NICARAGUA

WHO estimate of number of people requiring treatment - end 2004: 1 000
Antiretroviral therapy target declared by country: 280 by the end of 2005

1. Demographic and socioeconomic data

<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Estimate</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (millions)</td>
<td>2004</td>
<td>5.6</td>
<td>United Nations</td>
</tr>
<tr>
<td>Population in urban areas (%)</td>
<td>2003</td>
<td>57.1</td>
<td>United Nations</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>2002</td>
<td>70.1</td>
<td>WHO</td>
</tr>
<tr>
<td>Gross domestic product per capita (US$)</td>
<td>2002</td>
<td>750</td>
<td>United Nations</td>
</tr>
<tr>
<td>Government budget spent on health care (%)</td>
<td>2002</td>
<td>14.9</td>
<td>WHO</td>
</tr>
<tr>
<td>Per capita expenditure on health (US$)</td>
<td>2002</td>
<td>58</td>
<td>WHO</td>
</tr>
<tr>
<td>Human Development Index</td>
<td>2002</td>
<td>0.667</td>
<td>UNDP</td>
</tr>
</tbody>
</table>

2. HIV indicators

<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Estimate</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult prevalence of HIV/AIDS (15-49 years)</td>
<td>2003</td>
<td>0.1% - 0.3%</td>
<td>WHO/UNAIDS</td>
</tr>
<tr>
<td>Estimated number of people living with HIV/AIDS (0-49 years)</td>
<td>2003</td>
<td>3 100 - 12 000</td>
<td>WHO/UNAIDS</td>
</tr>
<tr>
<td>Reported number of people receiving antiretroviral therapy (15-49 years)</td>
<td>March 2005</td>
<td>150</td>
<td>WHO/UNAIDS</td>
</tr>
<tr>
<td>Estimated total number needing antiretroviral therapy in 2004</td>
<td>Dec 2004</td>
<td>1 000</td>
<td>WHO/UNAIDS</td>
</tr>
<tr>
<td>HIV testing and counselling sites: number of sites</td>
<td>not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV testing and counselling sites: number of people tested at all sites</td>
<td>not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of HIV among adults with tuberculosis (15-49 years)</td>
<td>2002</td>
<td>1.2%</td>
<td>WHO</td>
</tr>
</tbody>
</table>

3. Situation analysis

Epidemic level and trend and gender data

Nicaragua is the second poorest country in Latin America and has one of the highest population growth rates in the Americas. However, the country reports the lowest HIV/AIDS prevalence in Central America, estimated at 0.2% in 2003. Factors that may be slowing the spread of the disease include the low incidence among injecting drug users, a prohibition on commercial blood sales and a relatively controlled sex industry. The first AIDS case was diagnosed in 1987, and by the end of 2004, 1604 cumulative cases had been reported.

Most cases occur among individuals 20-39 years old, with a male-to-female ratio in 2004 of 3:1. Sexual transmission accounts for 86% of cases, with half identified as heterosexual, but this proportion may be overreported. Although Nicaragua’s epidemic is currently in a nascent stage, the preconditions for a more serious epidemic are present. Driving factors include high levels of migration and mobility, especially among migrant workers, and a culture that stigmatizes condom use. The number of people living with HIV/AIDS has been rising since the late 1990s.

Major vulnerable and affected groups

Sex workers and men who have sex with men are the main vulnerable groups. The Central America Multi-Site HIV Prevalence Survey indicated prevalence rates among men who have sex with men of 9%. Among female sex workers, HIV prevalence rates are estimated at about 1%. The regions most affected are Managua and Chinandega.

Policy on HIV testing and treatment

In 1996 Nicaragua passed a law on the promotion, protection and defence of human rights in the face of the AIDS epidemic. Standards and guidelines for the clinical management of HIV infection have been developed and/or adapted, based on the adaptation of standards proposed by the Pan American Health Organization/WHO and the United States Centers for Disease Control and Prevention. Protocols for preventing mother-to-child transmission have been in place since 2000.

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

The first-line drug regimen for adults is zidovudine + lamivudine + efavirenz. The first-line drug regimen for pregnant women is zidovudine or nevirapine. The first-line drug regimen for children is zidovudine + lamivudine + nevirapine or indinavir. The previous cost of antiretroviral therapy per person per year was an estimated US$ 2400. Under the Accelerated Access Initiative, successful price negotiations have led to substantially reduced prices for antiretroviral therapy in Central America. The most common treatment in Central America, zidovudine + lamivudine + efavirenz, now costs between US$ 1035 and US$ 1454 per person per year. Where countries opt to use generic antiretroviral drugs, the cost per person per year for first-line triple therapy will be further reduced to between US$ 800 and US$ 1200.

