

THE WORLD BANK OPERATIONS EVALUATION DEPARTMENT

Brazil
First and Second AIDS and STD
Control Projects

PROJECT PERFORMANCE ASSESSMENT REPORT

OED Mission: Enhancing development effectiveness through excellence and independence in evaluation.

About this Report

The Operations Evaluation Department assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, OED annually assesses about 25 percent of the Bank's lending operations. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons. The projects, topics, and analytical approaches selected for assessment support larger evaluation studies.

A Project Performance Assessment Report (PPAR) is based on a review of the Implementation Completion Report (a self-evaluation by the responsible Bank department) and fieldwork conducted by OED. To prepare PPARs, OED staff examine project files and other documents, interview operational staff, and in most cases visit the borrowing country for onsite discussions with project staff and beneficiaries. The PPAR thereby seeks to validate and augment the information provided in the ICR, as well as examine issues of special interest to broader OED studies.

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Institutional Development Impact: The extent to which a project improves the ability of a country or region to make more efficient, equitable and sustainable use of its human, financial, and natural resources through: (a) better definition, stability, transparency, enforceability, and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Institutional Development Impact includes both intended and unintended effects of a project. *Possible ratings:* High, Substantial, Modest, Negligible.

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Borrower Performance: The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

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Brazil
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Control Projects

Project Performance Assessment Report

(Loans 3659-BR and 4392-BR)

April 27, 2004

Sector and Thematic Evaluation Group
Operations Evaluation Department

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The World Bank
Washington, D.C.

OPERATIONS EVALUATION DEPARTMENT

ENHANCING DEVELOPMENT EFFECTIVENESS THROUGH EXCELLENCE AND INDEPENDENCE IN EVALUATION

The Operations Evaluation Department (OED) is an independent unit within the World Bank; it reports directly to the Bank's Board of Executive Directors. OED assesses what works, and what does not; how a borrower plans to run and maintain a project; and the lasting contribution of the Bank to a country's overall development. The goals of evaluation are to learn from experience, to provide an objective basis for assessing the results of the Bank's work, and to provide accountability in the achievement of its objectives. It also improves Bank work by identifying and disseminating the lessons learned from experience and by framing recommendations drawn from evaluation findings.

This Project Performance Assessment Report was initially issued to the Board of Executive Directors as Report 28819.

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Summary

Shortly after the first AIDS cases were diagnosed in Brazil in 1982 both civil society and state and federal governments took action to contain the growth of the HIV epidemic. By the time World Bank support for the fight against HIV/AIDS was solicited in 1992, Brazil already had a well-established National AIDS Program and National AIDS Commission, and almost a decade of experience in the design and implementation of innovative prevention and human rights promotion activities carried out by a multiplicity of governmental and non-governmental actors. By that time as well, Brazil had already initiated treatment and care provision. In response to Brazil's request the World Bank, through two projects, has provided technical and financial assistance over the past decade to support: (a) prevention; (b) diagnosis, treatment, and care; (c) surveillance, research, monitoring and evaluation; and (d) institutional development

The overall objectives of AIDS I (IBRD loan of US\$160 million equivalent) and AIDS II (IBRD loan of US\$165 million equivalent), approved in 1993 and 1998, respectively, were to reduce the incidence and transmission of HIV and STD infection and to strengthen program capacity in the areas of prevention, treatment, and management. These loans are now fully disbursed (at 100 percent and 98 percent, respectively) and a third loan of US\$100 million equivalent was approved in June 2003.

While Brazil has implemented many innovative and theoretically cost-effective interventions, evidence of the actual cost-effectiveness and impact of its program efforts is lacking. In the absence of adequate systems for HIV and behavioral surveillance and for program monitoring and evaluation, confirmation is difficult of the achievements of Brazil's HIV/AIDS program, as well as of the World Bank's contribution thereto. Available data and information, combined with the culled views and perspectives of the myriad actors and beneficiaries of the Bank-financed projects, do point to successful outcomes of the Bank's support, as well as to some shortfalls.

The loans have supported improvements and further expansion of state-of-the-art *prevention* activities, maintaining a focus on high-risk groups (men who have sex with men, injection drug users [IDUs] and commercial sex workers), expanding efforts to include at-risk populations (especially female sexual partners of IDUs and bisexual men, and persons with multiple sex partners), and attempting to maintain low prevalence rates among women, youth, rural populations and the poor. Sustained and innovative prevention interventions were extended to all regions in Brazil and may have contributed to the slowing or containment of the epidemic, reflected in a low prevalence rate of 0.65 percent among adults 15-49 years of age for year 2000 and a continued concentration of the epidemic among high-risk populations.

Limited data indicate that during the life of these projects awareness of the disease and of how to prevent its transmission has increased and healthier behaviors are being adopted by general populations, especially younger populations, and high risk groups. The Bank-financed prevention efforts have probably averted increased infection and sickness and kept the pool of HIV/AIDS patients under treatment and care lower than

would have been the case in the absence of prevention, rendering the treatment and care efforts (described below) both more affordable and more feasible.

AIDS I and II supported the expansion to all 27 states and the quality enhancement of *diagnosis, treatment and care* services for persons with HIV, AIDS and STDs through: (a) the establishment and support of a network of 237 counseling and testing centers; (b) the development of an extensive network of specialized health services for HIV/AIDS patients, with much of the care shifted from expensive hospitalization to cheaper alternatives for inpatient and outpatient services; (c) the strengthening of Brazil's laboratory system for critical monitoring and follow-up of patients; (d) the development of software to manage and control the distribution and use of antiretroviral drugs (ARVs); and (e) training of tens of thousands of health care providers and other technical staff. While AIDS II did not finance the costs of ARVs, both AIDS I and II did support critical investments in treatment and care capacity, without which ARVs could not have been effectively delivered to patients.

In 2003 about 140,000 AIDS patients were reported to be under active treatment in Brazil's program, and an additional 196,000 HIV-positive asymptomatic cases were being monitored but not yet on treatment. Evidence suggests that AIDS morbidity, mortality, opportunistic infection rates and hospitalizations have sharply declined since 1997, the year following Brazil's decision to extend its policy of universal access to health care to highly active antiretroviral therapy. Low drug resistance in Brazil (estimated at 6 percent) is an indicator of the quality of the treatment program. A continued concern, however, is that the majority of the estimated 600,000 Brazilians living with HIV in 2000 do not know that they are infected with the virus. Utilization of counseling and testing services is still modest. Furthermore, it is assumed that most of those with confirmed HIV would seek treatment and care that is available free of charge.

