

Reducing HIV/AIDS Vulnerability in Central America

Regional HIV/AIDS Situation and Response to the Epidemic

Latin America and Caribbean Region
and Global HIV/AIDS Program

THE WORLD BANK

December 2006

World Bank Global HIV/AIDS Program Discussion Paper

This series is produced by the Global HIV/AIDS Program of the World Bank's Human Development Network, to publish interesting new work on HIV/AIDS quickly, make it widely available, and encourage discussion and debate.

The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account that it may be provisional.

Papers are posted at www.worldbank.org/AIDS (go to “publications”). For free print copies of papers in this series please contact the corresponding author whose name appears the bottom of this page.

Enquiries about the series and submissions should be made directly to Joy de Beyer (jdebeyer@worldbank). Submissions should have been previously reviewed and cleared by the sponsoring department, which will bear the cost of publication. The sponsoring department and author(s) bear full responsibility for the quality of the technical contents and presentation of material in the series.

This set of papers on Reducing HIV/AIDS Vulnerability in Central America was produced by the Latin America and the Caribbean Region. For questions related to this set of papers, please contact:

Marcelo Bortman, LCSHD
World Bank, 1818 H Street, NW, Washington DC, 20433.
Tel. (202) 458-9730 – fax: (202) 614-0202
Email:

Cover photos: Courtesy of World Bank Photo Library

© 2006 The International Bank for Reconstruction and Development / The World Bank
1818 H Street, NW
Washington, DC 20433

All rights reserved.

Reducing HIV/AIDS Vulnerability in Central America ***Regional HIV/AIDS Situation and Response to the Epidemic***

Marcelo Bortman;¹ Luis B. Saenz;² Isabel Pimenta;³ Claudia Isern;⁴ Antonia Elizabeth Rodríguez;⁵ Marianella Miranda, Leonardo Moreira, and Danilo Rayo.⁶

This study was undertaken by the Human Development Department, Latin America and the Caribbean Regional Office (LCSHD) of the World Bank with financial support from the Bank-Netherlands Partnership Program (BNPP). The main objectives of the study were to establish a baseline for measuring progress and identifying new challenges for the Central America HIV/AIDS Regional Project, and to support policy dialogue regarding the political leadership and commitment to prepare a regional HIV action plan with common policies and coordinated strategies.

Keywords: HIV, AIDS, Central America, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, World Bank

The World Bank	
Vice President	Pamela Cox
Country Director	: Jane Armitage
Sector Director	: Evangeline Javier
Sector Manager	: Keith Hansen
Task Team Leader	: Marcelo Bortman

¹ Senior Health Public Specialist, LCSHH, World Bank.

² Project Director for this study for Sanigest, Costa Rica.

³ Public Health Specialist, WBIHD, World Bank.

⁴ Administrative Assistant for Client Support, LCSHD, World Bank.

⁵ Coordinator for the Regional HIV/AIDS Project in Central America.

⁶ Consultant to Sanigest, Costa Rica.

Acronyms and Abbreviations

AED	Academy for Educational Development and the Futures Group
AHMNP	Association of New Men and Women of Panama
AIDS	Acquired Immunodeficiency Syndrome
ALCA	Free Trade of the Americas
APLAFA	Family Planning Association
ART	Antiretroviral Therapy
ARV	Antiretroviral Medicines
ASI	Association of Integral Health against AIDS
ASONAPVISIDAH	Association of People who Live with HIV/AIDS
ASOVIHSIDA	Costa Rican Association of People who live with AIDS
BMI	Body Mass of Index
BNPP	Bank-Netherlands Partnership Program
CA	Central America
CAFTA-DR	Central American Free Trade Agreement – Dominican Republic
CAI	Integrated Care Clinics
CCSS	Costa Rican Institute of Social Security
CDC	Centers for Disease Control
CENIDH	Nicaraguan Center for Human Rights
CEFAS	Female Center of Social Adaptation
CEPRESI	Center for AIDS Education and Prevention (Nicaragua)
CEPROSAF	Center for Health Promotion and Family Assistance
CEPS	Social Promotion and Study Center
CESAMO	Health Center with Physician and Dentist
CIPAC	Center for Research and Promotion of Human Rights for Central America
CIPE	Center for International Private Enterprise
CONADEH	National Human Rights Commission of Honduras
CODEH	Commission for the Defense of Human Rights
CONASIDA	National Commission against AIDS (El Salvador)
COGAYLESH	Coalition of Gay Organizations of Honduras
CPMP	Committee for Proprietary Medicinal Products
CSW	Commercial Sex Workers
DDHH	Human Rights
EU	Education Unit
FDA	Food and Drug Administration
FESAL	National Family Health Survey
FEUH	Federation of University Students of Honduras
FONASIDA	National AIDS Forum
FUNDESIDA	Development and Fight against AIDS Fund
GFATM	Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria
GTZ	German Agency for Technical Cooperation
HCP	Health Communication Partnership
HIV	Human Immunodeficiency Virus
IADB	Inter-American Development Bank

ICAS	Central American Institute for Social Action
IEC	Information, Education and Communication
IGSS	Guatemalan Institute of Social Security
IHSS	Honduran Institute of Social Security
IIDH	Inter-American Institute of Human Rights
LAC	Latin American and the Caribbean Region
LCSHD	LAC Human Development Department
LCSHH	Health Sector
MERTU	Medical Entomology Research and Training Unit
MSF	Doctors without Borders
MSM	Men who have Sex with other Men
MSPAS	Ministry of Public Health and Social Assistance
NGO	Non-Governmental Organization
NPS	National Strategic Plan
OPS	Pan-American Health Organization (Spanish acronym)
PAHO	Pan-American Health Organization
PASCA	Central American AIDS Action Project
PASMO	Pan-American Association for Social Marketing
PENSIDA	Strategic National Plan to Fight HIV/AIDS
PLWH	People Living with HIV
PNS	National HIV/AIDS/STD Program
PPTMH	Program for Prevention of HIV Transmission from Mother to Child
PROBIDSIDA	Foundation for the Wellbeing and Dignity of People with AIDS
SICA	Central American Integration System
SIDA	Swedish International Development Cooperation Agency
SIDALAC	Latin American and Caribbean AIDS Initiative
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TF	Trust Fund
UARI	Impact Reduction Unit
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development
USASER	Sexual Health and Reproductive Units
UVEI	Epidemiological Control and Research Unit
VIH	Human Immunodeficiency Virus
WBIHD	World Bank Institute Human Development Division
WHO	World Health Organization

Table of Contents

Acronyms and Abbreviations	v
Acknowledgements.....	viii
Executive Summary – Regional Overview	xi
Main Findings, Conclusions and Recommendations.....	xii
National Responses.....	xiii
HIV/AIDS in Central America	1
Epidemiological Profile	3
Vulnerable and Highly Vulnerable Groups	6
National Responses to the HIV and AIDS Epidemic	11
Legal and Regulatory Framework	11
Successful Interventions for HIV/AIDS in Central America	12
Treatment and Procurement of Drugs.....	13
Conclusions and Recommendations	17
References.....	20
Annex 1. Evaluation of Discrimination	21
Annex 2. Form for Selecting Successful Interventions	24
Annex 3. Successful HIV/AIDS Intervention in Central America.....	26
Annex 4: ARV Drugs in Central America 2006.....	37

Tables

Table 1. Highly Vulnerable and Vulnerable Groups	1
Table 2. Central America: Population, GNI per Capita and Estimated Adult HIV Prevalence.....	4
Table 3. The HIV/AIDS Epidemic in Central America.....	4
Table 4. Information Level for Highly Vulnerable and Vulnerable Groups	10
Table 5. Estimate of Annual ART Costs by Country for Age Group 15-49 years.....	16
Table 6. Discrimination in Central America.....	22
Table 7. Response to discrimination and protection of human rights of PLWHA in Central America.....	23

Figures

Figure 1. Notification Rates of HIV and AIDS in Central America.....	5
--	---

Acknowledgements

This study was carried out by a team led by Marcelo Bortman and which included Luis Sáenz, Marianella Miranda, Leonardo Moreira and Danilo Rayo, Claudia Isern, Isabel Pimenta, and Antonia Elizabeth Rodriguez.⁷ The report benefited from contributions from various individuals and organizations throughout Central America, who provided both information and technical assistance. We are extremely grateful to them.

The team is particularly grateful to the Royal Government of the Netherlands for funding this investigation through the Bank-Netherlands Partnership Program (BNPP). The team would also like to thank the following technical reviewers: Joana Godinho (Senior Health Specialist, The World Bank) and Joy de Beyer (Specialist in Knowledge Management for the Global HIV/AIDS Program, The World Bank), who have both assisted with editing of this series; Jonathan C. Brown (Operations Advisor of the HIV/AIDS Global Program, The World Bank), and Ian Walker (Social Welfare Specialist, The World Bank).

We also are very grateful to:

Costa Rica

Dr. Oscar Porras, Immunology Services, National Children's Hospital
Lorena González, Officer from the Ombudsman's Program and Human Rights from the IIDH
Licda Edda Quiros,
Dr. Giselle Lucas, Ministry of Health
Dr Solón Chavarría, Coordinator of HIV/AIDS and STD Program, Costa Rican Social Security Office (CCSS)
Licda Cinthya Chacon, Costa Rican Demographic Association
Dr. Albin Chaves, Director of Pharmacotherapy CCSS
Oscar Valverde Cerros, UNFPA (United Nations Population Fund)
Daria Suárez Rehaag, CIPAC (Center for Investigation and Promotion of Human Rights for Central America)
Edgar Briceño, ASOVIHSIDA
Licda Miriam Fernández Esquivel, FUNDESIDA
Licda Gabriela Solano, HIV/AIDS Clinic, Calderón Guardia Hospital
Rodrigo Chinchilla, Global Fund⁸
Dr. Teresa Solano, Ministry of Health, Health Surveillance
Luis Leiva, ASOVIHSIDA
Catalina Devandas, The World Bank

⁷ Marcelo Bortman is a Senior Public Health Specialist at the World Bank; Luis Bernardo Sáenz is the Project Director for SANIGEST; his study team included Marianella Miranda, Leonardo Moreira and Danilo Rayo; Isabel Pimenta is a Health Specialist at the World Bank, Claudia Isern is an Administrative Assistant for Client Support at the World Bank, and Antonia Elizabeth Rodríguez is Coordinator for the Regional HIV/AIDS Project in Central America.

⁸ Global Fund for the fight against AIDS, tuberculosis and malaria.

El Salvador

Dr. Rodrigo Simán, Director for the National STD/HIV/AIDS Prevention and Control Program (PNS)
Dr. Michael Bartos, Representative for UNAIDS, Guatemala, El Salvador and Belize
Mrs. Jacqueline Sagastume, NPS (National Strategic Program).
Dr. Guillermo Galván, Sub Director, NPS
Dr. Juan Carlos Durán, Epidemiological Unit, NPS
Dr. Alma Quezada, Integral Care, PNS
Dr. Verónica Ávalos, NPS
Dr. Teresa Elías, NPS
Dr. Elizabeth Rodríguez, SISCA
Dr. José R. Guido Bejar, SISCA
Dr. Herbert Betancour, Focal Point, UNAIDS
Dr. Luis Castaneda, Bloom Hospital
Lic. Odir Miranda, Executive Director, ATLACTL Association
Licda. Alexia Alvarado, PASCA Representative, El Salvador
Strategic Alliance for HIV/AIDS Legislation
Heads and personnel for the Rayo de Luz en la Vida (Sunbeam in Life Project)
Lic. Luis Carlos Estrada, Huellas Foundation
Lic. Jaime Argueta, Agua Buena Association

Guatemala

Dr. Annelise de Salazar, Director of the National Program for Prevention and Control of STD/HIV/AIDS (PNS)
Licda. Rosse Mary Bertran, Medicines, PNS
Dr. Judith García, Epidemiological Unit, PNS
Licda. Karina Arriaza, Information, Education and Communications Unit, PNS
Dr. Carlos Mejías, Director of HIV/AIDS Unit, Roosevelt Hospital
Lic. Roberto León, Independent Consultant
Lic. Fernando Cano, PASCA Representative in Guatemala
Dr. Edgar Monterroso, Regional Director CDC/GAP
Dr. Lucrecia Castillo, USAID
Dr. Michael Bartos, UNAIDS Representative, Guatemala, El Salvador and Belize
Licda. María Jesús Valverde, Doctors without Borders (Médecins sans Frontiers-MSF), Switzerland
Dr. Cesar Antonio Nunez, Director PASCA Project
Dr. Stan Terrell, HIV/AIDS Team Leader. USAID/G-CAP
Lic. José Enrique Zelaya B., Sub-Regional Advisor HIV/AIDS for Central America, UNICEF Guatemala
Lic. Oscar Morales, Vida Association
Lic. Hugo Valladares, Director, Gente Nueva Association
Licda. Cristina Calderón, Director of the “Fernando Iturbide” AIDS Prevention Foundation
Licda. Cristina Calderón, Director
Licda. Saira Ortega, Director “La Sala”
Lic. Alván Aléman, PASMO Country Manager

Lic. Giovanni Meléndez, PASMO Regional Advisor for Research and Communications
Dr. Carolina Reyna, Head of the Red Cross project
Lcda. Janet M. Ikeda, Director of IDEI
Lic. Bobolop, Clown Coordinator, Atz'anem k'oj Group
Lcda. Elena Clavijo, Director ad Patricia Santis, San José Hospice
Dr. Hilda Quiej, Medical Coordinator of MSF, Spain
Dr. Lucia Estrada, Director, Marco Antonio Hospice

Honduras

Lic. Juan Ramón Gradehly, Advisor, UNAIDS
Lic. María Tallarico, UNAIDS
Lic. Kenneth Rodríguez, UNFPA
Lic. Janeth Flores, CONADEH
Dr. Odalys García Trujillo, Program for Preventing HIV Transmission from mother- to-child (PPTMH – Ministry of Health)
Lic. Javier Medina - Director, Kukulcán Association
Dr. Ana Marelly García, Directora, ASONAPVSI DAH)
Dr. Marcos Urquía; STD/HIV/AIDS Department, Ministry of Health.
Dr. Henry Andino, Director, STD/HIV/AIDS Department, Ministry of Health.
Lic. Gabriela Roxana Linares ASONOC – Santa Rosa de Copán

Nicaragua

Lic. Karla Aburto, UNFPA Program Officer (United Nations Population Fund)
Lic. Graciella Marsal, CEPS (Centro de Estudios y Promoción Social)
Lic. Zoila Segura, Technician, ICAS
Lic. Hazel Fonseca, Director of Xochiquetzal
Lic. Brenda Mayorga, Office for Prevention and Social Assistance - MIGOB (Ministry of the Government)
Dr. Ana Francis Obando, National STD/HIV/AIDS Program – Ministry of Health
Dr. Julio Pérez, Assistant to the Vice-Minister, Ministry of Health
Dr. Matilde Román, Ministry of Health

Panama

Emilio A. Messina G, MA. Head of the National STD/HIV/AIDS Program for the Ministry of Health.
Dr. Orlando Quintero A. Director of PROBIDSIDA
Licda. Migdalia Salas, Head of the Department of Health and Human Welfare, Panama Red Cross.
Lic. Ricardo Eloy Beteta, President of AHMNP
Dr. Ernesto Guerrero Director of UNAIDS, Panama
Licda. Hilda Martínez, APLAFA Researcher
Dr. Edilma Berrio. Head of the National STD/HIV/AIDS Program for the Ministry of Health.

