Cover Photos: landscape: AKlauschen; children: James Emery
FOREWORD

The National AIDS Committee is pleased to present The Impact of HIV and AIDS in Cameroon through 2020. This document provides an analysis of the epidemic and its social and economic impacts and the requirements for an effective national response, including antiretroviral treatment.

The HIV epidemic is an extremely complex phenomenon, and although this document cannot account for all aspects of the situation, it represents an important contribution to Cameroon’s efforts to limit the spread of HIV and provide care and support to people infected or affected by HIV and AIDS.

Cameroon is experiencing a key moment in terms of scaling up the national response. The leadership instilled by the President of the Republic must be broadened to all levels. Our work with civil society and other partners must be expanded. With decentralization, regional leadership must engage the communities and facilitate their role in meeting the vast needs associated with prevention and treatment programs.

We are all engaged in this great effort.

Dr. Jean-Bosco Elat Nfetam
Permanent Secretary
GTC/CNLS
ACKNOWLEDGEMENTS

This booklet was the result of collaboration among staff of the National AIDS Control Committee, Central Technical Group (CNLS/GTC); the USAID | Health Policy Initiative, Task Order 1; and the Joint United Nations Programme on AIDS (UNAIDS). The CNLS/GTC thanks the United States Government for its financial and technical assistance provided through the Health Policy Initiative, which is implemented by Futures Group. In addition, we thank UNAIDS for its ongoing support.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired immune deficiency syndrome</td>
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<tr>
<td>ART</td>
<td>Antiretroviral treatment</td>
</tr>
<tr>
<td>ARV</td>
<td>Antiretroviral</td>
</tr>
<tr>
<td>CD4</td>
<td>Cluster of differentiation 4 (count)</td>
</tr>
<tr>
<td>CNLS/GTC</td>
<td>National AIDS Control Committee, Central Technical Group</td>
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<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<tr>
<td>NGO</td>
<td>Nongovernmental organisation</td>
</tr>
<tr>
<td>OVC</td>
<td>Orphans and vulnerable children</td>
</tr>
<tr>
<td>PLHIV</td>
<td>People living with HIV</td>
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<tr>
<td>STI</td>
<td>Sexually transmitted infection</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on AIDS</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>VCT</td>
<td>Voluntary counselling and testing</td>
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<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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INTRODUCTION

In 2009, the Joint United Nations Programme on AIDS (UNAIDS) estimated that almost 70 percent of the 33.4 million adults worldwide infected with HIV live in sub-Saharan Africa.

Estimated Number of People Living with HIV Worldwide, 2008

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Number</th>
<th>Lower Range</th>
<th>Upper Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>1.4 million</td>
<td>1.2 – 1.6 million</td>
<td></td>
</tr>
<tr>
<td>Caribbean</td>
<td>240,000</td>
<td>220,000 – 260,000</td>
<td></td>
</tr>
<tr>
<td>Latin America</td>
<td>2.0 million</td>
<td>1.8 – 2.2 million</td>
<td></td>
</tr>
<tr>
<td>Western &amp; Central Europe</td>
<td>850,000</td>
<td>710,000 – 970,000</td>
<td></td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>310,000</td>
<td>250,000 – 380,000</td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>22.4 million</td>
<td>20.8 – 24.1 million</td>
<td></td>
</tr>
<tr>
<td>Eastern Europe &amp; Central Asia</td>
<td>1.5 million</td>
<td>1.4 – 1.7 million</td>
<td></td>
</tr>
<tr>
<td>East Asia</td>
<td>850,000</td>
<td>700,000 – 1.0 million</td>
<td></td>
</tr>
<tr>
<td>South &amp; South East Asia</td>
<td>3.8 million</td>
<td>3.4 – 4.3 million</td>
<td></td>
</tr>
<tr>
<td>Oceania</td>
<td>59,000</td>
<td>51,000 – 68,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>33.4 million</strong></td>
<td><strong>31.1 – 35.8 million</strong></td>
<td></td>
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</tbody>
</table>