Institutional Development. Both through innovative design and well-conceived conditionality, AIDS I and II contributed significantly to capacity development at the state and municipal levels. The projects nurtured and supported the strengthening and establishment of STD/AIDS coordination units in all 27 states and in 150 municipalities and initiated a process of financial transfers to states and municipalities on the basis of targets and objectives contained in annual action plans prepared at the local level and negotiated and co-signed with the federal level. This process is now being consolidated and institutionalized.

Bank assistance also stimulated and nurtured public-private partnerships by making financing available for contracts with NGOs and the private sector to carry out critical components of prevention and care efforts, thus expanding considerably Program capacity and coverage, especially in reaching marginalized and hard-to-reach groups. This arrangement is being decentralized increasingly to states and municipalities.

Shortfalls of AIDS I and II. The projects were unsuccessful in setting up adequate surveillance systems for HIV and STDs and in strengthening program evaluation. There is no systematic monitoring of infection rates and behaviors of high risk groups or of high-risk sexual behavior among the general population. STDs are still considerably

underreported and limited to clients of public STD services. Both projects supported ad hoc research on HIV infection and behavior of different populations in different geographical regions. However, the lack of a methodological framework for the design and conduct of these studies has obstructed the systematic tracking of trends over time. At the close of AIDS II the program was still without a viable system for monitoring and evaluating program performance and impact, despite the strong emphasis placed on M&E in each of the project designs, but important steps are now underway to strengthen and decentralize M&E capacity. The projects were also unsuccessful in assessing the cost-effectiveness of program interventions.

AIDS I and AIDS II had satisfactory outcomes overall. The institutional development impact of each project is rated substantial; and the sustainability of each project is likely. Both Bank and Borrower performance were satisfactory.

Lessons and Challenges

- The gaps in data and trends on HIV infection rates and on behaviors among high-risk and general populations, attributable to inadequacies in the surveillance of these groups, make it difficult to track or model the evolution of the epidemic and behaviors over time and thus to evaluate and enhance the effectiveness or impact of program interventions.
- Early, rigorous and sustained prevention efforts are likely to keep the pool of HIV and AIDS patients small relative to the counterfactual, and thus to reduce the burden on a country's health system, making treatment and care more feasible and affordable. The Bank supported Brazil to this effect, but Brazil's early response on the prevention front, well before Bank intervention, was most critical.
- Even when financing a relatively modest share of the overall costs of a well-established program, Bank support to HIV/AIDS efforts can make significant contributions to program expansion and to capacity building when it is strategically allocated.
- A research program that is ad hoc and uncoordinated in its conception is likely to generate a large volume of information and data that will be difficult to interpret for measuring and improving program performance and impact. The publicly funded research agenda should be strategic both in the choice and prioritization of topics and in the standardization of methodology that would accommodate the analysis of data across studies and of trends over time.
- Project design and conditionality can be strategic and pivotal in initiating and supporting institutional innovations, which are capable of expanding and using more fully program implementation capacity including that of NGOs, decentralized levels of the program, and other development sectors.

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<p>This report was prepared by Denise Vaillancourt (Task Manager) who assessed the project in April/May 2003. The report was edited by William Hurlbut, and Pilar Barquero provided administrative support.</p>

CURRENCY EQUIVALENT

(as of July 1993)

Currency Unit = Cruzeiro (Cr\$)
 US\$1.00 = Cr\$ 48.107
 Cr\$ 1.00 = US\$0.02

(as of March 14, 2003)

Currency Unit = Real
 US\$1.00 = R\$3.48
 R\$1.00 = US\$0.287

Abbreviations and Acronyms

AIDS	Acquired immunodeficiency syndrome
ARV	Anti Retroviral (drugs)
ART	Anti Retroviral Therapy
AZT	Azido-Deoxy Thymidine
CAS	Country Assistance Strategy
CBO	Community-based Organizations
CDC	United States Centers for Disease Control and Prevention
CN	National Coordination (AIDS Program)
CSW	Commercial sex worker
CTA	Counseling and Testing Centers
GOB	Government of Brazil
HAART	Highly Active Antiretroviral Therapy
HIV	Human immunodeficiency virus
ICR	Implementation Completion Report
IDU	Intravenous drug user
IEC	Information, education and communication
MDGs	Millennium Development Goals
MoH	Ministry of Health
MSM	Men who have sex with men
NASCP	National AIDS and STD Control Program
NGO	Nongovernmental organization
OED	Operations Evaluation Department
PAM	Action and Target Plans for States and Municipalities (Planos de Ações e Metas)
PI	Protease inhibitor (component of HAART)
POA	Annual Operating Plan
PPAR	Project Performance Assessment Report
PLWHA	People living with HIV/AIDS
PMTCT	Prevention of mother to child transmission
SIAIDS	Information System of AIDS Project
SINAN	<i>Sistema de Informações de Agravos de Notificação</i> (National Notification System for Communicable Diseases)
SISCEL	Control of Laboratory tests and examinations of the AIDS/STD program
SICLOM	Control of pharmaceutical procurement, stock & distribution information system
STD	Sexually transmitted disease
SUS	<i>Sistema Unico de Saude</i> (Unified Health System)
UNAIDS	United Nations AIDS Programme
UNDP	United Nations Development Programme
UNDCP	United Nations Drug Control Program
UNESCO	United Nations Educational Scientific and Cultural Organization
WHO	World Health Organization

Fiscal Year

Government: January 1 – December 31

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Principal Ratings

	<i>AIDS I</i>	<i>AIDS I</i>	<i>AIDS I</i>	<i>AIDS II**</i>
	<i>ICR</i>	<i>ICR Review*</i>	<i>PPAR</i>	<i>PPAR</i>
Outcome	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Institutional Development Impact	Substantial	Substantial	Substantial	Substantial
Sustainability	Likely	Likely	Likely	Likely
Bank Performance	Highly Satisfactory	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory	Satisfactory

*The Implementation Completion Report (ICR) is a self-evaluation by the responsible operational division of the Bank. The ICR review is an intermediate Operations Evaluation Department (OED) product that seek to independently verify the findings of the ICR.