Executive Summary – Regional Overview ⁹

In Latin America, Central America is the sub region most affected by the HIV epidemic after the Caribbean. Four of the six countries in Latin America with the highest HIV prevalence are in Central America, and two of them have prevalence rates above 1%. The epidemic threatens to run out of control unless prevention efforts among highly vulnerable groups, such as commercial sex workers, men who have sex with men and prisoners, are intensified.

Preventing new HIV infections, treating people with HIV, and caring for those affected by the epidemic represents a great challenge for these six countries. The World Bank is currently supporting initiatives by Central American governments to reverse the HIV epidemic. In this context, this study was carried out with the following specific objectives:

- 1) Review the epidemiology of HIV and AIDS in Central America;
- 2) Assess National AIDS Programs, including surveillance systems, laboratory capacity, prevention, treatment and clinical care;
- 3) Assess the legal and regulatory framework, and discrimination against people with HIV and AIDS – particularly women – and its impact on treatment and prevention; and
- 4) Review successful interventions and good practices related to HIV in Central America carried out by NGOs and public organizations, including development of monitoring and evaluation systems.

This study was conducted to support the current policy dialogue on strengthening HIV and AIDS national responses, in particular to: (i) build political leadership and commitment to prepare a regional action plan with coordinated strategies and common policies, (ii) strengthen and harmonize the legal and institutional framework for addressing the HIV epidemic in the region, (iii) identify and disseminate “best practices” for prevention through integrated efforts by the health sector, other government agencies and civil society and promote monitoring and impact evaluations, and (iv) set out the rationale for establishing a regional procurement process for HIV-related pharmaceuticals and supplies.

Finally, this study established a baseline against which to measure progress and to identify new challenges for the World Bank-financed Regional HIV/AIDS Project to address. The development objective of the Regional Project is to provide knowledge and tools to decision makers in all countries in the region to manage and control HIV and opportunistic infections. Component 1, *Regional Laboratory*, supports the establishment of a regional laboratory to implement highly specialized functions, as a single regional institution. Component 2, *Epidemiological Surveillance*, supports the implementation of a regional second-generation epidemiological surveillance system, to enable improved

⁹ The study included Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. Separate reports have been published on each country, in addition to this regional overview.

characterization of the HIV epidemic in Central America. Component 3, *Strengthening the Regional Response Capacity*, will increase the harmonization of legal and institutional frameworks needed to scale-up strategic interventions, in response to the HIV epidemic. It will also strengthen leadership and political commitment leading to a Regional Action Plan to address the epidemic in a coordinated way. Finally, component 4, *Prevention in Mobile Populations*, focuses on groups that are particularly vulnerable to HIV, i.e., mobile populations, considered to be a key factor in the spread of the epidemic. Prevention programs focusing on these populations are still few and small scale.

The information presented in this report was gathered in interviews with key stakeholders in Central America and from reviews of documents provided by national organizations, NGOs, and bilateral and international development organizations. In addition, seven workshops were held to present and discuss the information gathered by the study with the various stakeholders.

The study is published in a series of seven reports: this one summarizes the HIV situation in Central America; the other six describe the situation in each Central American country. Information from different countries is not always comparable. This partly reflects differences in the organizational level of the different programs responding to the epidemic, as well as variations in the study's access to information held by different institutions and organizations.

Main Findings, Conclusions and Recommendations

Honduras and Guatemala are among the six countries with the highest HIV prevalence in Latin America. Adult HIV prevalence is already over 1% in Honduras (1.6%) and Guatemala (1%). Panama (0.9%), Costa Rica (0.6%), El Salvador (0.6%) and Nicaragua (0.2%) still have HIV prevalence rates below 1%. By the year 2010, the epidemic may reach a 2% prevalence rate among the adult population in Central America, and in some cases it may surpass it.

It is estimated that over 200,000 people currently live with HIV in Central America.¹⁰ HIV transmission in Central America is primarily associated with heterosexual sex, as in the Caribbean. The exception is Costa Rica, where men who have sex with men (MSM) account for a much higher share of infected people than in other countries in the region. Although there are more men than women with HIV in Central America, the gender gap is closing fast. The epidemic is still concentrated in high-risk groups such as commercial sex workers and their clients, men who have sex with men, prisoners, and the Garifuna (an Afro-Caribbean population group from the Atlantic Coast of Honduras). The increase in adult deaths from AIDS has led to a rising number of orphans and vulnerable youth being left without homes, food, health care and education. The epidemic has economic repercussions both for households and country health systems, as well as for the economy.

¹⁰ CDC. Global AIDS Program for Central America. Program Profile, 2004.

In addition to the variations in prevalence and groups affected across the six countries, there are also important variations within each country. The epidemic is concentrated in certain geographic areas – particularly urban areas, internal commercial routes and ports. Groups associated with mobile populations, commercial sex workers and men who have sex with men have the highest prevalence of HIV, and are bridge populations for transmitting the epidemic to the general population, mainly due to them engaging in risky behaviors and the high level of interactions between these groups and the general population. However, the mechanisms of HIV transmission need to be better known so that effective public health interventions can be designed and implemented. Identifying the nature and extent of the problem in certain groups – such as people with disabilities, children at risk of sexual abuse, prison inmates, ethnic minorities, businessmen and the military/police – remains a challenge.

There are important differences in social and economic conditions among the Central American countries which may partly explain the differences in HIV prevalence rates. Other factors contribute to the epidemic, such as migration, tourism and proximity to the Caribbean. Migration has two components: 1) temporary workers moving within countries in this sub region; and 2) migrants attempting to move permanently to the United States, of whom only about 10% succeed, while 90% return to their countries. While in transit, migrants may be exposed to high risk sexual behavior, increasing their risk of becoming infected with HIV and other sexually transmitted infections. Higher HIV prevalence rates in Honduras, San Pedro Sula (a Caribbean port) and among the Garifuna population (indigenous people with roots in the Caribbean) suggest that transit between Central America and the Caribbean has had an impact on the Central American epidemic.

Some of the differences in HIV prevalence among these countries may be explained by poor surveillance systems and under-reporting. For example, although the role of injecting drug users (IDUs) does not seem to be an important factor in the epidemic in Central America, this may be the result of under-reporting. The higher HIV prevalence reported among MSM in Costa Rica may reflect more liberal cultural norms and less discrimination in this country, rather than real differences between Central American countries.

Once an HIV epidemic becomes generalized, the most affected groups are people in the prime working years of life. This has negative consequences for labor force size and productivity, with long-term repercussions for both the economy and health system, as has been witnessed in Africa. Countries such as Brazil, Thailand and Uganda have shown, however, that it is possible to keep the epidemic in check if there is strong country leadership, and evidence-based, cost-effective interventions that achieve high coverage of highly vulnerable groups such as commercial sex workers and men who have sex with men, are implemented.

National Responses

All Central American countries have established coordinated national responses to address the HIV epidemic. Nonetheless, important challenges remain to make these

systems effective. With respect to prevention, the main challenge continues to be to effectively reach the most vulnerable groups with evidence-based and cost-effective interventions, including appropriate prevention strategies to promote healthier and safer sexual and reproductive practices. On the treatment side, responses need to provide not only anti-retroviral drugs but also all the necessary clinical support and follow-up. At the regional level, efforts supported by the World Bank-financed project and other organizations will continue to focus on inter-country “transmission corridors” and border areas.

It is essential that each country defines national strategic priorities and allocates resources that reflect the realities of its own epidemic. Surveillance systems are still very weak, and most focus on notification of AIDS cases only. However, some of the necessary information about the epidemic is available and is included in this study. The Central American countries need to improve the analysis of available data to allow for appropriate planning and execution of national HIV/AIDS policies and programs.

Vulnerable groups and the general population still have a very limited understanding of HIV and AIDS. Swift action is required to discourage risky sexual practices, especially among highly vulnerable groups, and to better identify HIV cases and provide ARV treatment. A specific challenge is coordinating the actions of NGOs and the public health services, especially to provide effective responses at the three levels of care.

The country workshops that discussed the study findings and analyzed cost-effective intervention strategies concluded that at current resource levels, only 25% of infections could be prevented. This reflects the difficulty of reaching groups at greater risk. Cost-effective strategies identified by workshop participants include: i) free distribution of condoms among highly vulnerable and vulnerable groups, ii) social marketing of condoms, iii) targeting information, education and communication at highly vulnerable and vulnerable groups; and iv) providing counseling and access to rapid diagnostic tests.

Current funding to prevent and control the epidemic is far from adequate, and needs to be allocated to prevention among high risk and highly vulnerable groups. The World Bank developed a cost-effectiveness model to help governments determine the allocation of resources that would prevent the maximum number of new infections. According to this model, a well designed national program can have a substantial impact on the epidemic even with limited resources, provided these are channeled to the most cost-effective interventions. An analysis in Guatemala, Honduras and Panama suggests that health spending would have to increase by \$1 million per year to prevent the number of patients from growing 10-20%. In 2000, the three countries spent approximately \$9.6 million on HIV/AIDS programs.¹¹

Surveillance Systems. Surveillance of HIV and AIDS in Central America is based on mandatory notification of cases, and some prevalence studies. At the country level, by merely identifying and following up on HIV and AIDS cases, surveillance systems do not

¹¹ The World Bank. HIV/AIDS in Central America: The Epidemic and Priorities for its Prevention. LAC Region: Washington DC: 2003

fully respond to information needs posed by the dynamic of the epidemic. These systems need to increase their capacity to gather and analyze data related to risk factors and behaviors, known as second-generation surveillance. Upgrading the system to second-generation requires new strategies (sentinel units and sites). At the regional level, it is necessary to agree on common standards that will allow the exchange of information among countries, as well as on case definitions, implementation of sentinel units and sites, case reports, and indicators. To achieve this goal, it is important to consider the development of a regional integrated electronic information platform.

Legal and Regulatory Frameworks. Although all countries have developed a legal framework for health care provision for people living with HIV and AIDS (PLWHA), many cases of discrimination have been reported, and PLWHA have had to file law suits to defend their rights. In some countries, contradictions among the laws need to be resolved. In addition, improving knowledge about people's rights under the law remains a challenge, as does defining and implementing sanctions for discrimination. Successful interventions in the field of human rights, particularly in Guatemala and Panama, have seen a number of cases resolved in favor of patients who filed complaints. The study was able to identify areas where changes in general legislation or HIV/AIDS laws are necessary. Issues of reciprocity in treatment and care need to be resolved. Regional organs such as the Central American Integration System (SICA) can provide the necessary umbrella to integrate legal frameworks at the regional level.

Prevention. All countries have taken a broad approach to the prevention and control of the HIV epidemic. The list of potential target groups has increased to include the whole population. This strategy should be reviewed to ensure that the limited resources available are allocated to groups that are critical for preventing transmission of the virus – commercial sex workers, men who have sex with men, prisoners, and mobile populations.

In Central America, in addition to public services, there are many NGOs supporting the national responses against HIV and AIDS. These NGOs cover a wide range of interventions, offering protection of human rights, and prevention, treatment and care services. Judging from coverage indicators, many of these projects have been successful in achieving their goals. However, many interventions only track process indicators, and their outcomes are unknown.

Some projects are able to report on results: for example, an increase in the use of condoms by the target population was observed in Guatemala following a social marketing effort by PASMO. Similarly, the Basic Food Basket project of the Ministry of Health in El Salvador has shown a reduction in mother-to-child transmission of HIV. Projects aimed at the Garífuna population in Honduras have great potential. The same can be said of programs targeting the Xochiquetzal population in Nicaragua and of an effort by the United Nations Population Fund (UNFPA) and the Youth Ministry to draw attention to the epidemic in Costa Rica. Two successful interventions involve translating prevention messages for the Honduran Garífuna into the indigenous language. However, issues involving indigenous and afro-descendant groups in the region are very complex and require more attention. Some projects were successful in transferring knowledge to

vulnerable groups. However, most interventions have not selected indicators to measure impact on outcomes, such as HIV prevalence in vulnerable populations. The lack of appropriate measurement mechanisms does not mean that these interventions have not had an impact, or will not have one in the future. Rather, it points to the need for better monitoring and evaluation systems, including better indicators.

Treatment and Care. All Central American countries are providing treatment and care to people living with HIV and AIDS (PLWHA), including access to ARTs. Treatment is delivered through a mix of public and private care. The coordination of follow-up activities by health services and NGOs that provide ART is a serious challenge for country programs. In fact, there are significant challenges regarding the management of adverse effects of treatment, follow up with laboratory tests, and ensuring adherence to treatment. Dealing with illiterate patients or ethnic groups, many of whom are not covered by healthcare, adds to the challenge.