The AIDS pandemic represents a serious threat to Africa. Twenty years ago, the HIV prevalence rate in East Africa was similar to today’s rates in West and Central Africa. Cameroon’s HIV prevalence rate is estimated at 5.1 percent—the highest rate for the West and Central Africa sub-region (see table).
The AIDS pandemic slows economic development efforts and erodes the social fabric throughout sub-Saharan Africa. The National AIDS Control Committee/Central Technical Group (CNLS/GTC) estimates that there are 141 new HIV infections per day in Cameroon, which means six newly infected persons each hour, everyday. The time to act is now.

<table>
<thead>
<tr>
<th>Country</th>
<th>HIV Prevalence Rate (UNAIDS, 2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>1.2%</td>
</tr>
<tr>
<td>Mali</td>
<td>1.5%</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>1.6%</td>
</tr>
<tr>
<td>Ghana</td>
<td>1.9%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>3.1%</td>
</tr>
<tr>
<td>Togo</td>
<td>3.3%</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>3.9%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

To halt the devastating effects of its epidemic, Cameroon needs to expand HIV and AIDS treatment, care, and support services and prevent mother-to-child transmission and other new infections among the general population and most-at-risk groups.
Cameroon’s future response requires strong political commitment and the allocation of financial resources at all levels. The response to HIV and AIDS is not short term. The government, civil society, and international partners have integral and complementary roles to play in the development of a sustainable national response.

This booklet was prepared with estimates and projections generated by CNLS/GTC staff, using the AIDS Impact Model. The model is a standard tool used in many countries and is based on computer software available on the Internet.³

“There are 141 new HIV infections per day in Cameroon, six infections per hour.”
GENERAL INFORMATION

**Difference between HIV and AIDS**

HIV and AIDS are different. The human immunodeficiency virus (HIV) causes the acquired immune deficiency syndrome (AIDS). AIDS is a condition that compromises the immune system and leads to opportunistic infections and malignancies, or cancer, and eventually death.

Most people living with HIV appear healthy and do not have symptoms. Unless they are tested for HIV, they do not know that they are infected and may unknowingly transmit the virus to others. Knowing one’s HIV status is a key element in preventing new infections. Voluntary counselling and testing (VCT) slows the epidemic because it encourages people to take proper precautions.

**Modes of Transmission**

The principle mode of HIV infection in Cameroon is through sexual intercourse. About 90 percent of new infections are estimated to occur as a result of sexual relations. Multiple partners and non-use of condoms increase the risks of HIV transmission. About 6 percent of new infections are from mother-to-child transmission, and about 4 percent of new infections come from the blood supply and other accidental transmission.
**Natural Evolution of HIV Infection (without ARV treatment)**

On average, an adult infected with HIV develops AIDS symptoms after about seven years. Because AIDS compromises the immune system, an infected person is susceptible to opportunistic infections and other conditions that affect his/her health, unless he/she receives antiretroviral (ARV) drug treatment.

Infants can become infected by HIV during pregnancy, labor and delivery, and breastfeeding. An infant infected by HIV through mother-to-child transmission...
generally develops AIDS within one to three years. AIDS progresses more quickly in children than in adults because a child’s immune system is not yet mature. In 2010 in Cameroon, 7,300 babies are estimated to be born HIV positive due to mother-to-child transmission.

“In 2010 in Cameroon, 7,300 babies are estimated to be born HIV positive due to mother-to-child transmission.”
THE HIV EPIDEMIC IN CAMEROON

Cameroon’s adult HIV prevalence rate (percentage of population ages 15–49 who are HIV positive) has gone from 0.6 percent in 1990 to 5.1 percent in 2010. If Cameroon continues to expand and strengthen its national programme against HIV, the national prevalence rate could stay below 6 percent through 2020.