** At the time of preparation of this report the Implementation Completion Report (ICR) on AIDS II was not available.

Key Staff Responsible

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Second AIDS and STD Control Project (AIDS II)

	<i>Task Manager/Leader</i>	<i>Division Chief/Sector Director</i>	<i>Country Director</i>
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Preface

This is the Project Performance Assessment Report (PPAR) for the First and Second AIDS and STD Control Projects (AIDS I and II) in Brazil. AIDS I was financed through IBRD Loan No. 3659 for \$160 million with a government contribution of US\$90 million equivalent and no donor cofinancing for a total cost of US\$250 million equivalent. The loan was approved on November 9, 1993, became effective on June 1, 1994, and closed on June 30, 1998, as originally scheduled. AIDS II was financed through IBRD Loan No. 4392 in an amount of \$165 million with government counterpart financing of US\$135.0 million equivalent for a total cost of US\$300.0 million equivalent. This second loan was approved on September 15, 1998, became effective on February 9, 1999, and closed on June 30, 2003, six months after the original closing date. The loans were disbursed at 100 percent and 98 percent, respectively.

The findings of this assessment are based on an Operations Evaluation Department (OED) mission to Brazil, which took place in April/May 2003. This mission met in Brasilia with authorities and staff of the National HIV/AIDS Program and with key actors of the Federal District of Brasilia. It also visited five additional states (Pernambuco, Rio de Janeiro, Santa Catarina, Rio Grande do Sul and São Paulo), interviewing a wide range of actors (encompassing public sector and civil society actors and beneficiaries) and visiting selected facilities, research/academic institutions and community-based projects. Key documentary sources consulted include project appraisal documents on AIDS I and II and a completion report on AIDS I. (A completion report on AIDS II has not been issued at the writing of this review.) Supervision and evaluation reports, routine correspondence and other technical reports contained in the project files were also consulted. This assessment also drew on documentation produced in Brazil (government and nongovernmental sectors alike), and on available Brazilian and international research on STDs and HIV/AIDS in Brazil.

This PPAR is one of six conducted on the “first generation” of the Bank’s HIV/AIDS projects as part of an ongoing OED evaluation of the Development Effectiveness of World Bank Assistance for Fighting the AIDS Epidemic. It was prepared in conjunction with a more extensive case study on the World Bank’s support to Brazil in the fight against HIV/AIDS over the past 10-15 years, which encompassed policy advice and technical and financial support to Brazil’s HIV/AIDS efforts.

The OED mission gratefully acknowledges all those who made time for interviews and provided documents and information, including managers and staff of the Ministry of Health/National Program for STD and AIDS Control, and multiple actors and stakeholders of State and municipal programs for STD and AIDS Control in the Federal District of Brasilia, and in the States of Pernambuco, Rio de Janeiro, Santa Catarina, Rio Grande do Sul, and São Paulo. The mission is equally grateful to members of Brazil’s research/academic community, representatives of nongovernmental and civil society organizations, staff of partner institutions and World Bank staff. This report draws heavily on the technical reports and inputs of mission members, Varun Gauri, Economist, Development Research Group, World Bank, and Chris Beyrer, Consultant Epidemiologist. The team is grateful to Francisco Inacio Bastos, Deputy Coordinator,

Fiocruz AIDS Programme, Rio de Janeiro, for the extensive literature search and other technical inputs to this evaluation.

Following standard OED procedures, copies of the draft PPAR were sent to the relevant government officials and agencies for their review and comments. A number of observations were made, which have been incorporated into the PPAR. Government's comments are presented in full in Annex G.

1. Background and Context¹

1.1 Shortly after the first AIDS cases were diagnosed in Brazil in 1982 both civil society and state and federal governments took action to contain the growth of the HIV epidemic. By the time World Bank support for the fight against HIV/AIDS was solicited in 1992, Brazil already had a well-established National AIDS Program and National AIDS Commission, and almost a decade of experience in the design and implementation of innovative prevention and human rights promotion activities carried out by a multiplicity of governmental and non-governmental actors. By that time as well, Brazil had already initiated treatment and care provision. In response to Brazil's request the World Bank, through two projects, has provided technical and financial assistance over the past decade to support: (a) prevention; (b) diagnosis, treatment and care; (c) surveillance, research, monitoring and evaluation; and (d) institutional development. Financing provided under AIDS I amounted to about one-third of total public expenditures on HIV/AIDS/STDs in Brazil during the project period, net of expenditures on drugs; and that provided under AIDS II amounted to about 10 percent of total expenditure on HIV/AIDS during the life of the project, net of drugs (Ministry of Health, August 2002).²

1.2 ***Economic and Political Context.*** Following a period of economic stagnation and high inflation during the 1980s and early 1990s, and the impeachment in 1992 of President Collor, President Cardoso, during his two terms in office (1995-1998 and 1999-2002), brought about considerable improvements in the economy and impressive gains in social indicators by the year 2000.³ However impressive, these gains mask considerable inequities across regions and across income quintiles⁴ (Gwatkin and others 2000). Newly elected President Lula da Silva is committed to fiscal discipline and targets agreed with the International Monetary Fund in September 2002 and aims to: (a) consolidate hard-won stabilization gains; (b) reduce poverty and acute inequities; and (c) improve social indicators.

1.3 Since the early 1990s the ***World Bank's Country Assistance Strategies*** (CAS) have been overtly oriented around the central objective of poverty alleviation. The diminishing importance of Bank disbursements as a percentage of total debt flows to Brazil (from 16.5 in the 1980s to 6.4 in the 1990s) has led CASs to be more selective and more focused on the roots of poverty and on Brazil's poorest regions (Northeast). In this context health and education have been accorded high priority, along with the provision

1. Except as noted, this section is based on information contained in OED's Brazil Country Assistance Evaluation (2003).

2. Data on public expenditure for HIV/AIDS is not broken down by program component, making it impossible to assess the share of Bank's financing by component.

3. Under-five mortality rates decreased from 58 per thousand in 1990 to 39 in 2000 and infant mortality rates from 47.8 to 31.7 per thousand live births over the same period, attributable in great part to impressive immunization rates (99 percent in 1999). Maternal mortality at the end of the 1990s in Brazil is estimated at 160 per 100,000 live births, down from 260 in 1995.

4. For example, Demographic and Health Survey estimates for the period 1986-96 indicate that infant mortality rates for the lowest income quintile (83.2) are almost triple the level estimated for the highest income quintile (28.6).

of other basic services and assets to the poor. **Box 1** summarizes the priorities and challenges of Brazil's health sector and the orientation of Bank support.

Box 1. Issues and Challenges of Health System Development in Brazil

The new Constitution of 1988 established health as a universal right and a duty of the State. It also created the framework for a gradual decentralization of health services. In 1990 the unified public health system (SUS) was created. Under this new system, the social security health system was opened up to all citizens and service provision is consolidated into a single system and decentralized from the federal to state and municipal governments. This system also provides for a shared responsibility for public health matters among all levels of government, including disease control and prevention. Reform and refinement of this system are ongoing. OED's evaluation of Brazil's Country Assistance Strategy (2003) notes the need for improvement in the following areas: decentralization and regionalization of health care; allocative efficiency, cost containment and financial sustainability; reducing inequities in health status and in service access and reaching poor, marginalized populations; continued expansion of basic health care through the Family Health Program; human resources development and management; and the regulation of private health sector. The Bank's technical and financial assistance to Brazil's health sector seeks to support consolidation of the SUS, especially with regard to securing cost-effectiveness, affordability and sustainability.