All countries also face challenges regarding the availability of ARVs. Agreements have been reached to attain preferential prices for brand-name drugs. In addition, generic medicines are available through institutional bidding processes or through procurement agencies and international foundations. Specific challenges remain in planning joint purchases by Ministries of Health and Social Security institutions, having uniform treatment protocols, establishing an infrastructure for patient follow-up, and monitoring resistance to medicines.

At the national level, countries need to establish mechanisms to facilitate the purchase of high quality generic drugs, using mechanisms such as the PAHO Revolving Fund or bilateral agreements. At the regional level, the possibility of establishing an alliance of Central American countries for the bulk purchase of drugs, aiming at reducing costs, should be considered. This alliance would improve these countries' bargaining power, ensuring access to drugs and related supplies at lower prices.

Laboratory Capacity. At the national level, laboratory capacity needs to increase not only to provide diagnostic services, but also to be able to follow up on people receiving ART. This will require investment in equipment and skilled workers; and improvements in health services referral processes. At the regional level, the World Bank is supporting the establishment and implementation of a regional laboratory in Panama City. This facility will have the following functions to support national laboratories: (i) diagnostic and follow up testing for complex cases, (ii) access to, and transfer of new laboratory technologies, (iii) quality control, (iv) training in new techniques, (v) research, and (vi) development of an integrated information system with country laboratories.

HIV/AIDS in Central America

This report provides a summary of the six country case studies in Central America. It is structured in four different sections: (i) epidemiological profiles, (ii) National AIDS Programs, including prevention, treatment and care, surveillance systems, and laboratory capacity, (iii) legal and regulatory frameworks, including discrimination against people with HIV, and (iv) successful interventions.

Epidemiological data and other information were collected from the Epidemiological Services and reports published by the Ministries of Health in the different countries. The highly vulnerable and vulnerable groups that were assessed are listed below. In mapping the situation of these groups, special attention was given to evaluating the extent to which information could be standardized given the diverse sources used.

Table 1. Highly Vulnerable and Vulnerable Groups

Highly Vulnerable Groups	Vulnerable Groups
Commercial sex workers (CSW)	Mobile populations in affected regions
Men who have sex with men	Indigenous and Afro-descendent groups
Injecting drug users (IDUs)	Orphans and vulnerable youth
Prison inmates	People with disabilities
	People in the uniformed services
	Women

The study of highly vulnerable and vulnerable groups aimed at obtaining information that would contribute to:

- a) Increasing the effectiveness of prevention of HIV infection among mobile populations;
- b) Emphasizing regional initiatives, such as efforts to strengthen civil society within a political framework of the UN “Three Ones”: (i) one agreed HIV/AIDS action framework that provides the basis for coordinating the work of all partners; (ii) one national AIDS coordinating authority, with a broad based multi-sector mandate; and (iii) one agreed country-level monitoring and evaluation system.¹²
- c) Purchasing of drugs and other supplies at regional level. Currently there is little or no experience with regional purchasing, but since this study is a baseline for the Regional HIV/AIDS Project, it was relevant to identify gaps so that the impact of future interventions can be evaluated.

To analyze countries’ stigma and discrimination legal frameworks, the study used Goffman’s concept of stigmatization as occurring when a person is “discredited and reduced in the eyes of society.”¹³ According to Peter Piot, “Stigma towards PLWHA stems from a powerful combination of fear and embarrassment.”¹⁴ These arise because

¹² UNAIDS. Fundamental Principles of the “Three Ones”. 2003.

¹³ Goffman E, Stigma: Notes on the Management of Spoiled Identity. Prentice-Hall, 1963.

¹⁴ Piot , Peter. World Conference against Racism. Durban, South África 2001.

the way HIV is transmitted – unprotected sex or the injection of drugs – is surrounded by taboos and moral issues, and also because AIDS is a relatively new and deadly disease. However, responding to AIDS with guilt or abuse of its victims keeps the epidemic underground, creating ideal conditions for spreading the epidemic. “The only way of progressing and facing this epidemic,” Piot argues, is to replace “embarrassment with solidarity, and fear with hope.”

A survey to assess discrimination towards people living with HIV (PLWH) was carried out following Annex 5 of the UNAIDS Protocol against Discrimination¹⁵ and the guidance questions listed in Annex 1 of this report. Annex 1 includes a list of the people who were interviewed. The variables studied were: access to healthcare services, employment, access to judicial processes, public administration, social welfare assistance programs, access to housing, reproductive rights and family life, and access to financial services and other public services. The general methodology for assessing discrimination was as follows:

- a) The questionnaire was adapted from the UNAIDS protocol. Two columns were added to gather evidence and locate contacts.
- b) The questionnaire was sent to the national committee responsible for the HIV/AIDS program in each country, with instructions and a motivational letter. This was followed up by telephone. If there was no response, the questionnaire was sent to an NGO involved with the issue.
- c) A form for each of the countries was filled out and validated by the National Committee or the NGO.
- d) The study team reviewed available reports, and verified the data collected.
- e) All the information collected was analyzed.

In order to identify successful interventions for prevention and care targeting PLWH, the study followed the recommendations of a cost-effectiveness study that had been previously applied in Guatemala, Honduras and Panama.¹⁶ Interventions identified as cost-effective included the following: programs to promote and defend the human rights of PLWH; blood safety programs; information, education and communication (IEC) for adolescents and highly vulnerable and vulnerable groups (CSW, MSM, prisoners and the military/police); free distribution of condoms among high-risk groups and marketing of condoms; prevention of mother-to-child transmission; and syndromic management of sexually transmitted infections.

Successful experiences were selected based on recommendations by experts according to predefined criteria. A successful intervention was defined as a program, project or intervention with a comprehensive perspective regarding HIV and AIDS prevention and care, and with measurable goals related to impact, access coverage or change in behavior. To be selected, a project had to:

¹⁵ <http://www.unaids.org>

¹⁶ The World Bank. HIV/AIDS in Central America: The Epidemic and Priorities for its Prevention Region LAC: Washington DC: 2003.

- a) Be directed at highly vulnerable and vulnerable groups, according to the classification used in this study;
- b) Have objectives relating to effective prevention strategies towards highly vulnerable and vulnerable groups and dissemination of information for controlling the epidemic; and strategies for reducing stigmatization and discrimination of vulnerable groups;
- c) Have indicators regarding access, coverage, impact or behavioral change;
- d) Be able to measure effectiveness; and
- e) Have been under implementation for at least two years.

A range of issues have to be considered when analyzing antiretroviral treatment, including the income levels of PLWH and what government support they receive. Although ARVs are now less expensive than in the past, the amount of resources required for HIV-related drugs and lab supplies surpasses the budget allocated for medical expenses in most countries of the region. A range of other factors influence countries' capacity to manage infections and provide follow-up treatment, including their ability to control the quality of drugs and guarantee patient access to them, and the availability of qualified professionals to administer treatment and evaluate patient follow-up. Patents also are an issue for countries in the region; current laws in each country must be considered as well as how international trade rules affect the availability of drugs in a variety of ways, such as through limitations on imports and local production, licensing requirements and procedures, and data protection. Finally, in analyzing the drug purchasing process, it is necessary to consider how different types of drugs are selected, whether countries have the institutional capacity to predict what quantities they will need, and their capacity to purchase, store and distribute ARVs and materials required for following-up treatment.

EPIDEMIOLOGICAL PROFILE

AIDS is one of the top ten causes of death in three of the six countries in Central America. It is estimated that 208,600¹⁷ people currently live with HIV. By the year 2010, the epidemic may reach a prevalence of 2% in the adult population, and in some countries may even surpass it. The prevalence of HIV among adults is highest in Honduras (1.6%), followed by Guatemala (1%), Panama (0.9%), El Salvador (0.6%), Costa Rica (0.6%) and Nicaragua (0.2%). The epidemic is concentrated in highly vulnerable groups (commercial sex workers, men who have sex with men, prison inmates and the Garífuna population from the Atlantic Coast of Honduras). An increase in the number of deaths of adults with AIDS has led to a rising number of orphans and vulnerable youth who receive no support and are exposed to the risks of being left without homes, food, health and education. The epidemic has economic repercussions both for households and country health systems, as well as for the economy.

¹⁷ CDC. Global AIDS Program for Central America. Program Profile, 2004.

Table 2. Central America: Population, GNI per Capita and Estimated Adult HIV Prevalence

Country	Population 2005, mid year (millions)	GNI per Capita (Atlas method, US\$)	Estimated Adult HIV Prevalence (%)
Honduras	7.2	1,120	1.6
Guatemala	12.6	2,400	1.0
Panama	3.2	4,630	0.9
El Salvador	6.9	2,450	0.6
Costa Rica	4.3	1,590	0.6
Nicaragua	5.5	910	0.2

Source: Country at a glance, World Bank Group; UNAIDS

The accumulated number of notified HIV and AIDS cases varies considerably within the region – from as low as 12 cases per 100,000 in Nicaragua to as high as 228 per 100,000 in Honduras. Between these extremes, the number of notified cases per 100,000 inhabitants is of 211 in Panama, 99 in El Salvador, 61 in Costa Rica and 53 in Guatemala. It is estimated that in Latin America, the epidemic is underestimated by 30% for AIDS cases and 40% for HIV cases.¹⁸

Table 3. The HIV/AIDS Epidemic in Central America

Country	AIDS Cases	Notification Rate per 100,00 Inhabitants 1982-2004	Male:Female Ratio 2001	Prevalence in Female Sex Workers 2001/2002	Prevalence in MSM 2001/2002
Honduras	16,363	228	1.2:1	9.0%	13%
Guatemala	8,685	53	2.5:1	8.7%	12.0%
Panama	7,111	211	3:1	2.0%	10.6%
El Salvador	7,148	99	3:1	3.6%	18.0%
Costa Rica	2,546	61	4.4:1	0.8%	14.5
Nicaragua	1,402	12	4:1	1.7%	9.3%

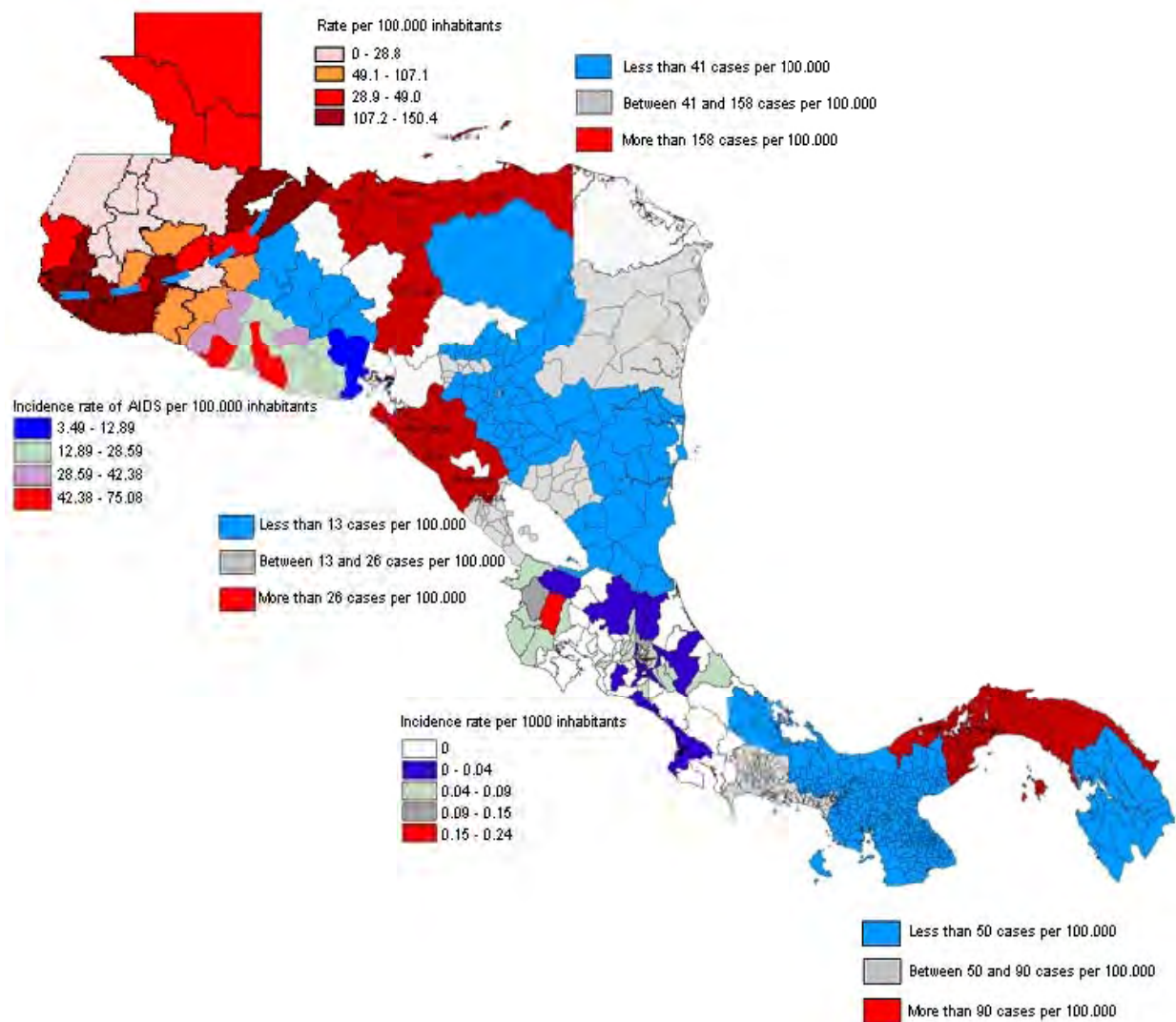
Sources: Ministries of Health of Central America, PAHO, UNAIDS, the PASCA Multisite Study on STIs and HIV.