The prevalence of HIV varies across the different regions of Cameroon. Four regions have HIV prevalence rates of 8 percent or higher: North West (8.7%), East (8.6%), Yaoundé (8.3%), and South West (8%). The two northern regions have prevalence rates at or below 2 percent. The scale of the response needs to be adapted to the conditions and opportunities in each region.
Factors that Contribute to the Spread of HIV in Cameroon

Many factors contribute to the rapid expansion of the HIV epidemic:

- Multiple sexual partners
- Low condom use
- Low status of women (with few economic opportunities and great power differential with men, women do not have the power to demand safer sex)
- High prevalence of other sexually transmitted infections, which facilitate HIV transmission through unprotected sexual relations
- Harmful socio-cultural practices
- Migration

Source: Demographic and Health Survey, 2004
The Rapid Increase in HIV Prevalence

In 2010, there are an estimated 560,000 Cameroonians living with HIV. Cameroon has more people living with HIV (PLHIV) than either the North Africa region or the Caribbean. HIV prevalence is growing rapidly. In 1990, there were fewer than 32,000 HIV-positive Cameroonians. By 1995, the number of PLHIV increased more than eight times to 264,000. At current rates, there will be about 726,000 PLHIV in 2020. An even larger number of people could be infected if the national response to HIV is not fully funded and implemented. The majority of infected people do not know they are infected and hence may not take precautions to protect their partners.

Total Population Living with HIV, 1990–2020

Women are more likely to be HIV positive than men. Roughly three in five (60%) PLHIV are women. Young women are especially vulnerable to HIV infection. Young
women represent seven in 10 (70%) of all youth ages 15–24 who are HIV positive, and this higher rate of infection is projected to continue over the next 10 years.

**Youth Living with HIV, Ages 15–24, 2010–2020**

**New HIV Infections**

The HIV epidemic is driven by new infections. Incidence data indicate how many new infections have occurred. Data on incidence are derived from the number of new infections during a period of time (usually a year), divided by the number of persons who are HIV negative at the beginning of the time period.

“Young women represent 7 in 10 of all youth ages 15–24 who are HIV positive.”
In Cameroon, there are six new infections per hour, approximately 141 per day, 4,276 every month, and 51,315 per year.

**AIDS Mortality**

The death toll from AIDS continues to rise. In 1995, 7,900 people died from AIDS-related conditions; in just five years, the annual number rose to 25,000 in 2000. More than 34,000 deaths are projected in 2010.

AIDS-related deaths profoundly affect families, which often are split up and left without any means of support. Similarly, the loss of many people in their prime working years harms the economy. Businesses are adversely affected due to the need to recruit and train new staff. Health and social service systems suffer from the loss of health workers, teachers, and other skilled workers.

**Orphans and Vulnerable Children due to HIV and AIDS**

The number of children orphaned by AIDS—children under age 18 who have lost one or both parents to AIDS—has increased dramatically, rising from 13,000 orphans in 1995 to 304,000 in 2010. By 2020, this number is projected to rise to 350,000. Children orphaned by AIDS represent about 25 percent of Cameroon’s total 1,200,000 orphans in 2010.

“More than 34,000 deaths are projected in 2010.”
Providing appropriate support and care for orphans and vulnerable children (OVC) poses challenges for both families and society. Many OVC live outside of family support, and many OVC are marginalised, stigmatised, and discriminated against. Consequently, they are exposed to harmful conditions such as lack of schooling, illiteracy, begging, pedophilia, juvenile delinquency, prostitution, and the transmission of HIV and other sexually transmitted infections (STIs).

**Prevention Strategies**

The government of Cameroon must strive to increase people’s knowledge about HIV and AIDS, enabling them

“By 2020, the number of children affected by AIDS will increase beyond 350,000.”
to take appropriate action to protect against infection, obtain HIV testing and counselling, and seek treatment when necessary. At the same time, the government needs to facilitate a national response on prevention, treatment, and care and support, working with civil society and private sector partners, both local and international.