1.4 ***HIV/AIDS Epidemic in Brazil.***^{5 6 7} The following is a brief summary. A fuller description and some data on the HIV/AIDS epidemic are presented in **Annex C**. With the first AIDS cases diagnosed in 1982, the HIV/AIDS epidemic in Brazil is now entering its third decade. HIV/AIDS in Brazil was first characterized by early (1980-85) and rapid spread of HIV-1 among urban homosexual and bisexual men (MSM), and soon followed by substantial spread in urban injecting drug users (IDU). The second decade of HIV/AIDS, roughly 1992-2002, was marked by increasing spread of HIV among high-risk heterosexuals, including commercial sex workers (CSW), sexually-transmitted disease (STD) clinic attendees, and the wives and sex partners of male IDUs and bisexuals. The gender ratio in AIDS case reports has fallen from 25:1 male to female in the earliest years of the epidemic to 1.7:1 in 2003.

1.5 AIDS mortality peaked at 12/100,000 in 1995, before the advent of highly active antiretroviral therapy (HAART), and has been declining ever since, reaching 6.3/100,000 by 2000. As of 2000 there were an estimated 600,000 Brazilians living with HIV infection, compared with PAHO's estimate of 750,000 in 1992⁸. As of March 2002,

5. Unless otherwise indicated, data cited in this section are drawn from MoH/NASCP statistics.

6. Because AIDS case reporting in Brazil has been mandatory since 1986 and routine HIV surveillance is recent and still being strengthened, data on AIDS are much more plentiful and reliable. However, data on AIDS need to be interpreted with caution. Current AIDS cases reflect risky behaviors and infections that happened some 10 years previously.

7. Definitions of epidemiological terms used in this section: HIV incidence is the rate at which new HIV infections are acquired over a given period of time in a population. AIDS incidence is the rate of new AIDS diagnoses over a given period of time in a population. HIV prevalence is the proportion of persons with HIV infection in a given population at a specific moment in time. AIDS prevalence is the proportion of persons with full-blown AIDS in a population at a given time.

8. As part of the preparation of AIDS III, the Bank estimated that about 800,000 Brazilians were infected in 2002. The government is currently preparing an estimate for 2003.

237,588 AIDS cases and 110,651 deaths from AIDS had been reported since the beginning of the epidemic. Drawing on HIV surveillance data on pregnant women, the population prevalence of HIV among reproductive age adults has been estimated at 0.65 percent, (Szwarcwald (CL) 2002) well below the 2 percent rate of reproductive age adults, which UNAIDS has suggested for describing generalized epidemics .

1.6 Brazil's HIV epidemic thus remains concentrated, still largely limited to individuals and groups engaging in high-risk behaviors for HIV, including MSM, IDU, CSW, heterosexuals with multiple partners and female partners of IDU and bisexual men. Studies on the HIV prevalence of the highest risk groups reveal prevalence levels of 36.3 percent among IDUs, 10.8 percent among MSM and 6.5 percent among CSW (see Annex C, Table 2) for recent years in various samples, most of them non-national⁹. Trend data on HIV prevalence over time are not available for MSM and CSW. Analysis of trends among IDUs indicate a decline in HIV prevalence in selected urban areas.¹⁰

1.7 The majority of reported AIDS cases were caused by heterosexual transmission, still limited to high risk groups (partners of IDUs and bisexual men, CSW and people with multiple partners). Transmission through intravenous drug use rose from an estimated 18.5 percent of total reported AIDS cases in the 1980s to a high of 24.8 percent in 1992 and subsequently declined in the ensuing years to 11.4 percent in 2000. Transmission by transfusion has decreased as a share of reported AIDS cases from 5.3 percent in the 1980s to 0.2 percent in 2000, while peri-natal transmission rose from 1.8 percent in the 1980s to 2.5 percent in 2000.

1.8 Incidence of AIDS in Brazil, as measured by year of diagnosis, increased from 8.2/100,000 in 1991 to a high of 18.2/100,000 in 1998 with a decline to 12.0 recorded in 2002, but patterns across regions vary. Again, trends in AIDS cases reflect levels and patterns of transmission that occurred some 10 years before.

1.9 ***Brazil's Response.*** Brazil's response to the epidemic has been based on a three-pronged strategy: early and sustained prevention, the promotion and protection of human rights, and universal access to treatment and care. In the early 1980s both civil society and government initiated action to contain the growth of the HIV epidemic. The first State AIDS program was established in São Paulo in 1983 and two years later the number of established State programs increased to 11 of Brazil's 27 states. By 1986 an AIDS program was established under the Division of Sanitary Dermatology in the Ministry of Health and notification of AIDS cases became compulsory nationwide. The National AIDS Commission was established in 1988 under the leadership of the Ministry of Health and included representatives of Ministries of Labor, Justice, Education, the Order of Lawyers, the Federal Counsel of Medicine and other civil society organizations. By that year serological testing was required for all blood banks and Congress passed a law granting persons living with AIDS the rights guaranteed to workers with incapacitating or

9. As detailed in Annex C, Table 2, data must be interpreted with caution, due to quality of some studies and representativity of study samples.

10. Staff of Fiocruz AIDS Programme have informed the team of new, more sophisticated analyses of trends among IDUs in Rio, just being submitted for publication, and refer as well to a published article on trends in Santos, highlighted in para. 4.15 (Mesquita et al.).

terminal illnesses. In 1989 the National AIDS Division, responsible for the National AIDS/STD Control Program (NASCP), was established within Ministry of Health. Also during the 1980s national, state and municipal governments and civil society (both for-profit and not-for-profit sectors) designed and launched campaigns to inform the general public, carried out targeted interventions aimed at changing the behavior of high-risk groups (MSM and IDUs), and undertook advocacy and human rights activities.