The epidemic is becoming “feminized” - the overall ratio of men to women who live with HIV/AIDS in Central America has declined from 2.3: 1 in 1982 to 1.8: 1 in 2004.¹⁹ For Costa Rica, the ratio has dropped from 8.6-1 to 4.4-1, indicating a lower level of feminization of the epidemic than in the other countries. The “feminization” of the disease has worsened due to cultural factors, including the disempowerment of women who often are forced to have sex without their consent or who are unable to negotiate the use of condoms.

¹⁸ García Abreu, A, Nogueira, I, Cowgill, K. *HIV/AIDS in Latin America: The Challenges Ahead. Human Development Network*, The World Bank, 2003.

¹⁹ *Ibid.*

Figure 1. Notification Rates of HIV and AIDS in Central America



Source: Based on data from PAHO, UNAIDS and the Central American Population Center. Country maps are included in the respective country booklets.

Some 70% of cases resulted from heterosexual exposure, while 12% resulted from homosexual or bisexual exposure. Heterosexual transmission is increasing, while other forms of transmission are decreasing.²⁰ Most HIV and AIDS cases are found in cities, although there is a high prevalence of infection among indigenous populations as well. Sixteen percent of the Garífunas in Honduras are HIV positive – a prevalence estimated to be six times higher than in the overall population in Honduras. A positive trend is that

²⁰ PAHO/UNAIDS. Vigilancia del SIDA en las Américas. 2005.

in Nicaragua the use of condoms doubled between 1991 and 1998 among indigenous men who have sex with more than one partner.²¹

Clearly, the HIV epidemic in Central America is serious, although there are variations among the countries. The reasons for these variations are not fully understood, but it is important that they are clarified to be able to design more cost-effective interventions. All Central American countries have first-generation, passive epidemiological surveillance systems, although their specific approaches vary. HIV tests are performed by public health services either upon request by patients (for example, pregnant women), or as part of studies of individuals who belong to highly vulnerable and vulnerable groups. In addition, blood donations are tested for HIV. Common criticisms are that these surveillance systems are not interconnected, and do not follow up on people registered during different stages of the disease. The Strategic Regional Epidemiological Surveillance Plan for HIV/AIDS seeks to establish a second-generation epidemiological surveillance system. This system will provide information on risk factors and behavioral information that will allow for better understanding of the nature of the HIV/AIDS epidemic in the region, which will in turn enable the design of more effective responses.

VULNERABLE AND HIGHLY VULNERABLE GROUPS

Commercial Sex Workers. Commercial sex workers (CSW) and their clients are at higher risk of acquiring and transmitting HIV. Many CSW have a high number of clients. Clients frequently do not use condoms, and sex workers often do not insist on their use, either because they underestimate the risk of infection, do not have access to condoms, or earn more money by engaging in unprotected sex. CSW and their clients may act as bridge populations and transmit the infection to other groups of the population.

In Honduras, the HIV prevalence among sex workers was 5.5% (n = 281) for Tegucigalpa and 19.8% (n=247) for San Pedro Sula (PASCA) in 1989. For other communities in this country (such as Comayagua, La Ceiba, San Pedro Sula, Tegucigalpa and Puerto Cortés), a study estimated prevalence at 10% in 1997;²² another study estimated prevalence at 9% in this group in 2001.²³

As in other countries, HIV in El Salvador is most prevalent in urban centers. The Multicenter Study carried out by PASCA estimated that the prevalence among CSW in urban areas at 3.6% in 2001. This study indicated that 50% of sex workers did not use condoms when engaging in sex with regular partners. The study also found that HIV prevalence among street commercial sex workers was six times higher than among those in a fixed location.

In Costa Rica, 0.8% of the 8,750 female sexual workers registered at the Ministry of Health are HIV carriers. In Panama, an evaluation for the UN General Assembly Special

²¹ *Ibid.*

²² Honduras Health Secretary 1997.

²³ UNAIDS, PASCA, CDC, PAHO and the University of Washington. 2001.

Session on HIV/AIDS (UNGASS) estimated that HIV prevalence among the nearly 7,000 female sex workers was approximately 2% in 2005; and 3.5% among street workers.

In Guatemala, studies have been conducted in 11 of the country's 22 regions, including six regions with the greatest number of reported cases. They show that the prevalence among sex workers ranges from 0-11%. The Unit of Epidemiological Surveillance in the Ministry of Public Health and Social Welfare (MSPAS) reported that the overall rate was 8.7% in 2005. Cases of infected female sex workers have gone from none in 1990 to levels ranging from 4.7% to 11% in 2003.²⁴ These studies have been conducted in major cities such as Guatemala City, Antigua, Puerto Barrios and Izabal. Sex workers often are exploited children of both sexes. An estimated 77% of their partners do not use condoms, according to the La Sala project.

In Nicaragua, the prevalence among sex workers was 1.7% in 2002, in Managua, Leon, Chinandega and Bluefields.²⁵ In this group, only 6% – 11% were not aware of safe sex practices.

Men who Have Sex with Men. Unprotected sex among men who have sex with men accounts for a significant number of cases. This is a group with high rates of HIV prevalence, that oftentimes serve as important bridges of transmission of STIs and HIV to other groups of the population. It is the second most vulnerable group, as found in many studies conducted in Central America. However, due to the high levels of stigma associated with homosexuality, and resulting difficulty for MSM to disclose their sexual habits, results of these studies are less reliable.

In El Salvador, the Multicenter Study found that 18% of MSM were HIV positive. In Costa Rica, HIV prevalence among MSM was 14.5% in 2003, according to PASCA. In Guatemala, 12% of MSM studied in Guatemala City were HIV carriers and 13% were syphilis carriers in 2003. The Multicenter Study estimated that 31% of PLWH were MSM. In Panama, 10.6% of MSM are estimated to be HIV-positive. The figure is thought to be an underestimate due to the stigma attached to homosexuality. Many MSM avoid medical centers, and 27% of all AIDS cases did not report the mode of transmission.

In Honduras, HIV has had a considerable impact on MSM, according to data from the Ministry of Health. Between 1985 and 2001, 8% of all reported cases involved men in homosexual relationships. The Multicenter Study carried out in 2001 estimated that prevalence was approximately 13% in this group. San Pedro Sula, one of the regions that most affected by the epidemic, had a prevalence of approximately 16%, eight percentage points higher than the rate observed in Tegucigalpa. The pattern in Nicaragua was very different. CEPRESI found that 1.2% of the MSM population was HIV positive in 2002.

Prisoners. Prison inmates are considered an important highly vulnerable group due to the high rates of unprotected heterosexual and homosexual sex, often associated with use of

²⁴ Central American Multicenter Studies and MERTU/CDC for 2003

²⁵ UNAIDS, 2004

injecting drugs. They may also act as a bridge population during their confinement, associated with partner visits, and when they are released back into the communities.

Honduras performed a study in 1997 and 1998 that concluded that 6.8% of the prison population carried the virus.²⁶ In Panama, according to an UNGASS report, prevalence ranges from 5% to 13% in detention centers. The report indicated that most of the carriers were infected before being imprisoned. In El Salvador, 6,051 of the 12,106 inmate population were tested, and seroprevalence was 0.7%. In Costa Rica, the prevalence was 0.03% in 2004.²⁷ The main causes of transmission were shared needles, consensual sexual relations and rape, and tattoos with infected needles and tattoo pistols. Due to a lack of resources, tests are only performed when prisoners begin to present symptoms. In Nicaragua, the prevalence of HIV in a sample of 300 inmates was 1%. Reported rates of condom use during the last sexual act were very low.

Orphans. A growing proportion of orphans are children of people who died from AIDS. In Honduras, a report by UNICEF estimates that 14,000 children became orphans due to AIDS by 2002. In Panama, an estimated 8,100 children – 21% of all orphans – had lost their parents to AIDS by 2001; that figure is projected to rise to 13,000 children by 2010. In El Salvador, 11% of all orphaned children had become orphans due to AIDS in 2005, up from 0.6% in 1990. In Costa Rica, as in other countries, the percentage of orphans who lost their parents because of AIDS increased from zero in 1990 to 3% in 1995 and 12% in 2005. In Guatemala, this group has grown from 0.3% of all orphans in 1990 to 14% in 2005. In Nicaragua, UNICEF reported that approximately 4,000 children had become orphans due to AIDS by 2005, compared to fewer than 100 in 1995 and 2,000 in 2001.²⁸

Indigenous and Afro-descendent Groups. Indigenous populations are considered to be at high risk of HIV and other STIs for a number of reasons. They are very mobile, and when they are outside their communities, they tend to engage in higher rates of risky behaviors. In addition, gender inequality results in significant barriers to negotiating use of condoms. The belief that diseases are the result of evil spells increases barriers to effective prevention, and favors transmission of HIV among these groups.²⁹

The Garífuna population in Guatemala and Honduras is the most vulnerable indigenous group in the region. One source estimates seropositivity in this group to be as high as 25% in the cities of Puerto Barrios and San Pedro Sula.³⁰ Another source estimates

²⁶ Sierra, Ministry of Health Department for Control and Prevention of STDs, HIV/AIDS and Tuberculosis. Sero-epidemiological study of Syphilis, Hepatitis B and HIV in the Garífuna population from El Triunfo de la Cruz, Bajamar, Sambo Creek and Corozal. 1999.

²⁷ Schwab N et al. Optimizing the allocation of resources to prevent HIV in Costa Rica. World Bank 2004.

²⁸ UNICEF, UNAIDS, USAID. *Niños al borde del abismo*, or *Children at the Edge of the Abyss* 2002

²⁹ Traa-Valarezo, X. Social Evaluation and Strategy for the Indigenous Populations and Afro-descendants. World Bank. 2004.

³⁰ *Ibid.*

overall prevalence to be 8.4%, and prevalence among women to be 8.5%.³¹ In El Salvador, the mestizo population comprises 7% of the total population, with estimated HIV prevalence of up to 25%. In Panama, seropositivity among the mestizo-Kuna populations in the urban sections of Panama City is as high as 10%, while the populations of the Kuna Yala islands and Bocas del Toro have a seropositivity of 5%. For Costa Rica, indigenous groups comprise 1.7% of the population, and are estimated to have seropositivity of 10%; the afro-descendent population comprises 1.9% of the population and also is estimated to have a seropositivity of up to 10%. In Nicaragua, HIV prevalence among the Miskito and Garifuna population of the Atlantic region may reach 10% as well. HIV prevalence was approximately 47 per 100,000 in the autonomous Nicaraguan region of the South-Atlantic in 2004. For the autonomous region of the North Atlantic, it was 25.8 per 100,000 people that same year.³²

Other Vulnerable Groups. Data suggest that the prevalence of HIV among men who have sex with men and commercial sex workers in the 15-49 age group has increased. This could be significant for other vulnerable groups, since CSW and MSM are considered highly vulnerable groups that may help to spread the epidemic to other vulnerable groups. These include the general population 15-49 years of age, mobile populations and the military. Another vulnerable group is the disabled. However, this study did not find information regarding this group.

A study by the Mexican Institute for Public Health determined that by the year 2001 most HIV cases reported in Nicaragua involved people who had acquired the virus in another country. This occurs especially towards the south, where undocumented individuals predominate. In Honduras, the Ministry of Health estimated that HIV prevalence among international truck drivers was 1.3% in 1998. In El Salvador in 2003, almost one out of every 10 families had a member who was living or had lived in another country, almost always in North America. Migration is higher among men than women - 68% compared to 32%. One of every two people who have migrated is at least 25 years old and had approximately seven years of schooling when he or she left the country;³³ this lack of schooling may contribute to an increased risk of becoming infected with HIV and other sexually transmitted diseases. However, no data are available regarding the prevalence of HIV among migrants.

Early beginning of sexual life, associated with high frequency of sexual relations without protection in countries with high levels of young population suggest a highly vulnerable scenario for the epidemic to spread. In El Salvador, over 60% of the population is in the 20-39 age group. One risk for spreading the epidemic in this country is the early initiation of sexual relations; the country has a specific annual fertility rate for adolescents of 104 children for each 1,000 women between the ages of 15-19; 22% of all women aged 15-24

³¹ Sierra, Ministry of Health Department for Control and Prevention of STDs, HIV/AIDS and Tuberculosis. Sero-epidemiological study of Syphilis, Hepatitis B and HIV in the Garifuna population from El Triunfo de la Cruz, Bajamar, Sambo Creek and Corozal. 1999.

³² National Strategic Plan for HIV/AIDS 2005-2009.

³³ FESAL 2002-2003,

had their first sexual relationship before they were 15 years old.³⁴ In Costa Rica, the prevalence of HIV was 17.4% per 100,000 among 30-34 year olds and 15.2 per 100,000 among 35-39 year olds in 2004. Social factors that increase the risk of contracting HIV include having unprotected sex at an early age, dropping out of school, limited possibilities for socializing, and child labor, which exposes children to adults who may carry HIV.

In Guatemala, the 15-49 age group represents 88% of the population; 68% of this group is between the ages of 20 to 39 years. It is estimated that 0.7% of uniformed services personnel in Guatemala are HIV-positive. In Guatemala, truck drivers are considered to be a high-risk group; they travel along the so-called AIDS route – regions crossed by the two main highways in the country. These include the Atlantic route from Guatemala to Puerto Barrios and the Pacific route that extends from Guatemala to Escuintla and Tecún Umán which borders Mexico.

Table 4 summarizes the availability and perceived quality of data about vulnerable groups in each country. Scoring was based on a qualitative judgment about the surveillance system and its outputs in each country.