- Accurate HIV and AIDS information and behaviour change communication are needed to reduce transmission.
- Voluntary counselling and testing needs to be provided and easily accessible.
- Treatment programmes for STIs need to be accessible.
- Prevention of mother-to-child transmission, coupled with expanded pediatric ARV treatment programmes, are needed to save children’s lives.
- HIV prevention and treatment programmes need to be integrated with STI, reproductive health and family planning, maternal and child health services to enable women and men to reduce the risk of infection.
- Measures to protect PLHIV rights need to be implemented.
Impact on Socioeconomic Development

HIV and AIDS affect Cameroon’s socioeconomic development in many ways.

Impact on the Health Sector

- Increased allocation of health sector resources to AIDS care and treatment. HIV and AIDS programme expenses absorb a major part of the national health budget. Costs for AIDS patients will increase as more patients have access to care and treatment.

- Reduction of hospitals’ capacity to accept new patients because many beds are occupied by AIDS patients.

- Increased demand for qualified health professionals who care for AIDS patients and support the national treatment programme, shifting personnel from other preventive care and other disease responses.

- Loss of skilled health workers due to HIV-related illness.

Impact on the Education Sector

- Loss of teachers and greater absenteeism among teachers due to HIV-related illness.

- Decreased public financing of education due to the increased funding needed for the fight against HIV.
• Increased levels of poverty at the family level, and less resources available for children’s education due to household income loss.

Impact on Enterprises

• Loss of professional and technical personnel and qualified workers due to HIV-related illness.
• Increased production costs associated with the need to provide care and treatment for sick workers.
• Declines in worker productivity.

Impact on Women and Girls

Women and girls are particularly vulnerable to HIV.

• Women are at higher risk for HIV infection for biological and socioeconomic reasons and the power differential between women and men.
• Certain socio-cultural practices increase the risk of transmission such as use of vaginal drying agents that may create lesions, increasing the probability of HIV transmission.
• Women and girls are more likely to care for HIV-positive family members and thus have an additional workload.
RESPONSE TO HIV AND AIDS

There is no cure for HIV, and a vaccine to prevent HIV has not yet been developed. Preventing new HIV infections is the most effective way to halt the epidemic. Key prevention actions include promoting responsible sexual behaviour, such as monogamy, a reduction in partners, and correct and consistent condom use; ensuring a safe blood supply; and treating STIs. In addition, providing VCT and ARV treatment is also important to ensure that people know their HIV status and to encourage PLHIV to prevent further spread of the virus.

Each recommended intervention—prevention, care and support, and treatment—has an important contribution to responding to HIV and AIDS. All interventions are needed to stem the HIV epidemic.
**ARV Treatment Needs and Coverage**

**Adult Population Ages 15+**

The availability of antiretroviral treatment (ART) decreases the number of AIDS-related deaths and allows people with AIDS to lead healthy lives. Access to treatment continues to expand. Cameroon has more than 150 clinics that provide ART, and since 2007, ARV drugs are free to those who need them. In 2000, more than 50,000 Cameroonianians were in need of ART but had no access to it. By 2005, 16,500 of the 86,000 people eligible for treatment had access. In 2010, ART coverage is projected to reach 41 percent of PLHIV needing treatment (more than 89,000 people out of 217,000 PLHIV needing treatment).

By 2020, programme managers plan to provide coverage to more than 80 percent of the people ages 15 and older who need ART. This component of the national response will require substantial human and financial resources. Preventing new infections would reduce the number of people needing treatment and decrease the resources required for ART into the future.
**Pediatric Treatment: Children Ages 0–14**

ART coverage of children ages 0–14 is lower than for adults. The coverage estimates for 2010 indicate that only 13 percent of eligible children (4,195 children out of 32,000 eligible children) will receive treatment. By 2020, the coverage for children needing ART is estimated to increase to more than 50 percent of the 26,000 children requiring ART. Preventing mother-to-child transmission would greatly reduce the number of children needing treatment and the associated costs.