1.10 In 1991 MoH began the acquisition and free distribution of antiretroviral drugs (AZT monotherapy) to AIDS patients. In 1996, with the development of the first AIDS therapies with real benefits in survival and quality of life, Brazil's policy of universal access to health care was extended to highly active antiretroviral therapy (HAART)¹¹. According to MoH statistics, in 2000, of the 600,000 people with HIV, some 93,500 were on antiretroviral therapy (ARV) and an additional 130,900 HIV-positive asymptomatic cases with CD4 count above 200 were being monitored but were not on treatment. In 2003 about 140,000 patients were on ART with an additional 196,000 monitored but not yet on treatment. (NASCP Statistics). AIDS morbidity, mortality, opportunistic infection rates and hospitalizations have sharply declined since 1997. A continued concern, however, is that the majority of the estimated 600,000 Brazilians living with HIV do not know their status, have not had HIV testing, and a significant proportion are likely to be continuing behaviors that could maintain HIV spread.

2. Objectives and Design

AIDS I

2.1 The two overall *objectives* of the First AIDS and STD Control Project (AIDS I) were to reduce the incidence and transmission of HIV and STDs and to strengthen public and private institutions responsible for STD and HIV/AIDS control. Its specific objectives were to put in place a set of institutions and activities that would: (a) define a minimal program for HIV and STD prevention and identify what interventions work best; (b) develop and adequately equip a technically competent cadre of health professionals to diagnose, treat and deliver social services to HIV/AIDS patients; (c) establish effective surveillance for HIV/AIDS and its corollary illnesses (e.g., STDs and tuberculosis); and (d) sustain project investments by the states and municipalities.

2.2 AIDS I was composed of four *components*: (a) prevention, including information, education and communication (IEC) programs aimed at the general population and at high-risk groups, expansion of capacity in diagnosis, counseling, testing and early intervention and condom procurement and distribution; (b) services for HIV and STD patients, including improvements in early diagnosis and treatment of STDs and integration of prevention and medical services with counseling both to improve and reduce the cost of care; (c) institutional development, including training of service

11. HAART is defined as triple agent therapy, with or without a protease inhibitor (PI). All patients in Brazil are now started on triple agent therapy. However, there are a small number (less than 10,000 overall) who were started on two drug regimens and had not been moved to three drug regimens by mid-year 2003. The OED case study on Brazil HIV/AIDS, currently under preparation, includes a description of the antiretroviral drug programs and regimens in Brazil.

providers, upgrading of laboratory services and technical assistance; and (d) surveillance, research and evaluation, including epidemiological surveillance, program evaluation and special studies on epidemiology, costs and economics of the disease.

2.3 *Implementation Arrangements.* The National AIDS and STD Control Program (NASCP), under the Secretariat for Health Policy in the Ministry of Health (MOH), was responsible for project management and coordination. The head of the NASCP was designated as general project manager and was to be supported by an assistant project manager and a team of experts recruited to satisfy all the fiduciary exigencies of the Bank. The project was designed to transfer resources to: (i) the federal level (primarily NASCP) to strengthen its capacity to design, pilot, lead, guide and support, contract out and, in some cases, implement a range of national program activities, encompassing prevention, care and treatment, surveillance, research, monitoring and evaluation; (ii) states and selected municipalities to support the design and implementation of their HIV/AIDS action plans; and (iii) non-governmental organizations and civil society organizations (NGOs/CSOs), through contractual arrangements, for carrying out projects covering a range of activities, including: prevention, human rights, care and treatment.

2.4 All 27 states and 43 municipalities¹² (the latter selected on the basis of needs and capacity criteria) were eligible to benefit from project support but could only access such support on the condition that they would: establish, staff, and co-finance an HIV/AIDS and STD Control Coordination Unit within the health structure; sign agreements with Ministry of Health on the terms and conditions of the transfers (a condition of effectiveness for the first five states; a condition of disbursement for the remaining states/municipalities); and prepare consolidated annual operations plans (POA) to be approved by the Bank (disbursements were contingent on inclusion of activities in POA).

2.5 Transfers to NGOs were contingent on the satisfaction of two sets of criteria, one set to determine the adequacy of the NGO itself (structure, legal status, profile, organization and staffing, sources of financing and local level assessment of its technical capacity and performance), the other to evaluate the quality of NGO proposals against technical, managerial, financial, epidemiological and geographic criteria. Proposals were reviewed and selected by a national panel. Those proposals that were considered promising, but in need of technical refinement, would receive technical support to raise them to a standard to be selected.

2.6 Both the direct transfer of project resources to states and selected municipalities and the award and financing (through a competitive process) of contracts with NGOs for prevention and treatment/care activities were innovations in Brazil, conceived to accommodate a multi-sectoral approach to the fight against HIV/AIDS and to give greater responsibility to states and municipalities for the preparation and negotiation of POA conceived at the local level.

12. At the time of project preparation there were about 5,000 municipalities in Brazil. There are currently about 5,700.

AIDS II

2.7 The overall *objectives* of the Second AIDS and STD Control Project (AIDS II) were to reduce the incidence of HIV and STD infection and to expand access to and improve the quality of diagnosis, treatment and care of persons with HIV, AIDS and STDs. Building on the first project, the specific objectives of this operation were to: (a) continue support of the Government's efforts; (b) broaden prevention activities; (c) strengthen evaluation capacity; (d) work towards program sustainability; and (e) identify the most cost-effective interventions.

2.8 AIDS II supported three *components*: (a) prevention of AIDS and STDs; (b) diagnosis, treatment and care for persons with HIV, AIDS and STDs; and (c) institutional strengthening, including epidemiological surveillance and monitoring and evaluation, among other interventions. The original articulation of components and activities for AIDS I and II, as drawn from the project documentation, is presented in **Annex D** for reference.

2.9 *Design Modifications.* While the general design of AIDS I was maintained for the second operation, certain modifications were introduced to address changes in the profile of the AIDS epidemic. In addition to continued efforts to support behavior change in high-risk groups (notably MSM, IDUs, and CSW), additional prevention interventions were expanded both to include new and broader target groups (e.g., students and women through reproductive health services) and to reach additional geographical areas in the country.

2.10 The design of AIDS II also took into account four program issues. *First*, in response to concerns about the affordability and sustainability of Government's decision to finance the full costs of treatment of HIV/AIDS patients in the context of its overall policy of universal and free access to health care, the second operation did not provide for the financing of ARV drugs, but did include investments to promote alternatives to hospital care (day hospitals, home care, and other outpatient services) to both improve the quality and lower the costs of such care. Studies were programmed to assess the costs and effectiveness of care and treatment. *Second*, the project envisaged the support and monitoring of NASCP efforts to reduce the cost of condoms to the public through tax reductions and other means. *Third*, in light of poor monitoring and evaluation performance under the first operation, AIDS II emphasized the establishment of a viable monitoring and evaluation system, most notably: (a) the definition of project objectives and indicators to measure impact; (b) the specification of the type of baseline information needed to track desired changes; and (c) agreement with the national program on key evaluation activities and their terms of reference. *Fourth*, it sought to decentralize program management and execution by devolving some responsibilities to states and municipalities (e.g. the gradual transfer of review, selection and supervision responsibilities for projects executed by NGOs).