Table 4. Information Level for Highly Vulnerable and Vulnerable Groups

Highly Vulnerable Groups	Honduras	Panama	El Salvador	Costa Rica	Guatemala	Nicaragua
Commercial Sex Workers	●	●	●	■	●	●
Men who have sex with other men	■	■	■	■	■	■
Prison Inmates	■	■	■	▲	▲*	▲
Injecting Drug Users	▲	▲*	▲	▲	▲	▲
Vulnerable Groups	Honduras	Panama	El Salvador	Costa Rica	Guatemala	Nicaragua
Orphans	▲	■	▲	■	▲	▲
Vulnerable Youth	▲	■	●	■	■	▲
Migrant groups in affected regions	▲	■	■	▲	▲	■
Disabled	▲	▲	▲	▲	▲	■*
People in Uniformed Services	▲	▲*	▲	▲	▲	▲
Women	■	▲	■	▲	▲	▲

Reasonable information available: ● Not enough information available: ■ No information available: ▲
*Studies being carried out.

³⁴ FESAL, 2002-2003

National Responses to the HIV and AIDS Epidemic

Although all Central American countries have developed national responses to the epidemic, many challenges remain regarding how to reach highly vulnerable groups, articulate prevention messages and organize care effectively in order to achieve healthy and safe sexual and reproductive practices, and provide effective healthcare for people who require treatment with antiretroviral drugs (ARV) and follow-up. People's understanding of HIV and AIDS is still inadequate. Swift action is required to correct risky sexual practices, better identify HIV cases and provide access to ARV treatment. A specific challenge is coordinating NGOs and state health services, especially in achieving effective response at the three levels of care.

A regional strategy to strengthen prevention among highly vulnerable and vulnerable groups, and to provide healthcare and support that promote early detection and reduce risky behavior, is needed to address this problem. While such a strategy is being developed, the countries in the region are implementing programs financed by national funds and foreign resources, mostly from USAID and the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria (GFATM).

This section summarizes the findings regarding the national responses to HIV and AIDS in the six countries studied, and successful interventions to prevent HIV and discrimination, and examines different issues related to treatment, including regulatory mechanisms, drug procurement processes, and funding mechanisms.

LEGAL AND REGULATORY FRAMEWORK

All countries in the region have developed a legal framework for dealing with the problems arising from the HIV epidemic. The Constitution of each country clearly establishes the rights of citizens to healthcare, and gives the state responsibility to deal with diseases that threaten public health. In most countries, ministries of health and social security institutions administer laws that regulate health and healthcare.

At the end of the 1990s and at the beginning of the new millennium, new laws were approved for dealing with HIV and AIDS. These laws generally grant PLWH the right to confidential testing and treatment. But the laws are not fully enforced, and in some countries the new HIV/AIDS laws contradict existing laws; for example, some new laws appear to prohibit mandatory testing prior to or during employment, while Labor Codes appear to allow the practice – a contradiction that leads to considerable legal uncertainty. Meanwhile, HIV tests at times are performed without the knowledge or consent of the individual involved, and the results are made public. This may result in loss of employment or lack of access to goods and services. Current data do not measure the official reaction to discrimination claims or court sentences.

This study reviewed evidence regarding discrimination and stigmatization -- 10 topics relating to discrimination were analyzed through a questionnaire following the UNAIDS anti-discrimination protocol. Tables 6 and 7 in Annex 1 summarize findings for each country.

SUCCESSFUL INTERVENTIONS FOR HIV/AIDS IN CENTRAL AMERICA

Vulnerable groups, especially commercial sex workers and men who have sex with men, have the highest prevalence of HIV, and are focal points for dissemination of the epidemic to the general population due to their risky behavior. Once the epidemic spreads among the general population, people in productive ages will be mostly affected. This will have long-term repercussions for both households and health systems, as well as for the economy. The epidemic is concentrated in certain geographic areas – particularly urban areas, internal commercial routes and ports.

Preventing the spread of the epidemic by promoting healthy sexual and reproductive health represents an enormous challenge. The public system faces challenges in reaching highly vulnerable groups with cost-effective interventions. The NGO sector, although very committed, still lacks capacity. The educational system faces challenges because of the lack of sex education programs and in many instances contributes to the perpetuation of stigma and discrimination towards PLWH.

In this context, the study reviewed interventions aimed at preventing HIV and STIs, and providing care and legal support to highly vulnerable and vulnerable groups. Successful interventions were selected based on criteria described before. Each of the interventions is described in more detail in the individual country reports. Table 8 in Annex 2 summarizes the basic characteristics of each successful intervention. The study found that:

- Some of the interventions showed positive results. An evaluation of social marketing of condoms (PASMO, Guatemala) showed an increased use of condoms among the project target population, for instance. An evaluation of the Basic Food Basket Program (MSPAS, El Salvador) measured changes in the BMI (Body Mass Index) of the people who receive this subsidy, which is believed to reduce the risk of mother-to-child transmission. Although vertical transmission decreased in El Salvador, further analysis must be carried out to rule out the possibility that the results reflect confounding variables.
- Successful interventions in the field of human rights, especially in Guatemala and Panama, showed positive results as measured by the resolution of cases in favor of patients who filed complaints. However, it would be important to assess whether some people were unable to file complaints due to lack of access to the program or a lack of clarity in policies.
- Project coverage indicators show that many of the projects have been successful. Projects involving the Garífuna in Honduras and the Xochiquetzal in Nicaragua appear to have great potential. Also promising is an alliance between the Vice-Minister of Culture, Youth and Sports in Costa Rica and the United Nations Population Fund – UNFPA, which is drawing attention to the epidemic.

- Although successful experiences follow strategic plan guidelines, the challenge faced by any future project will be to determine how to reach highly vulnerable and vulnerable groups.
- None of the successful interventions used indicators to measure impact on the incidence or prevalence of HIV in target populations. This does not mean that they had no indicators or could not obtain data. Rather, they lacked evaluation instruments that measured the intervention's impact on the spread of the disease.
- A number of educational interventions need to be evaluated for the impact they are having on the vulnerable groups they target. For example, interventions directed at the general school environment should measure the impact on youngsters in general, while messages directed at risk groups such as commercial sex workers must be evaluated by looking at changes in behaviors and in HIV infections in this group.
- In the future, there is a need for coordination between health services and NGOs that provide antiretroviral treatment (ART) and follow-up activities to ensure adherence to treatment.
- Projects that involve laboratory work should develop the capacity to perform tests for ART follow-up. This would not necessarily require buying costly new equipment. Rather it could be accomplished by taking samples from people who live in outlying areas and transporting them to existing laboratory facilities for evaluation. This would increase access to services while enabling patients to visit specialized treatment centers less often.

TREATMENT AND PROCUREMENT OF DRUGS

National reports suggest that only about 14,000 cases are being treated, even though PAHO and UNAIDS estimate that there were approximately 40,000 cases of AIDS in the region in 2004 requiring treatment, a figure that coincides with the World Bank estimate of 37,500 cases of AIDS between 1998-2003.³⁵

An analysis by the World Bank in Guatemala, Honduras and Panama suggests that healthcare spending would have to increase by \$1 million per year to prevent the number of new patients from growing 10-20%. In 2000, the three countries spent approximately \$9.6 million on HIV/AIDS programs that had an inefficient impact.³⁶

All countries face challenges regarding the availability of ARVs. Agreements have been reached to obtain preferential prices for brand-name drugs. In addition, generic drugs are available through institutional bid processes or through intermediate agencies and international foundations. However, specific challenges remain regarding the planning of joint purchases between Ministries of Health and Social Security Institutions, uniform

³⁵ The World Bank. Project Appraisal of the Central America Integration System for a Regional HIV/AIDS Project. March 2005.

³⁶ The World Bank. HIV/AIDS in Central America: The Epidemic and Priorities for its Prevention. LAC Region: Washington DC: 2003.

treatment protocols, and infrastructure for following-up patients receiving treatment, and monitoring resistance to drugs. In addition, there are significant challenges regarding the management of adverse effects of treatment, following up through laboratory tests and ensuring adherence to treatment. Dealing with illiterate patients or ethnic groups, many of whom are not covered by healthcare, is a particular challenge. Table 9 in Annex 3 summarizes the findings of this study regarding ARV in Central America.

Access to Treatment. Access to treatment has not been measured in a systematic manner in the region. In Honduras, PAHO estimated that only 41% of the people who require treatment actually receive it. In Panama, the official figures indicate that 58% of the population that require treatment were actually receiving it at the time of the study. Some 3% of these were children below the age of five. El Salvador has granted access for the entire population; nevertheless, limitations related to culture and geographic location were observed. The same is true for Costa Rica, where patients with HIV are guaranteed treatment by the state. Geographic and cultural barriers to access have been identified in Guatemala. For Nicaragua, it estimated that only 10% of those who need treatment received it in 2004.

In each country, delays in supplying drugs impair continuity of treatment and undermine its effectiveness. In some cases, delays are serious enough that stocks are simply unavailable for many months at a time. According to the available evidence, this is one of the greatest risks for treatment efficacy.³⁷ The problem is caused in part by delays in bidding processes due both to the purchasing process itself and to the quality of the samples presented, especially generic drugs. Even though drugs may be available in warehouses, it sometimes is difficult to reach patients in areas far away from urban centers. All countries are clearly interested in improving their coverage. But this is difficult given geographic distances (Honduras, Panama, Guatemala and Nicaragua), gaps in insurance coverage (Costa Rica), and the fact that many PLWH have not been identified in every country.

Funding Sources for Treatment. In Honduras, the main funding sources for purchase of ARVs are the GFATM and the Government of Honduras. In 2006, the allocations for drug purchased were US\$3.3 million from the Government, and US\$1.4 million from the GFATM. In El Salvador, purchases are made by the MSPAS and ISS, and financed by the government, GFATM and the Government of Brazil, which have provided drugs as part of cooperation projects. In Guatemala, the budget for purchasing drugs has increased, but there are still gaps that are partially filled by NGOs such as MSF (Doctors without Borders). Guatemala receives support from the PAHO Revolving Fund and the Clinton Foundation as an intermediary for making purchases with funds from the country; in addition, it receives support from the GFATM and MSF, which contribute non-reimbursable aid to purchase drugs. In Nicaragua, the public budget for purchasing drugs is very limited, and the country relies on support from the GFATM.

³⁷ Koenig, S., Kuritzkes, D., Hirsch, M. Leandre, F., Mukherjee, J., Farmer, P., del Rio, C. Monitoring HIV Treatment in Developing Countries. *BMJ* 2006; 332: 602-604.

Drug Costs. The unit cost of antiretroviral drugs has decreased in the past five years. In absolute terms, the amount spent on drugs is difficult to compare among countries. Honduras increased the amount it allocated to drugs to US\$3.3 million in 2006. In El Salvador, although the total investment in drugs has increased, the amount provided by the public sector has decreased. Panama's Social Security Office reports that its unit costs vary from US\$104 to \$114 per month. For Costa Rica, costs range from US\$61–192 per month, depending on the treatment scheme; the average cost for the Costa Rican Social Security Office is US\$138. In Costa Rica, the cost of ARV drugs is officially estimated at about 5% of the Social Security Office's total pharmaceutical spending. In Guatemala, the treatment scheme followed by MSF has reduced costs per patient by approximately 50%; the organization reports that the monthly cost for treatment varies between US\$41 and US\$113 per patient. Guatemala spent US\$ 1 million on ARV in 2005, which represents a considerable increase from previous years.

Projecting Needs. Each of the six countries decides what quantity of drugs to buy based on current demand, although only Costa Rica was able to identify a model that is applied consistently; the country seeks to maintain an 11-month supply. El Salvador uses various methods based on quantitative projections of a model that has also been used successfully by the Dominican Republic. Guatemala has a linear model provided by MSF. Nicaragua estimates needs through an analysis of quarterly consumption patterns.

Financing Gaps for ART. Table 5 presents the results of an estimate of the gap between current spending for ARV and the cost of treating all adults who require it. The model uses prevalence data from different sources plus the Population Reference Bureau's data for 2003-2004 for each country's adult population 15-49 years of age. The model is based on the following assumptions:

- a) 90% of the people who receive ART are in the 15-49 age group;
- b) treatment prices did not vary greatly from 2004 to 2005;
- c) the AIDS mortality rate did not vary drastically from one year to the next; and
- d) the public sector used the most inexpensive treatment scheme available.

According to the PAHO/WHO HIV/AIDS Fact Sheets, approximately 20% of HIV-positive people require antiretroviral therapy. This percentage was used in the model to estimate the population that requires ART for each country. When those individuals receiving treatment were subtracted from this estimate, the population gap was obtained. This figure was multiplied by the cost of annual antiretroviral therapy in each country to calculate the investment gap in antiretroviral drugs for each country.

The results do not include the cost of providing ART to other age groups, such as newborns and children below the age of 15 and adults above the age of 49. The figures also do not consider the costs of equipment and laboratory reagents or the costs of treating opportunistic infections, nor do they include estimates of high-cost treatment cycles caused by drug resistance; this situation is beginning to present itself in countries that have provided ART for many years.

Table 5. Estimate of Annual ART Costs by Country for Age Group 15-49 years

Indicator	Guatemala	Honduras	El Salvador	Panama	Costa Rica	Nicaragua
Estimated number of people that require ART	12,333	5,550	4,911	3,040	2,821	1,092
Number of people who receive ART ³⁸	4,193 (34%*)	2,312 (18%)	2,235 (46%)	1,873 (61%)	1,850 (66%)	33 (3%)
Annual cost of first line drugs per person (US\$)	600	608	1,500	1,251	1,616*	2,400
Gap between the current expense and amount required (millions US\$)	4.9	1.9	4.0	1.5	1.6	2.5

Sources: National HIV/Aids Plans; PAHO/WHO Information sheets.

*Includes patients: IGSS, PNS and MSF

*Price averages among the first line schemes were estimated: US\$1,616 and US\$ 1,879

The following findings are highlighted:

- Universal access to ART has not yet been achieved. Coverage of ART varies substantially from one country to the other. Very low figures are observed in Nicaragua and Honduras.
- Providing ART to everyone who needs it would require a significant increase in expenditures, which would affect medical budgets of health institutions.
- If equity is not considered, it is very likely that the poorest population groups, who have limited access because of geographic, cultural and economic factors, will not be covered.
- Although countries negotiated an estimated 55% reduction in prices in 2003, significant differences remain in the price of ARV from country to country. This suggests that opportunities to reduce prices exist.
- Countries with the highest drug prices may obtain lower prices through regional mechanisms – the PAHO Revolving Fund or Clinton Foundation – or agreements with pharmaceutical companies according to the Panama Meeting in 2003.