“Preventing new infections would reduce the number of people needing treatment and decrease the resources required for ART into the future.”
**Pediatric ART Needs and Coverage, Eligible Children, Ages 0–14, 2000–2020**

![Image](https://via.placeholder.com/150)

*Source: AIDS Impact Model for Cameroon, 2010*

**Estimated Costs**

As Cameroon’s HIV epidemic grows, the funds needed for the national response also increase.

In 2008, the government of Cameroon allocated approximately 3.3 billion CFA, representing 16 percent of the total national expenditure on HIV and AIDS. Households, nongovernmental organisations (NGOs), and the private sector provided 2.3 billion CFA or 11 percent of the total. The balance of the funding—73 percent—came from international and bilateral organisations.
In 2010, the funding requirement for HIV and AIDS treatment, care, and support is about US$42 million—of which US$20 million is for first and second line ARVs. By 2015, the estimate of annual ARV costs will be about US$50 million. By 2020, with the projected national ART coverage of 80 percent, more than US$80 million will be required for ARV drugs alone. According to CNLS/GTC estimates, the annual financial needs for the national treatment, care, and support programme in the fight against HIV will increase from US$42 million (21 billion CFA) in 2010 to US$129 million (more than 64 billion CFA) in 2020.

### HIV/AIDS Sources of Funding, 2008

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>CFA (Billions)</th>
<th>Percent of Total Expenditure</th>
</tr>
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<tr>
<td>Public funds</td>
<td>3.33</td>
<td>16%</td>
</tr>
<tr>
<td>Households and private sector</td>
<td>2.32</td>
<td>11%</td>
</tr>
<tr>
<td>International partners</td>
<td>15.65</td>
<td>73%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21.3</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: National AIDS Spending Accounts Study, CNLS/GTC and UNAIDS, 2010
Treatment, Care, and Support Estimates, 2010–2020

Recommendations

Multiple actions are required to prevent HIV transmission, mitigate the impact of HIV and AIDS, and provide care and treatment for people infected and affected:

- Ensure effective leadership in the government and other sectors
- Improve resource mobilisation and use by the government and other partners
- Expand and strengthening prevention activities
- Increase ART coverage
- Expand support for mother-to-child transmission prevention programmes
• Expand and strengthening prevention with most-at-risk groups

• Improve monitoring and evaluation and information use in national response implementation

• Engage the participation of religious and community leaders, local communities, and NGOs in the fight against HIV

These actions require strong and continual leadership by public sector officials. The national response to HIV and AIDS needs to be made increasingly effective and sustainable for the foreseeable future.
CONCLUSION

Appropriate and timely interventions are imperative to slow the growing HIV epidemic in Cameroon. Strong political leadership is essential to make courageous decisions related to prevention, mitigation, and treatment.

The government of Cameroon needs to coordinate and collaborate closely with partners, including NGOs; religious leaders; parliamentarians; journalists; associations of women, youth, and PLHIV; the private sector; and development partners.

Actions to stem the HIV epidemic now will save lives and money in the future.
ADDITIONAL SOURCES


CNLS website. Available at: http://www.cnls.org/.

**Endnotes**

1. UNAIDS and the World Health Organisation (WHO) provide estimates that define upper and lower limits. The numbers shown represent the midpoints of the ranges. For more information, see the UNAIDS Knowledge Centre website, available at: http://www.unaids.org/en/KnowledgeCentre/.


4. Treatment eligibility prior to 2009 was defined by persons with a CD4 count below 200. In 2010, Cameroon began implementing the new WHO treatment guidelines, and eligibility is now defined as persons with a CD4 count below 350. Placing people on treatment early often results in better treatment outcomes. The CD4 count is determined by a blood test that counts the number of CD4 cells that are an indicator of an individual’s immune system.