2.11 Relatively minor changes were made to the implementation arrangements for AIDS II. As a means of encouraging participation of smaller municipalities and of achieving more efficiency in the transfer, use and accounting of such funds, the

participation of smaller municipalities was encouraged through the formation of consortia.

3. Implementation and Costs

Implementation Experience

3.1 *AIDS I*. The institutional arrangements were respected throughout the project, with the three main implementers (federal level, states/municipalities, and NGOs) managing roughly equal shares of project resources, according to NASCP reports.

3.2 Project conditions for the transfer of funds to states and municipalities were by and large fulfilled and POA were generally implemented in line with expectations, although the absorptive capacity of local-level programs was very much a function of political commitment at these levels.¹³ Overall a total of about \$115.8 million was transferred to local Governments under AIDS I during the period 1994-1998.¹⁴ Support to states varied with regard to their per capita amounts and with regard to the allocation per identified case of AIDS. (See Table E-3 in **Annex E**.)

3.3 NGOs undertook a large share of the prevention work financed under the project, in line with their acknowledged comparative advantage to reach and work effectively with high-risk groups. With the support of AIDS I 181 NGOs carried out 444 prevention projects and 140 treatment and care projects, for a total of some 584 projects or more than double the appraisal target of 261 (see Table 1 for details).¹⁵

3.4 The NGO liaison office within NASCP managed the NGO contracting. The monitoring of these projects was undertaken through the preparation by NGOs themselves of quarterly reports on implementation progress and through supervision visits undertaken by national program staff. To further consolidate success in contracting with NGOs, the mid-term review recommended: more attention to support of NGOs in their efforts to achieve financial sustainability of their activities, involvement of local level government in the selection and evaluation of NGO projects, and greater uniformity and continuity in reporting and monitoring. While progress has been made on all of these fronts during the second half of AIDS I and throughout AIDS II, the challenges of ensuring the financial sustainability of NGOs and of more rigorous and routine monitoring and evaluation of NGO activities were consistently raised in OED mission

13. For example, the city of São Paulo experienced major delays in the execution of its program and ultimately did not use its full allocation under the project, due to major changes in the structure of the health care delivery system, and also to low commitment of the city administration to AIDS control activities. A subsequent change in municipality leadership towards the end of AIDS I created an enabling environment for more intensified program effort. State-level staff interviewed reported that the new leadership engendered strong political support for the fight against HIV/AIDS and culminated in a well-resourced program, including both local funding and greater utilization of project funds.

14. World Bank completion report data.

15. Even with this doubling of the original target, there was capacity and demand for more projects. In the final year of implementation over 400 new proposals were received along with over 130 requests for extensions and supplemental financing. While the latter requests were fully accommodated, only 51 of new proposals were approved due to full utilization of NGO allocations and limited scope for reallocation in the project's final year.

interviews with federal and local level staff, as well as with NGO representatives. Initially the financial cap on NGO projects was set at US\$100,000, but was subsequently reduced to about US\$55,000 equivalent when few if any NGOs could make use of these funds.

AIDS II

3.5 AIDS II transferred resources for HIV/AIDS activities to all 27 states and the number of municipalities benefiting from direct transfers more than tripled to 150. In December 2002, the Minister of Health signed a law establishing federal transfers to states and municipalities to finance HIV/AIDS/STD activities. Under this law states and municipalities must prepare and successfully negotiate action plans with targets (PAMs), whose focus is on performance benchmarks and targets, rather than inputs. This new law was supportive of Brazil's decentralization policy and reflective of the design and implementation experience of AIDS I and II. In May 2003, 14 states and 158 municipalities had approved PAMs. Because this development happened close to the completion of AIDS II no funds under the project were channeled to states under this new mechanism. States continued to receive funds through the POA mechanism as designed under AIDS I. As shown in Table 4, both the number of NGOs and the number of NGO projects receiving support under AIDS II increased significantly over the levels achieved under AIDS I.

Table 1. NGO Projects Supported by AIDS I and AIDS II

Target groups/interventions	No. Projects	
	AIDS I *	AIDS II **
A. Prevention		
Injection drug users	15	171
Men who have sex with men	28	193
Commercial sex workers	54	285
Youth	73	192
Of which:		
school children		(17)
Adolescents		(56)
children and adolescents		(192)
Low income populations	14	160
Women	40	213
Other	220	495
Of which:		
NGO sustainability		(120)
IEC/Institutional development		(118)
Health and education prof.		(83)
Resettled populations		(62)
Prisoners		(48)
Truck drivers		(26)
Indigenous populations		(24)
Miners		(10)
Disabled		(4)
Subtotal Prevention	444	1,709
B. Treatment and Care	140	454
Total actual:	564	2,163
Planned:	261	(not specified)
Total No. NGOs supported:	181	795***

- Source: Im
- implementation Completion Report on AIDS I
- ** Source: Ministry of Health/NASCP 2002
- *** Source: NASCP data provided during OED mission

Planned versus Actual Costs by Component¹⁶

3.6 **AIDS I.** The total actual cost of the project, US\$250 million equivalent, was equal to that estimated at appraisal. Actual expenditures on prevention were 117 percent of the full costs estimated at appraisal, while actual expenditures on care and treatment were 89 percent of appraisal estimates. The cost of the institutional development component was about the same as appraisal estimates (102 percent). Expenditure on surveillance, research and evaluation fell far short of appraisal estimates (46 percent).

16. See Annex E for details

Data on public expenditure for HIV/AIDS is not broken down by program component (prevention, treatment and care, institutional development, and surveillance, monitoring and evaluation), making it impossible to assess the share of Bank's financing by component.

3.7 **AIDS II.** The total actual cost of AIDS II was US\$296.5 equivalent or 99 percent of appraisal estimates. The actual costs of the prevention and institutional strengthening components slightly exceeded full cost appraisal estimates (104 percent and 109 percent respectively), while the actual cost of the diagnosis, treatment and care component fell short (86 percent). The Bank's loan amount, which was 98 percent disbursed, amounted to about 10 percent of total expenditure on HIV/AIDS during the life of the project (Ministry of Health, August 2002) (See Table D-4 in **Annex D** for details.).