Assessment of overall health sector response and capacity

Nicaragua’s government has recognized the need for early action to contain the epidemic. The National Program for the Prevention and Control of HIV/AIDS and Sexually Transmitted Infections (now the National AIDS Control Program) was established in 1987. Although part of the Ministry of Health, the National AIDS Control Program is decentralized in its operations, with local health care systems coordinating prevention, control and education related to HIV/AIDS and sexually transmitted infections with regional hospitals, primary care health centres and health posts. The National AIDS Control Program developed a National Strategic Plan for Preventing HIV and Sexually Transmitted Infections (2000-2004) in collaboration with civil society groups, groups of people living with HIV/AIDS, government institutions and international organizations. This is being revised. The Ministry of Health has indicated that improving the availability of medicines to prevent mother-to-child transmission is essential, but due to an inadequate supply of drugs, the government is not able to routinely cover antiretroviral therapy for people living with HIV/AIDS. The Ministry of Health has a care services network with 1058 physical units, broken down into primary care (1025 health centres and stations with and without beds), secondary care (32 hospitals) and tertiary care (two hospitals), 60 alternative centres (including private and military hospitals and clinics run by nongovernmental organizations) and 49 companies providing health care services. The national laboratory network consists of 164 units, and the network also includes 22 blood banks, which carry out serological tests for HIV.

Critical issues and major challenges

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Critical issues and challenges for scaling up antiretroviral therapy include the lack of reliable data, lack of adequate training among health care providers and insufficient voluntary counselling and testing services. Given the low investment in the health sector, Nicaragua will need strong support to keep the HIV/AIDS situation from worsening. Key issues for scaling up antiretroviral therapy include the need to strengthen drug supply management, quality control, human resources capacity and surveillance.

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

- WHO estimates that about US$ 1.44 million is required to support scaling up antiretroviral therapy in Nicaragua during 2004-2005 to meet the WHO "3 by 5" treatment target of 465 people.
- Nicaragua submitted a successful Global Fund Round 2 proposal for total funding over five years of about US$ 18.4 million and approved two-year funding of US$ 4.0 million. Funding disbursed to date totals about US$ 1.64 million.
- 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 has not been signed yet.
- Taking into account the government funds expected to be committed to support scaling up antiretroviral therapy, and in particular, assuming the full implementation of treatment programmes intended to be funded via the Global Fund Round 2 grant, WHO estimates that Nicaragua should not face a funding gap to reach the "3 by 5" treatment target by the end of 2005.

### 5. Antiretroviral therapy coverage

- In 2003, WHO and UNAIDS estimated Nicaragua's total antiretroviral therapy need to be about 930 people, and the WHO "3 by 5" treatment target for 2005 was set at 465 people (based on 50% of estimated need). The government has declared a national treatment target for the end of 2005 of 280 people.
- The National AIDS Control Program reported that 33 people were receiving antiretroviral therapy in August 2004 and as of the end of the year, this had risen to a reported figure of 125 people under treatment. By March 2005, an estimated total of 150 people were receiving antiretroviral therapy in Nicaragua.

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

#### Leadership and management
- The Ministry of Health takes an overall leadership and management role for prevention, care and control of HIV/AIDS and provides leadership in policy and programming within the public sector. The Nicaraguan AIDS Commission acts as the overall coordination mechanism for the national HIV/AIDS response. Other ministries such as the Ministry of Education, Culture and Sport, Ministry of the Interior and Ministry of Defense support HIV/AIDS prevention and training activities. Coordination mechanisms include the United Nations Theme Group on HIV/AIDS in Nicaragua and the Country Coordinating Mechanism of the Global Fund. UNAIDS in partnership with OPEC provides technical and economic support for prevention activities.

#### Antiretroviral therapy service delivery
- The Ministry of Health provides leadership in antiretroviral therapy service delivery. The National Civil Society HIV/AIDS Commission is a network of 84 nongovernmental organizations and supports government efforts in prevention, promotion and care. Other nongovernmental organizations such as the Nimehuatzin Foundation actively support care activities.

#### Community mobilization
- A range of nongovernmental organizations, United Nations agencies and bilateral donors work alongside the government in mobilizing communities and supporting people living with HIV/AIDS. Local faith-based organizations such as the El Buen Pastor Congregation provide additional support for people living with HIV/AIDS.

#### Strategic information
- The Nicaraguan AIDS Commission provides leadership in surveillance, monitoring and evaluation. The Mexican Public Health Institute, local nongovernmental organizations such as the Mexican Health Foundation (FUNSALUD) and the Regional HIV/AIDS Initiative for Latin America and the Caribbean (SIDALAC) and regional nongovernmental organizations such as the Central American HIV/AIDS Prevention Project (PASCA) support research and strategic information activities. WHO provides support for surveillance, monitoring and evaluation activities.

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

#### WHO's response so far
- Providing support for revising the National Strategic Plan in collaboration with UNAIDS
- Setting up a "3 by 5" Task Force and developing a subregional strategic plan (Pan American Health Organization)
- Developing a subregional plan for HIV/AIDS surveillance in Central America (Pan American Health Organization)
- 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 the subregion signing the agreement and purchases worth more than US$ 12 million being made in 2003

#### Key areas for WHO support in the future
- Managing funding for the activities of the National Strategic Plan, mainly health information and communication including the National Information, Education and Communication Strategy for HIV/AIDS
- Strengthening monitoring and evaluation

#### Staffing input for scaling up antiretroviral therapy and accelerating prevention
- A National Programme Officer is in place, and the recruitment of a Subregional "3 by 5" Officer (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama) is planned.
- Additional staffing needs identified include a National Programme Officer for quality control for medicines and for monitoring drug resistance.