Drug Registration. Health ministries manage the process for registering drugs for treatment of HIV, sexually transmitted infections and opportunistic infections. In order to register drugs, pharmaceutical companies must present manufacturer certificates proving that the drugs are safe and effective. Costa Rica requires that the drugs be registered by the FDA in the United States or by the CPMP in the European Union. El Salvador has the same requirement, although it does not ask companies to specify where the drugs are registered. In Guatemala, drugs purchased through the PAHO Revolving Fund, GFATM

³⁸ Participants in the San Jose, Costa Rica workshops commented that a 66% coverage figure for Costa Rica is very low since the country has a protocol for ART, and if a patient meets the criteria, he or she will have access to treatment. Participants in workshops held in Guatemala stated that the model should take into consideration treatment price variability. Participants also said that people who have to take second line treatments see their costs increase 6 -10 times.

and MSF must be on the essential list of pharmaceuticals of the WHO, but they do not necessarily have to be registered with the country's Ministry of Health.

Drug Procurement. The six countries have a variety of policies governing drug purchasing. In Panama and Costa Rica, the predominant practice is to purchase drugs with public funds at prices set in regional negotiations with pharmaceutical companies; generic drugs, which have been purchased by projects financed by the GFATM, are purchased at market prices in these countries. In Guatemala, the Ministries of Health and the Social Security Institutions procure brand and generic drugs for the public system.

Conclusions and Recommendations

The HIV epidemic in Central America represents a serious threat to the region. In most of the region, the epidemic is concentrated in highly vulnerable and vulnerable groups such as commercial sex workers, men who have sex with men, prisoners, and mobile and indigenous populations. There is great variation in HIV epidemiological patterns and trends in Central America, and the distribution of risk is not homogenous.

On top of the traditional risk factors for HIV, there are some known specific factors which make the region particularly vulnerable to the spread of the epidemic. Among these, the most important two are the proximity to the Caribbean – which is facing a serious epidemic – and an important pattern of intra- an inter-regional migration.

The countries in Central America have limited economic capacity and would therefore benefit from regional coordination and economies of scale. Some examples of regional approaches are interventions in border areas with mobile populations, common surveillance systems, minimum legal standards, bulk purchase of ART drugs and related supplies, country reciprocity in treatment services, and coordinated technological capacity in areas which require significant investments.

Achieving regional coordination starts by endorsing the UNAIDS Three Ones principles at regional level, in addition to the endorsement of these principles at country level. The principles seek to achieve the most effective and efficient use of resources, and to ensure rapid action and results-based management through the development of (i) one agreed HIV/AIDS action framework that provides the basis for coordinating the work of all partners, (ii) one regional AIDS coordinating agency/committee with a broad-based multisectoral mandate, and (iii) one agreed regional-level monitoring and evaluation framework that will integrate national systems.

As mentioned before, a regional strategy needs to be developed which will address issues related to surveillance systems, minimum legal standards for PLWH, prevention programs at the borders for highly vulnerable and vulnerable mobile populations, ART purchasing, treatment coverage reciprocity, laboratory capacity, and monitoring and evaluation systems. An effective regional coordination mechanism needs to be put in place in Central America to develop and implement the regional strategy. Strengthening

the Central American Integration System (SICA) and Central American Secretariat for Social Integration (SISCA) would contribute to the achievement of these objectives.

In terms of strategic information systems in Central America, important improvements can lead to a better understanding of the epidemic and more effective responses. Currently, there is much information available about the HIV epidemic that is not properly analyzed. In addition, there is an urgent need to develop the current surveillance system to a second generation level. This means starting to generate data that can provide not only demographic information on the epidemic, but also behavioral information on highly vulnerable and vulnerable groups.

The risk of HIV infection and its impact feeds on violations of human rights, including discrimination against women and marginalized groups such as sex workers, people who inject drugs and men who have sex with men. People living with HIV suffer, in turn, further human rights violations and violence. Protecting human rights and promoting public health are, in fact, mutually reinforcing. At regional level, it is important for countries to recognize and translate into legislation minimal acceptable human rights standards, which should be guaranteed to all people living with HIV.

Effective HIV prevention programs focus on the critical relationships between the epidemiology of HIV infection, the risk behaviors that facilitate transmission of the virus, and the cultural, institutional and structural factors that drive these risk behaviors. Due to the concentrated nature of the epidemic in Central America, it is essential to target interventions to the groups and regions where transmission rates are the highest. That means allocating most of the efforts and resources to interventions targeted to highly vulnerable and vulnerable groups such as commercial sex workers, men who have sex with men, prisoners and mobile groups. Efforts should focus on measures that directly support risk reduction by providing information and skills, as well as access to needed commodities such as condoms, clean injecting equipment, and drug substitution therapy (eg, methadone) for the groups most in need. Prevention programs should also address social and institutional factors, such as sexual behavioral norms, gender inequality, and HIV related stigma, that will otherwise continue to fuel the HIV epidemic in the region.

HIV and AIDS treatment, care and support are key elements in the response to the epidemic, not only directly benefiting people living with the disease, but also helping to reduce the social and economic impact of the epidemic and boost HIV prevention. However, coordinating the effective delivery of treatment support poses its own significant challenges. Ensuring high rates of adherence to therapeutic schemes is of special importance, as skipping even a small number of doses can lead to development of resistant viral strains. Resistance is a very serious problem that may significantly increase costs associated with treatment, and decrease its effectiveness. In addition, the transmission of resistant strains poses serious epidemiological and public health challenges.

Financing to fully scale up regional and national responses needs to be identified. National resources available so far have not been enough for the investments required to

fight the epidemic, and the region has had to rely on, and has benefited from foreign aid. However, important financial gaps, which are likely to increase in the near future, remain.

To address some of these issues, and improve the use of available and future resources, economies of scales can be achieved in purchasing ARV and related HIV/AIDS supplies and increasing laboratory capacity. There are significant gains to be achieved if a regional purchasing mechanism is established similar to the PAHO Revolving Fund for vaccines. This type of mechanism may significantly reduce prices. It is also important that countries reach agreements on health coverage policies that ensure reciprocity of treatment, and regarding treatment schemes to be used at regional level.

Laboratory capacity is a critical component for diagnosis, prevention, treatment and follow-up. However, laboratories are very expensive and no country in Central America has the resources to establish a new laboratory requiring highly expensive equipment and inputs, and highly skilled and specialized personnel. In addition, the incorporation of new technologies also requires significant levels of investment. A regional laboratory, as will be developed under the Regional AIDS Project, will aggregate the demand and offer the necessary capacity to the six countries in the region.

It is essential also to select, support and scale up interventions which have proved to be cost-effective. Monitoring and evaluation systems need to be part of intervention design and implementation, developing baselines, and making systematic cost-benefit evaluations of impacts and outcomes.

References

- Garcia Abreu, A., Noguera, I., Gowgill, K. HIV/AIDS in Latina America: The Challenges Ahead. Human Development Network, The World Bank, 2003.
- Goffman, E. Stigma: Notes on the management of Spoiled Identity. Prentice-Hall, 1963.
- Koenig, SI, Kurtzkes, DI, Hirsch, MI, Leandre, F., Mukherjee, J., Farmer, P., Del Rio, C. Monitoring HIV Treatment in Developing Countries, BMJ 2006, 332: 602-604.
- Ministry of Health, II National Strategic Plan for Fighting against HIV/AIDS, 2003
- PAHO/UNAIDS. AIDS Surveillance in the Americas, 2005.
- PAHO/WHO. Evolution of the Pharmaceutical Sector in Guatemala. Guatemala, 2002
- PAHO/WHO. Fact Sheets Regarding Care and Treatment for HIV/AIDS Infections, 2004
- Piechulek H, Mendoza Aldana J. German Agency for Technical Cooperation (GTZ), Managua, Nicaragua. *Stigma and Discrimination towards HIV/AIDS in Nicaragua*. Int Conf AIDS 2004 Jul 11-16; 15.
- Schwab, N. et al. Optimizing the Allocation of Resources to Prevent HIV in Costa Rica, The World Bank, 2004.
- Sierra, Ministry of Health Department for Control and Prevention of STDs, HIV/AIDS and Tuberculosis. Sero-epidemiological study of Syphilis, Hepatitis B and HIV in the Garifuna population from El Triunfo de la Cruz, Bajamar, Sambo Creek and Corozal. 1999.
- UNAIDS. Epidemiological Factsheets on HIV/AIDS and Sexually Transmitted Infections. 2004.
- UNAIDS. Fundamental Principles of the “Three Ones”, 2003
- World Bank. Project Appraisal Document of the Central America Integration System for a Regional HIV/AIDS Project, March 2005.

Annex 1. Evaluation of Discrimination

Questions about Discrimination from the UNAIDS protocol Annex 5 (UNAIDS 2000)

- 1) Are there agreements or communications forums that fight against discrimination?
- 2) Are there agencies for defending human rights?
- 3) Is there an NGO whose objective is defending the human rights of PLWHA?
- 4) What is the degree of coordination among the agencies that defend human rights?
- 5) Are there informational and educational campaigns directed at fighting discrimination?

People Interviewed Regarding Discrimination

- Fernando Cano, PASCA, Guatemala
- Janeth Flores, National Commission of Human Rights (Comisión Nacional de Derechos Humanos), Honduras
- Alexia Alvarado, PASCA and President, Alliance for Legislation (Alianza para la Legislación), El Salvador
- Karla Aburto, VIH-AIDS Advisor, UNFPA, Nicaragua
- Eda Quirós, Head of Health Human Resources, Ministry of Health, Costa Rica
- Maite Cisneros, Ombudsman, Panama

Table 6. Discrimination in Central America

AREA	FINDINGS	COMMENTS
Healthcare Assistance	Denial of treatment, denial of access to services, isolation at the medical center, violation of confidentiality or mistreatment and abuse due to the patient's condition as HIV +	Observed in all countries. Evidence of these types of incidents was found in Guatemala, Honduras, El Salvador and Panama. No evidence was found in Costa Rica.
Employment	Request of HIV/AIDS tests prior to employment. HIV/AIDS without prior knowledge or consent, denial of work or loss of employment due to being HIV-positive.	In Guatemala and El Salvador, the work code allowed medical evaluations to be performed before an employee began a new job. All countries indicated that this was common practice.
Legal Processes	Criminalization of MSM and CSW practices, as well as voluntary or involuntary transmission of HIV or a sexually transmitted disease.	Found in the criminal laws of Guatemala, Honduras, Nicaragua, Costa Rica. Was not observed in El Salvador.
	Discrimination in accepting appeals or litigations by PLWHA	One case was mentioned in Panama
Public Administration	Discrimination against prison inmates	Observed in Panama
Immigration	People requesting residency or entering a country asked for a certificate of HIV-free status.	Observed in Panama and Costa Rica
Social Welfare	No evidence of discriminatory laws or practices in this area	
Housing	Some banks or financial institutions request an HIV exam.	Reported in Honduras. El Salvador stated that when credit is requested, an authorization must be signed allowing a person's medical records to be reviewed. In addition, people seeking credit to buy homes are required to get life insurance first; but insurance carriers categorize them as high risk, thereby making insurance premiums excessive or unavailable to them—and hence preventing them from being able to obtain credit to buy homes.
Education	People who are HIV-positive are denied registration in schools, including universities. A lack of confidentiality regarding students or relatives who are HIV-positive.	Reported in Guatemala, Honduras, El Salvador, Costa Rica and Panama.
Family and Reproductive Life	Modifications of parental custody and succession rights for PLWHA	Reported in Guatemala and Panama
	Compulsory pre-matrimonial HIV tests	Reported in Honduras, El Salvador and Panama.
	Sterilization of HIV-positive women who have abortions.	Reported in El Salvador and Panama.
	Compulsory prenatal tests	Reported in Panama.
Insurance and Financial Services	Patients with high risk profiles of HIV/AIDS are denied private healthcare and life insurance services. Bank forms required an affidavit of a person's condition regarding HIV as well as a release of clinical records.	Reported in Guatemala, Honduras, El Salvador, Nicaragua, and Panama. In Panama, this limitation also extends to the Social Security Service.
Public Services	Denial of public transportation services	Cases reported in Nicaragua.

Table 7. Response to discrimination and protection of human rights of PLWHA in Central America

Aspect to Evaluate	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Forums to fight against discrimination	Ombudsman's Office, Agua Nueva ASOVIHSIDA Americas CIPAC	El Salvador chapter of the Regional Human Rights Network	Coordination Association for Sectors that Fight AIDS. Human Rights Ombudsman Regional Human Rights Network, Guatemala Chapter	National Aids Forum with 12 regional chapters for defending human rights of PLWHA	Strategic Plan for 2005-2009 operates as an agreement and framework for coordinating efforts related to the national response to discrimination and other matters.	The Ombudsman's Office deals with complaints of people who believe their rights have been violated.
Commission or NGO in charge of promoting non-discrimination	CONASIDA, Ministry of Health	Strategic Alliance for HIV/AIDS Legislation	IDEI PASCA RED SUROCCIDENTE	National Human Rights Commission	Human Rights Ombudsman and the Nicaraguan Center for Human Rights (CENIDH)	PROBIDSIDA, an NGO of PLWHA
NGO to defend the Human Rights of PLWHA in court	Agua Nueva ASOVIHSIDA Américas CIPAC	ATLACATL	IDEI RED SUROCCIDENTE	Association of People who Live with HIV/AIDS (ASONAPVSI DAH)	Nicaraguan Association for People Who Live with HIV/Aids (ASONHIV/AIDS)	The Ombudsman's Office and PROBISIDA
Information and education campaigns to fight discrimination	The Ministry of Health provides advice and training to clinics, primary care centers, and hospitals	Conferences and other activities focus on fighting discrimination and stigmatization.	Conferences and other activities focus on fighting discrimination and stigmatization.	National PLWHA conferences organized by ASONAPVIHSIDA	In September 2005, the Regional Human Rights and HIV/AIDS Network held an educational meeting at Montelimar	PROBIDSIDA organizes educational, self-help community activities and events that disseminate information.