4. Outputs and Outcomes by Objective

AIDS I

Table 2. Summary OED Ratings of Outcome by Objective: AIDS I

	<i>Importance*</i>	<i>Efficacy**</i>
General Objectives		
To reduce the incidence and transmission of HIV and STDs	High	Not possible to evaluate
To strengthen public and private institutions responsible for STD and HIV/AIDS control	Substantial	Satisfactory
Specific Objectives		
To put in place a set of institutions and activities that would:		
Define a minimal program for HIV and STD prevention and identify what interventions work best	High	Moderately Satisfactory
Through training develop an adequately equipped and technically competent cadre of health professionals to diagnose, treat and deliver social services to HIV/AIDS patients	Substantial	Satisfactory
Establish effective surveillance for HIV/AIDS and its corollary illnesses (e.g., STDs and TB)	High	Unsatisfactory
Sustain project investments by the states and municipalities	Substantial	Satisfactory

- Importance is judged by the priority accorded to the objective in project design, based on both the project description and the amount of funds allocated. ** Efficacy is the extent to which the project's objectives were achieved, or expected to be achieved, taking into account their relative importance.

4.1 Because of a lack of adequate baseline and end-of-project epidemiological and behavioral data, *it is not possible to evaluate the outcome of the project against the general objective of reducing the incidence and transmission of HIV and STDs.*¹⁷ The other project objectives are articulated in terms of outputs, rather than outcomes and thus can be assessed. *The project succeeded overall in achieving the other general objective to strengthen public and private institutions responsible for STD and HIV/AIDS control.* As is described in more detail below, the project supported the design,

17. The lack of data on trends in HIV prevalence and in behaviors among the general population and among high risk groups is a consequence of the project's failure to strengthen adequately surveillance and monitoring and evaluation, discussed later on in this section.

implementation and expansion of programs for prevention and for treatment and care. Of particular note is a significant investment in capacity building, including the training of 21,600 health professionals (target of 7,000) through the design and delivery of some 769 training courses (target of 550), and the provision of local and international technical assistance for program design and implementation (NASCP project reports).

4.2 *The project was successful in defining and supporting a core program for HIV and STD prevention, but fell short of the objective of assessing which interventions work best with a view to guiding future decisions regarding resource allocation.* AIDS I has made significant contribution to the establishment and successful implementation of sustained, innovative, state-of-the-art prevention activities in Brazil, including both information/awareness raising for the general public and behavioral change interventions aimed at high-risk groups. Both the State and civil society were particularly productive in reaching high-risk groups. For example, a combination of innovative public sector and NGO projects aimed at (a) preventing drug abuse and HIV infection among the general population and (b) reducing transmission of HIV among IDUs through education and needle exchange. Other examples of successful partnerships with civil society are found in project-supported efforts aimed at MSM and CSW, encompassing behavior change interventions and studies. Adolescents benefited from prevention efforts through partnerships with the Ministry of Education, the Roquete Pinto Foundation and Brazilian educational television. A major outcome of project support in terms of partnerships with the private sector was the creation of the Business Council (Conselho Empresarial), made up of 24 large businesses and over one million workers, which provides guidance to the private sector in the design and establishment of workplace interventions.

4.3 AIDS I invested in the design and delivery of 138 courses in prevention delivered to 8,673 trainees. The project also supported the design and implementation of seven national IEC campaigns, (one more than originally planned) to increase awareness of HIV/AIDS and knowledge of how to prevent it. Other outreach/awareness creation activities supported included the establishment of an AIDS Hotline (contacted by about 1,000 callers per day) and a National Human Rights Network, made up of about 1,400 members with strong advocacy and outreach capacity.

4.4 From 1993 through March 1998 the project purchased and distributed 136 million condoms and supported social marketing activities. The national logistic system for condom distribution serves to control condom stocks, improve the flow to distributors and users and maintain a record of who is receiving condoms to project future needs. Efforts to reduce the import tax on condoms were initiated under AIDS I, and continued with greater success under AIDS II. Figure 1 shows the decline in the unit prices of condoms over the life of the two projects.

4.5 Despite the lack of baseline data and a viable monitoring and evaluation system, available evidence does indicate that during the life of this project awareness of the disease and of how to prevent its transmission did increase and healthier behaviors were adopted both by the general public and by high-risk groups. For example, the sale of domestic and imported condoms rose significantly from 70 million in 1993 to 228 million in 1997 (NASCP statistics). Program data from 1993 and 1996 show a moderate increase from 25 percent to 37 percent of males who report that they always use a condom and

from 14 percent to 19 percent of males who report that they almost always use a condom. In the absence of more precise information on project and program performance, it is plausible to assume that project support of awareness raising and targeted behavior change interventions and project achievements in improving condom availability did contribute to enhanced awareness of the disease and risks of transmission and to the adoption of healthier behaviors documented in the above-mentioned surveys. While successful in the establishment and support of innovative and targeted prevention interventions, the project did not carry out studies and evaluations to assess the cost-effectiveness of prevention activities, on which basis future strategic decisions and resource allocation were to have been decided.

4.6 ***The project was successful in strengthening capacity of the health system to diagnose, treat and deliver social services to HIV/AIDS patients.*** At the project's outset HIV testing was very limited and carried out by blood banks with virtually no counseling services available. With the support of AIDS I a network of 104 counseling and testing centers (CTAs) was established across the country covering all states except Acre (Ministry of Health/NASCP August 2002).¹⁸ The project target was 125 CTAs.

4.7 Through an ambitious program of training of health providers, accreditation of existing hospitals and the creation of alternative services AIDS I succeeded in establishing considerable capacity in Brazil to care for persons with HIV/AIDS, with much of the care shifted from expensive hospitalization to cheaper alternatives for inpatient and outpatient services. Specifically, the project fulfilled the target of establishing about 190 new treatment facilities for HIV/AIDS patients, although the mix of facilities developed was different than originally planned. Forty-nine day hospitals were established versus the project target of 100. While no public-financed home care services were originally planned under the project, 31 were established with project assistance. Sixty-six specialized outpatient care facilities were established exceeding the original target of 42 by 57%. Over 40 NGO projects established home-based care services falling short of the target of 50. In addition, while it was not included among the original project targets, 340 hospitals were accredited to provide HIV/AIDS treatment.

