extending the voluntary counselling and testing centres to other regions of Belize. A successful programme for preventing mother-to-child transmission is also being implemented, based on technical cooperation with the Bahamas and with technical and financial support from PAHO.

## 6. Implementation partners involved in scaling up treatment and prevention

#### Leadership and management

As a multisectoral partner of the National AIDS Commission, the National AIDS Programme provides planning, leadership, implementation and coordination for scaling up antiretroviral therapy. The government has provided a specific HIV/AIDS capital budget to the National AIDS Programme since the fiscal year 2002/2003. A human resource strategy and a monitoring and evaluation strategy are needed to scale up high-quality care and to promote sustainability. The National AIDS Commission takes a primary role in coordinating, facilitating, monitoring and evaluating the implementation of the National Strategic Plan on HIV/AIDS for 2005-2009 and has shared responsibility for developing the national policy and legal framework for HIV/AIDS, advocacy and resource mobilization. The National AIDS Commission has established a Committee on Access to Antiretroviral Drugs to advise and plan projects to increase the availability and affordability of antiretroviral drugs. The Committee is also responsible for regulating the import of antiretroviral drugs by pharmacies. This Committee has not begun to function yet, and currently the Ministry of Health has responsibility for all aspects of the clinical management of HIV/AIDS including antiretroviral therapy. The United Nations Theme Group on HIV/AIDS in Belize is actively involved in the national response and provides technical support to the National AIDS Commission and other national counterparts, including the Ministry of Health.

#### Service delivery

The Ministry of Health provides leadership in antiretroviral therapy service delivery. Antiretroviral drugs, opportunistic infection drugs and laboratory reagents and supplies are procured through the Ministry of Health tendering process and distributed through the Central Medical Stores. Capacity-building is critical in the following areas for the Ministry of Health: clinical management, pretest and post-test counselling, behaviour change communication, case planning and management, psychosocial support, adherence, contact tracing, nutrition, monitoring and evaluation and strengthening tuberculosis and sexually transmitted infection programmes. New guidelines for preventing mother-to-child transmission are needed to include triple therapy and Caesarean section for women living with HIV/AIDS. The development of software is critical for case management, including admission, clinical management and continuum of support.

#### Community mobilization

The Ministry of Health is empowering the community nurses' aides in HIV/AIDS home- and community-based care through the Health Education and Community Participation Bureau. The Bureau is also involved in information, education and communication. The Ministry of Human Development provides some social support and, like the Ministry of Education, is active in information, education and communication activities. The Ministry of Education is implementing a Health and Family Life Education Programme. The Ministry of Labour is implementing an International Labour Organization programme on HIV/AIDS in the workplace. The Belize Family Life Association is involved in information, education and communication and community mobilization activities including counselling, health education and condom distribution as well as treatment of sexually transmitted infections and other issues relating to sexual and reproductive health. Nongovernmental organizations such as Alliance Against AIDS advocate for expanded access to treatment and provide counselling and support services to people living with HIV/AIDS. The Pan-American Social Marketing Organization provides behaviour change communication and social marketing of condoms. The Belize Red Cross plays a key role in the national response and participates in advocacy, providing information, training, technical assistance, food and clothing. In addition to many church and political groups, the Young Men's Christian Association, Young Women's Christian Association, Youth Enhancement Agency, Centre for Employment Training and Youth for the Future are active in programme communication and support programmes for young people.

#### Strategic information

The National AIDS Programme has overall responsibility for surveillance of HIV/AIDS, supported by public and some private health care providers and public and some private laboratories. The Ministry has managed and coordinated sentinel surveillance since 1986 and produces quarterly and annual HIV/AIDS reports. The Ministry is developing the Belize Health Information System, which will include electronic health records, encounter data, accounting and billing, supply chain management, programme function including maternal and child health, HIV/AIDS and reporting and countrywide networking.

## 7. Staffing input for scaling up HIV treatment and prevention

#### WHO's response so far

- Holding a subregional meeting in August 2005 in Costa Rica for countries of Central America to assess progress towards "3 by 5" and to identify gaps and areas of cooperation
- Implementing the "3 by 5" strategy and developing national and subregional strategic plans
- Developing a subregional plan for HIV/AIDS surveillance in Central America
- Holding training workshops in the subregion on prevention and counselling among youth and vulnerable groups, delivering antiretroviral therapy, preventing sexually transmitted infections and training health workers
- Establishing the Regional Revolving Fund for Strategic Public Health Supplies (including antiretroviral therapy), with 12 countries in Central America signing the agreement and purchases worth more than US\$ 12 million being made in 2003

#### Key areas for WHO support in the future

- Supporting the development of a national operational plan for comprehensive HIV/AIDS care, treatment and support
- Supporting the clinical management of HIV/AIDS
- Supporting the development of a communication strategy, including behaviour change communication
- Supporting the development of laboratory infrastructure
- Supporting the development of psychosocial support
- Supporting monitoring and evaluation
- Supporting the expansion of centres for voluntary counselling and testing
- Supporting the introduction of second-line antiretroviral drugs

#### Staffing input for scaling up HIV treatment and prevention

- The WHO Country Office has one National Programme Officer addressing HIV/AIDS issues, as well as an international HIV/AIDS Officer for the Central American subregion.