Annex 2. Form for Selecting Successful Interventions

Name of the Institution:	
Participation:	
<input type="checkbox"/> Program <input type="checkbox"/> Project	
Country: Region: <input type="checkbox"/> Urban <input type="checkbox"/> Rural	Type of activity addressed: <input type="checkbox"/> Prevention <input type="checkbox"/> Treatment <input type="checkbox"/> Mitigation of Damage <input type="checkbox"/> Legal actions in defense of human rights <input type="checkbox"/> Gender <input type="checkbox"/> Other (Please indicate):
A. GENERAL INFORMATION OF THE ORGANIZATION THAT IS CARRYING OUT THE SUCCESSFUL EXPERIENCE	
1. Type of Organization: <input type="checkbox"/> Community Organization <input type="checkbox"/> Non-governmental organization <input type="checkbox"/> Governmental Organization <input type="checkbox"/> Private Sector <input type="checkbox"/> Associations <input type="checkbox"/> Other (Please indicate):	2. Year it was established: <input style="width: 100px;" type="text"/> 3. Description of the Organization: Background Objectives Personal

B. INFORMATION ABOUT THE PROJECT-PROGRAM	
Name of the Project:	
1. Type of activity Addressed: <input type="checkbox"/> Prevention <input type="checkbox"/> Testament <input type="checkbox"/> Mitigation of the damage <input type="checkbox"/> Legal actions in defense of human rights <input type="checkbox"/> Gender <input type="checkbox"/> Other (specify):	2. Year initiated: <input style="width: 100px;" type="text"/> 3. Year it ended: <input style="width: 100px;" type="text"/> 4. Description of the Project: Historical Background Objectives Personnel

5. Population Benefited:

- | | |
|---|--|
| <input type="checkbox"/> Commercial Sex Workers | <input type="checkbox"/> Prison inmates |
| <input type="checkbox"/> Indigenous groups and Afro-descendants | <input type="checkbox"/> Vulnerable Youth |
| <input type="checkbox"/> Men who have sex with other men (MSM) | <input type="checkbox"/> Orphans |
| <input type="checkbox"/> Migrant groups in affected regions
and direct victims of the epidemic | <input type="checkbox"/> Businessmen |
| <input type="checkbox"/> Military and Police | <input type="checkbox"/> Manufacturing Plant Employees |
| | <input type="checkbox"/> Other (specify): |

6. Sources of Finance:

7. Reasons explaining why it is considered a successful experience:

- Impact
 - Coverage
 - Access
 - Particular characteristics, innovation, permanence, methodology.
- This data must contain qualitative, quantitative and demonstrative success indicators. Files, pamphlets, samples of work can be attached.

8. Future Perspectives of the Project

9. Relationship to the Strategic Plan of the Country Regarding AIDS

10. Sources of Finance.

11. Relationship to the AIDS problem. What are the dimensions and severity of the HIV/AIDS problem in the country?

Annex 3. Successful HIV/AIDS Intervention in Central America

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
COSTA RICA					
United Nations Population Fund	Facilitates a healthy lifestyle: helps youth who are socially excluded in order to prevent HIV/AIDS. It is also known as “Manos a la Obra”	Prevention, human rights, gender, migrants	Facilitates conditions for a healthy lifestyle aimed at youngsters in social situations by promoting HIV prevention and focusing on sexual rights through training and sensitization activities. It is related to the strategic plan for promoting health in segregated youth who are at high risk of contracting STIs and HIV.	Has implemented empowerment methodology for youth regarding the problem of HIV as a result of implementing the project by presenting strategies to the country’s institutions and authorities regarding the legal framework, youth, migration, sexual and reproductive health and IEC.	Youth who live in situations of social exclusion
Foundation for fighting against AIDS (FUNDESIDA)	Contributes to eradicating the commercial sexual exploitation of children, adolescents and women in the metropolitan San Jose area.	IEC for prevention and institutional support for HIV/AIDS	Performs prevention activities through projects that receive external funding to focus on gender and adolescents. The foundation also collaborates in epidemiological research projects. Fits into the objectives of the strategic plan for social reinsertion of PLWHA and care for vulnerable groups.	Mapping of areas of sexual exploitation. Provided care for 212 girls at risk of sexual exploitation through alternative education programs	Vulnerable youth, girls, adolescents and women facing conditions of sexual violence
Central American Center for Research and Promotion for Human Rights	Promotes a healthy lifestyle.	Prevention	Researches and promotes human rights in the gay, lesbian, bisexual and transgender population in order to reduce discrimination and stigmatization and foment social insertion and guarantee equal opportunities. The effort is tied to the strategic plan that promotes protecting the health of vulnerable populations.	Has generated an environment appropriate for providing sexual education through integral activities. Its success is observed through process indicators at training activities, distribution of informative material and the large amount of MSM who have attended the events that it organizes.	Gay, lesbian, bisexual and transgender population

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
COSTA RICA					
Costa Rican Association of People who live with AIDS (ASOVIHSIDA)	Works with couples.	Human Rights, Attention and Prevention	Promotes the quality of life of PLWHA by making them aware of their personal situation and promoting their social interaction as well as demystifying the disease	Includes 200 associations. Meetings and surveys have been carried out among PLWHA. In addition, it belongs to local and international support networks for PLWHA.	PLWHA

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
EL SALVADOR					
ATLACTL Association	Defense of Human Rights of PLWHA.	Human Rights	Defends human rights of PLWHA. Lawyers file legal complaints. Fits into the objectives of the strategic plan related to human rights and taking discrimination cases to court.	In 2005, the association won 20 litigation cases regarding firing of employees.	PLWHA
Huellas Foundation	Musical theatre production "Death Be Gone" ("La Muerte Afuera").	Prevention	Supports the strengthening of civil PLWHA organizations. Fits into the strategic objective of encouraging IEC.	It is estimated that nearly 10,000 youngsters have participated in educational activities	Youth and general population, students, workers and health professionals
Zacamil National Hospital	Rayo de Luz en la Vida.	Prevention	Implements support programs for individuals who recently have been diagnosed, as well as their families, through a play. Fits into the strategic plan objective of caring for PLWHA.	Encourages social inclusion of PLWHA	PLWHA and their families, health personnel and the general population
National STIs and HIV/AIDS Program	Mobile populations.	Prevention	IEC for truck drivers in the San Cristóbal and other high-risk areas. Directed at working with couples for training purposes. Fits into the strategic objective that promotes care for vulnerable populations.	Six clinics have been established at borders, where condoms are distributed, laboratories are available and counseling is provided. The program has reached nearly 42,000 people, among whom there are 45 cases of HIV and 20 cases were referred for treatment.	Mobile populations and CSW as well as other vulnerable populations in border territories

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
EL SALVADOR					
National STIs and HIV/AIDS Program	Project for preventing mother-to-child transmission of HIV/AIDS.	Prevention	Reduce vertical transmission of HIV, with the goal of reaching 50% of pregnant women in the first year, and 95% during the third year. It also contemplates goals for reducing secondary transmission among future parents. Fits into the strategic plan objective of increasing capacity to offer services for HIV diagnosis and care.	The number of cases of vertical transmission reported has been reduced. The centers have gained capacity to make HIV diagnoses and specialized treatment references for PLWHA.	Pregnant women who are HIV positive and their babies
National STIs and HIV/AIDS Program	Mobile HIV Units.	Prevention and assistance	The goal is to achieve greater coverage to detect HIV through mobile units that travel to remote areas. Fits into the strategic plan by providing HIV/AIDS health services in remote areas.	In 2005-2006, approximately 2,000 tests were performed and nearly 30 cases were detected.	General population, vulnerable population.
National STIs and HIV/AIDS Program	Basic Food Basket Project	Treatment and assistance	Improve the quality of life of PLWHA in ART through adequate nutrition. The project provides a food basket for the direct beneficiary and another for that person's family. The program is aimed at people who suffer from nutritional deficits, pregnant women and children. Fits into the strategic plan objective of encouraging adherence to treatment by following a good nutrition.	Increase of BMI. The availability of nutritional support entices people to adhere to ART, and that contributes to better health outcomes.	PLWHA on ART

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
HONDURAS					
National Human Rights Commission	HIV/AIDS and Human Rights Program	Promotion and protection of human rights of PLWHA	Rights of PLWHA. Fits into the strategic plan regarding the objective for defending human rights and equity.	20 ombudsmen networks, visits to prisons including detention centers for minors, training workshops, system for filing complaints (53)	All vulnerable groups, PLWHA
Ministry of Health	Program for preventing the transmission of HIV from mother to child (PPTMH).	Prevention and treatment	Reduce the HIV transmission from mother-child by 50% (an estimated 1,200 pregnant women are HIV positive). It fits into the objective of the strategic plan to increase the availability of ART for pregnant women and their child.	Provides coverage for the population that attends prenatal care in 17 out of 20 regions	HIV-positive pregnant women, pregnant women in general
Kukulkán Association	Diversity and integration for prevention/ National Program for Prevention and Care of STIs, HIV/AIDS.	Prevention and Promotion	With the slogan “Diversity and integration for prevention,” this group directs its activities at promoting health among highly vulnerable groups. Its goal is to reduce the HIV incidence rate by 20%. Its work fits into the objective of the strategic plan of prevention among vulnerable groups.	Works with the community in order to reduce discrimination. It has organized more than 7,000 MSM in 22 municipalities through strategic communication with couples. It has achieved alliances with institutions in order to provide better access to health services.	Gay men, bisexuals, transvestites, MSM (18-39)
Health Communication Partnership (HCP)	HIV/AIDS prevention program in Garífuna youth between the ages of 15 and 24.	Prevention and Promotion	Reduce the incidence of HIV/AIDS in youngsters aged 15-24 in Garífuna communities. Project supported by U.S. universities to use efficient communication to improve the health of MSM and CSW . It fits into the objective of the strategic plan to strengthen IEC for sexual and reproductive health for vulnerable populations and changing behavior by promoting healthy practices.	Production of a radio soap opera called “Ancestors do not Die” (“Los ancestros no mueren”) in Spanish and the Garífuna language. More than 60% of the target population remembers the radio soap opera and its main theme and 71% remembered parts of the theme song.	Young adult population (15-24) (Garífuna Indian group) in 26 communities

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
HONDURAS					
Center for Promotion of Family Health and Care (CEPROSAF).	HIV/AIDS Prevention in the adolescent population of the Garífuna Indian population.	Prevention and Promotion	Initiated in 2005, this consists of 20 projects involving promotion of healthy habits among the Garifuna population in the Atlantic region. This fits into the objectives of strengthening the community to respond to AIDS, using a gender focus.	Covers 70% of the population between 11 and 25 years old in an IEC program. Training of couples and dissemination of materials as well as the elaboration of a baseline	Adolescent population – particularly the Garifuna population
National Association of People Living with Aids in Honduras (ASONAPVSI DAH).	House visits	Treatment, mitigating damage, gender and legal aspects related to living with PLWHA	Works on strengthening self-help groups in order to improve the quality of life of PLWHA through house calls. Includes funding from the GFATM. Fits into the objective of the strategic plan of care and support for PLWHA.	In 2005, 6379 visits were made to project participants. Although there are no impact evaluations for the program, the quality of life and hospitalization improved and life expectancy increased among those served.	PLWHA and vulnerable groups

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
GUATEMALA					
"Fernando Iturbide" AIDS Prevention Foundation	Promotion and defense of human rights of PLWHA	Human Rights	Prevent AIDS through programs directed at manufacturing plant workers, pregnant women, and PLWHA. It fits into the national strategic plan of defending the human rights of PLWHA.	Researches the topic of IEC for the HIV/AIDS epidemic	CSW, MSM, vulnerable youth, indigenous groups and afro-descendants, migrant groups in affected regions and direct victims of the epidemic, military and police
Asociación Vida (Life Association)	Group: Friends against AIDS	Human Rights	Guarantees the quality of life for PLWHA who have the right receive services from the Guatemalan Social Security Institute. It fits into the national strategy of defending the human rights of PLWHA.	A court verdict in favor of PLWHA patients who required antiretroviral treatment; the ruling required the IGSS, which had refused to fund the treatment, to pay for it.	PLWHA and MSM
Gente Nueva (New People) Association,	Gente Nueva Association	Prevention and Human Rights	Improves access to drugs and continuous treatment. It promotes a better quality of life and continued access to drugs and treatment. It fits into the objectives that promote the elaboration of policies and programs for preventing and increasing the perception of risk in vulnerable population and promote integral, multidisciplinary and sustainable care to PLWHA.	Medical attention for PLWHA (22) who require treatment. Individual and group therapy to couples and families. Health promotion and prevention activities in high risk areas where there are CSW with a high risk of transmitting or acquiring HIV.	CSW, MSM, vulnerable youth, orphans, businessmen, indigenous groups, afro-descendants, migrant groups, direct victims of the epidemic and military/police
Association of Integral Health (ASI)	"La Sala"	Prevention	It fits into the national strategic plan of promoting training and empowerment of vulnerable groups.	Training for CSW in order to disseminate prevention messages through continuous training.	CSW, PLWHA.

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
GUATEMALA					
“Fernando Iturbide” AIDS Prevention Foundation	“Maquilas” (manufacturing plants)	Prevention	Fits into the objectives of the strategic plan directed at defending the rights of PLWHA for their inclusion in society.	Educational workshops directed at 16 manufacturing plants (16,335 people).	Employees, Businessmen, PLWHA
Pan American Association of Social Marketing “PASMO”	Social marketing of condoms	Prevention	Maximize the availability of health information, products and services for low-income individuals and vulnerable groups (CSW, MSM, PLWHA, and the Garifuna population). Their activities are tied to the objectives of the strategic plan directed at IEC towards groups at risk.	For 2004, an index of more than 90% was reported for condom use by CSW with occasional and regular partners, as well as greater than 75% for MSM in their latest relationship with a regular or occasional partner	CSW, MSM, PLWHA, Garifuna population
Red Cross	HIV/AIDS Prevention in High Schools	Prevention	AIDS prevention in high-schools (youngsters aged 12-22) from the department of Izabal (high risk zone). Youngsters participate in prevention activities.	30 teachers received diplomas, and 195 students were trained to educate other students. The evaluations were positive regarding knowledge and use of the condom (85% compared to 56% from the control group). In three years, 12,000 students were trained	Youngsters enrolled in formal education 12-22 years -old
IDEI	Reduces high risk sexual behavior for HIV/AIDS ethnic Mann farmers who migrate to Guatemala	Prevention	Improving conditions and respect for human rights. Encourages the development of agents of change in the community and institutional employees. It fits into the strategic national objective of protecting vulnerable groups such as mobile populations and ethnic groups.	Increase knowledge about risky behavior such as alcohol consumption that leads to unprotected sexual relations.	CSW, indigenous groups and afro-descendants, mobile populations and PLWHA

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
GUATEMALA					
Atz'anem k'oj Group	Project "Payaso" (Clown) Guatemala	Prevention	Education through cultural activities using games, masks, dancers, musicians and clowns. Its goal is to encourage families and communities to discuss issues dealing with sexuality and HIV. Fits into the strategic objective of carrying out IEC.	300 interventions have taken place in 200 communities with an average assistance of 500 beneficiaries per community visited	Indigenous populations, vulnerable groups
San José Hospice	San José Hospice	Treatment and Assistance	Treatment of PLWHA. Their activities fit into the objective of the strategic plan that promotes integral care.	Works with voluntary support and MSF. They assist a group of 43 children. Promotes education of beneficiaries and their integration into society.	Orphaned children who are HIV positive and PLWHA
Doctors without Borders (MSF - Médecins Sans Frontiers)	Yaloc Clinic (means "to fight" in Quiche)	Treatment and Assistance	Provides direct attention to people, especially children, in the terminal phase, and to low-income PLWHA who require treatment. Fits into the objective of the strategic plan that promotes integral and multidisciplinary attention to PLWHA.	ART, laboratory follow-up and psychological support for 978 patients at the end of 2005	PLWHA that require ART
Marco Antonio Hospice	"Hogar Marco Antonio"	Treatment and Assistance	Addresses the prevention and treatment of PLWHA among populations that lack economic resources and social security. Fits into the strategic objective to promote integral care for PLWHA	Offers treatment and support to patients and families	Low-income PLWHA

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
NICARAGUA					
Xochiquetzal Foundation	Integral care program for PLWHA	Prevention, promotion and treatment	Guaranteeing the rights and promoting integral care for PLWHA as well as educating the population regarding STIs and HIV. Fits into the strategic objective of promoting educational and communication activities aimed at PLWHA.	Reaches nearly 30% of the population receiving ART. Performs surveys which estimate that HIV prevalence is higher than the official rate. In four years, 280,000 people, particularly from vulnerable groups, have been covered by educational activities through this organization. Integrated medical attention has been provided to 17,000 people.	General population and PLWHA as well as vulnerable groups, children at risk of sexual exploitation.
Ministry of the Government	GFATM Project	Prevention and treatment	Prevention of STIs and HIV through educational activities that include employees from the Ministry of the Government and the general population as well as prison inmates in a context of respect and promotion of human rights. It includes the training of promoters and the strengthening of the epidemiological surveillance system	Distribution of condoms and educational activities for prison inmates. Implementation process for the epidemiological surveillance system at a national level.	Ministry of Government employees and Prison inmates

Organization	Project	Focus	Purpose of the Project and Relationship to the Strategic Plan for Fighting AIDS	Reasons for success	Population Benefited
PANAMA					
PROBIDSIDA Foundation	Prevention, Control and Follow-up of HIV/AIDS	Human Rights and Prevention	From 2001 to 2003, training of facilitators for promoting health and preventing HIV infection and promoting healthy and risk-free practices among vulnerable groups. It was later extended to a second phase for promoting human rights and biosafety. The program fits into the strategic plan's goals of reducing HIV/AIDS and reaching vulnerable populations through IEC activities, defending the rights of PLWHA and providing free testing	Training of 350 facilitators through an interactive learning methodology. Much of the country was covered through training activities.	CSW, MSM, indigenous groups and afro-descendants, vulnerable youth and the general population
Association of New Men and Women of Panama (AHMNP)	Program for distributing free condoms	Prevention	Human rights of the gay community and awareness campaigns regarding the risk of transmission of HIV/AIDS.	Distribution of condoms in vulnerable areas . It has performed activities for disseminating and promoting equal rights. In addition it provides free HIV tests.	MSM
National HIV/AIDS Program	Educational strategy for preventing STIs and HIV/AIDS in 4th, 5th and 6th graders	Prevention and promotion	National policies related to HIV/AIDS.	Prepares policies, carries out surveys and engages in operational activities such as forming clubs, training facilitators, and creating videos. In the future, the program will focus more on strategic, rather than operational activities.	4th, 5th and 6th graders
Panamanian Red Cross	STIs and HIV/AIDS Prevention Project for Prisons	Prevention	Executes activities with vulnerable groups including prison inmates	Makes institutional alliances with the civil sector in order to implement prevention activities an integral care. A the end of 2005, training activities had been organized for 145 people who will train others in turn.	Prison inmates

Annex 4: ARV Drugs in Central America 2006

Area	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Regulation of ARV drugs	<p>Regulated by the Ministry of Health.</p> <p>The Costa Rican Social Security Office (Caja Costarricense del Seguro Social -CCSS) is in charge of purchasing drugs for HIV/AIDS Patients.</p> <p>To be registered, drugs must be approved by the US FDA or the Office for Registering Drugs of the European Union (CPMP The Committee for Proprietary Medicinal Products)</p> <p>There are regulations for the manufacturing of condoms.</p>	<p>To be registered by the Ministry of Health, a drug must be registered in the country of origin, and have the appropriate quality-control and safety certificates</p>	<p>Mechanism defined by the Ministry of Health for registration of drugs with manufacturer quality control certificates</p>	<p>Mechanism defined by the Ministry of Health through its Technical Supply Unit for Drugs and the Network and Services Office</p>	<p>Regulated by the Ministry of Health.</p>	<p>The Ministry of Health maintains a list of registered drugs used as a basis for making purchases.</p> <p>All HIV/AIDS drugs must be registered.</p>
Purchase of ARV drugs	<p>The CCSS purchases most drugs centrally, but hospitals can purchase additional drugs on their own.</p>	<p>Public bidding process through local representatives of manufacturers of registered drugs</p>	<p>The PAHO Revolving Fund purchases from the PAHO/WHO authorized list</p>	<p>International bidding. According to PAHO Fact Sheets, the purchasing process is centralized</p>	<p>The GFATM and the PAHO Revolving Fund based on the registered drugs list and through a bidding process</p>	<p>Social Security Office purchases 73% and the Ministry of Health 27%. Purchases by the Social Security Office have increased. Purchases by the Health Ministry fell 9% in 2004.</p> <p>Private market purchases drugs.</p> <p>NGOs do not purchase ARVs.</p>

Area	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Purchasing policies for ARV	<p>Various general laws authorize the CCSS to purchase ARV.</p> <p>Prices are negotiated based on schemes offered by South American countries, rather than following Central American policies.</p>	<p>Patent laws prohibit the purchase of generic drugs, so generic drugs are only financed by the GFATM and donated.</p>	<p>Public sector purchases from PAHO and the local market.</p> <p>Private sector purchases brand names and generics from the local market.</p>	<p>Generic ARV have been purchased since 2004 specifically from the pharmaceutical companies CIPLA and Rambaxy.</p>	<p>The supply is purchased through grants from the GFATM.</p>	<p>The purchase of drugs is centralized.</p> <p>Some ARV are purchased directly by the Santo Tomás Hospital.</p> <p>Panama has taken advantage of negotiations between Central American governments and pharmaceutical firms that reduced prices of ARV.</p>
Funding	<p>The CCSS invested US\$1,300 million annually, which represents between 4.7 – 7.8% of the amount available for drugs by the CCSS.</p>	<p>MSPAS.</p> <p>GFATM through the UNDP (US\$2 million)</p> <p>Donation from Brazil for treating 100 patients</p>	<p>PAHO MSF Clinton Foundation GFATM</p> <p>Prices dropped after generic drugs became available through funding agencies.</p> <p>7 million quetzals (US\$ 1 million) were allotted for the purchase of ARV in 2005.</p> <p>The average monthly cost for 2005 by MSF was US\$41-113</p>	<p>For 2005, the GFATM spent US\$1.4 million and the Ministry of Health spent US\$3.3 million on ARVs</p> <p>Financing for purchase of diagnostic tools for HIV/AIDS comes from National Funds and USAID.</p>	<p>GFATM, US\$300 million 2005-2006</p>	<p>National Budget Ministry of Health and the Social Security Office.</p> <p>For 2004, the average monthly cost for triple therapy through the public system ranged from US\$104-114.</p>

Area	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Organization of purchases	<p>Offers made by registered pharmaceuticals companies.</p> <p>The basic formulary for ARVs includes six generic drugs and three brand name drugs.</p>	<p>Lasts 3 months.</p> <p>Limitations have been observed in supplying drugs.</p> <p>The purchasing is now better organized by the application of a protocol that saves resources</p>	<p>Bidding process based on registered drugs.</p> <p>Linear model based on the requirements of 300 patients.</p>		<p>Purchase of drugs and reagents are based on a yearly purchase plan based on technical meetings and distributed quarterly</p> <p>Within this plan, all PLWHA who meet clinical, viral and immunological criteria are considered.</p> <p>There are no distinctions between the general population and vulnerable groups.</p> <p>Lab tests are purchased based on schedules coordinated with different health units.</p>	<p>ARV prices are those used for public national and international bidding processes.</p> <p>Six drugs are purchased according to an agreed-upon protocol.</p>
Access to drugs by population groups	<p>Patients who have CCSS coverage have the right to receive treatment. The protocols used are provided by specialists in immunology and infectology. Triple drug therapy is guaranteed.</p>	<p>Coverage of the entire population identified, although there are geographic, cultural and social limitations to its access.</p> <p>Patients treated in the private sector are transferred to private hospitals.</p>	<p>MSF is concerned about the population living in remote areas.</p> <p>The Ministry of Health offers care in two Guatemala City hospitals.</p>	<p>According to PAHO Fact Sheets, approximately 41% of those who required ART received treatment in 2004.</p>	<p>In 2004, according to PAHO data, 10% (N=311) of the total number of people who required ART actually received it. 2% of the people who required ART and received it are children younger than 5 years old.</p>	<p>Coverage is 58% according to official figures for the year 2004. Of those covered, 3.4% are children below the age of 5.</p>
Pregnant Women	<p>Pregnant women are encouraged to take the HIV test while receiving prenatal care.</p>	<p>Healthcare protocol for patients from the Ministry of Health.</p>		<p>According to PAHO Fact Sheets, there have been protocols for preventing vertical transmission since September 2000.</p>	<p>According to PAHO Fact Sheets, there have been protocols for preventing vertical transmission since 2000.</p>	<p>There is a treatment scheme for pregnant women</p>

Area	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Storage	Adequate Conditions.	A warehouse has been renovated to meet special security requirements. Drugs are distributed from it according to hospital demand.	Central storage with limited refrigerated storage			Adequate Conditions.
Problems found	Limitations in complying with quality control for generic drugs which produces problems for supply.		<p>Slow process for providing supply.</p> <p>Substances for producing generic drugs at a local level are taxed</p> <p>Access to treatment for patients in remote areas</p> <p>Delays in bidding processes due to a lack of bidders.</p> <p>Lack of treatment adherence due to the aforementioned reasons</p>	<p>Information from the STD/HIV/AIDS Department – July 2005. Rapid HIV mutation creates resistance to ARVs. As a result, ARVs must be changed constantly in the basic catalog. That leads to higher prices</p> <p>Treatment demand exceeds the national financial capacity for purchasing ARVs.</p> <p>The purchasing process has required a modification of the basic formulary.</p> <p>Production problems by pharmaceutical companies – specifically with Lamivudine and Abacavir.</p> <p>The purchase of drugs requires procedures that guarantee transparency in awarding contracts to pharmaceutical companies.</p>		<p>The government does not purchase generic ARV drugs which means that the cost of ART is higher.</p> <p>There were no pharmaceutical resistance registries related to the use of ARV.</p> <p>In 2004, less than 1% of all health workers (doctors, nurses and other health workers) were trained in ART.</p> <p>No national plan for identification through ART.</p>

Area	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Free Trade Agreement (CAFTA)	<p>Uncertainty of impact on supply</p> <p>If generics are limited, prices could go up.</p> <p>If WHO restrictions are applied for critical situations such as HIV/AIDS, generics could continue to be used</p>	Uncertainty of impact on supply	Uncertainty of impact on supply	Uncertainty of impact on supply	Uncertainty of impact on supply	<p>Uncertainty of impact on supply</p> <p>There is an initiative to take advantage of CAFTA for purchasing ARVs.</p>



For more information, please contact:

Human Development Department

Latin America and the Caribbean Regional Office

The World Bank

1818 H St. NW,

Washington, DC 20433

Tel: +1 202 458 9730

Fax: +1 202 614 0202

mbortman@worldbank.org



For more information, please contact:

Human Development Department

Latin America and the Caribbean Regional Office

The World Bank

1818 H St. NW,

Washington, DC 20433

Tel: +1 202 458 9730

Fax: +1 202 614 0202

mbortman@worldbank.org