4.8 A logistical system for the management and control of ARVs was developed along with policies and guidelines for health care and other services for HIV patients. In addition, the project financed the design and delivery of 546 training courses in treatment to 10,985 health care professionals and community outreach workers across the country. While not specified in the original design, the project also financed anti-retroviral treatment for HIV+ pregnant women to prevent mother-to-child transmission of HIV and trained about 500 health professionals in the care of these patients

4.9 Project investments in training, equipment and other materials have also supported the establishment of a network of diagnostic and treatment services for STDs. The project supported the establishment of 700 STD clinical health services within already existing public health facilities, more than double the appraisal target (300). However, planned evaluation and research on effectiveness and cost effectiveness of

18. World Bank completion report data indicate that an additional 39 CTAs were in the process of being established at the time of the project's closing.

different partner notification strategies, utilization and effectiveness of STD services, and feasibility of combining symptomatic and clinical testing in facilities was not carried out. Table F-1 in **Annex F** provides statistics on STD case reports for the period 1996-2001, which are likely to be a fraction of the true total.

4.10 At the project's outset laboratories lacked the referral capacity to back up lower level laboratories and to ensure timely and quality services needed for treatment and care. Project investments supported the upgrading of the network of laboratory facilities with a view to improving diagnosis, treatment and research for HIV/AIDS and STDs. With project support 43 public laboratories began implementing viral load testing starting in 1997 and 60 laboratories throughout the country were upgraded to do T CD4+ lymphocyte testing.¹⁹ The upgrading of the laboratory network has also enabled the monitoring of HIV subtypes and resistance to antiretroviral drugs. As a complement to support under other IBRD loans (REFORSUS project), AIDS I has helped establish an effective national blood quality control program, as evidenced in a significant reduction of the share of reported AIDS cases contracted through blood transfusions from 2.4 percent of all cases in 1992 to 0.2% in 2000 (Ministry of Health Epidemiological Bulletin, March 2002).

4.11 *The project was unsuccessful in its initial attempts to set up HIV surveillance.* Despite early attempts under the project to establish HIV surveillance, the system originally set up under the project was not viable given that follow-up collection samples and sample sizes were inadequate resulting in confidence intervals that were too high to be useful. The system was revamped in 1997 with project assistance and improvements included: a more careful selection of participating institutions, tighter and more central management, and more rigorous supervision. With these adjustments AIDS I ultimately did succeed in establishing 150 sentinel surveillance²⁰ sites (target of 80) in maternity clinics, emergency rooms and STD clinics. The project also financed the delivery of 72 courses in epidemiology to 1,598 health care professionals. At the project's closing in 1997, maternity and emergency room sentinel surveillance sites did manage to generate data on HIV prevalence in time for the project's final evaluation, notably: a prevalence of 1.8 percent among pregnant women (20-24 years) and 4.1% among emergency room patients (20-24 years). Sentinel surveillance at STD clinics was considered unreliable. The design of STD surveillance was also modified during project implementation, facilitating a more decentralized system of 72 state and municipal institutions (vs. 27 state facilities) selected on the basis of technical and geographical criteria. STD surveillance capacity established under the project generated data on the clients seeking such services. These data are not representative of the population at large, or even of high-risk groups within the population; and they are under-reported.

4.12 AIDS I invested about US\$6 million in 65 studies, of which 27 focused on prevention, risks and behaviors, 16 on diagnosis, treatment and care, 17 on the epidemiology and biology of the disease and 5 on other topics (costs, cost-effectiveness, program management and political economy). However, staff of state and municipal

19. Test designed to monitor the decline of the body's immune system.

20. A surveillance system in which a pre-arranged sample of reporting sources agrees to report all cases of one or more notifiable conditions.

programs visited outside of Rio and São Paulo interviewed by the OED mission noted the need for local-level research that would be more operationally relevant and useful than national level research and research focusing on the Southeast. Only a very small portion of research efforts and financing was devoted to the development of model refinements or to the study of costs and cost-effectiveness of prevention and treatment, which had been emphasized in the project design. Some of the research and studies undertaken with project support provided important information and insight on HIV and behavioral trends in the absence of regular surveillance activity by the government. Most notably, AIDS I invested in a series of three studies of about 850,000 army recruits that provided critical data on HIV/STD prevalence and behavior.

4.13 ***Project support for ensuring the sustainability of investments at the state and municipality level was considerable.*** The project succeeded in establishing state and municipal HIV/AIDS coordinating units, whose activities and recurrent costs were cofinanced by local government in line with decentralization policy. It is noteworthy that participation in the project required state/municipal financing of the personnel costs of coordinating units and cost sharing of selected activities. In addition, political and popular commitment at the state and municipal levels was very high overall thanks to NGO activism, the high visibility of the program and a participatory process for the planning and execution of local activities. An important exception was São Paulo city, which did not, at that time, enjoy strong commitment of local leadership, and whose performance under the project suffered due to its inability to effectively absorb project funds.

AIDS II

Table 3. Summary OED Ratings of Outcome by Objective: AIDS II

	<i>Importance*</i>	<i>Efficacy**</i>
General Objectives		
To reduce the incidence of HIV and STD Infection	High	Not possible to evaluate
To expand and improve the quality of diagnosis, treatment and care of persons with HIV, AIDS and STDs	Substantial	Satisfactory
Specific Objectives		
To build on the first AIDS/STD Control Project, especially to:		
Broaden further prevention activities (while maintaining a focus on high-risk groups)	High	Satisfactory
Strengthen evaluation capacity	High	Unsatisfactory
Work towards the sustainability of the program through devolution of some responsibilities to states and municipalities	Moderate	Satisfactory
Identify the most cost-effective interventions	Substantial	Unsatisfactory

*Importance is judged by the priority accorded to the objective in project design, based on both the project description and the amount of funds allocated. **Efficacy is the extent to which project objectives were achieved or expected to be achieved, taking into account their importance.

4.14 In the absence of adequate data on epidemiological and behavioral trends ***it is not possible to evaluate the achievement of the project's general objective to reduce the***

incidence of HIV and STD infection.²¹ However, there are data from various studies that provide some information on trends in prevalence for different populations over different time periods. With regard to syphilis, prevalence in army conscripts is reported to have risen from 0.53 percent in 1996 to 1.8 percent in 2002 (Szwarcwald (CL) 2002), while prevalence among women who delivered babies in health facilities decreased from 2.8 percent in 1998 to 1.7 percent in 2000 (SUS data). Available information on trends in HIV prevalence also shows a mixed picture. HIV prevalence is reported to have decreased among military conscripts from 0.2 percent in 1996 to 0.12 percent in the South, 0.19 percent in the North and Central West, and 0.08 percent in Rio and São Paulo in 1998 (Szwarcwald (CL) 2002). HIV prevalence among pregnant/post-partum women of 20-24 years is reported to have increased during the period 1998 – 2002 from 0.3 percent to 0.6 percent (NASCP 2003). The proportion of children infected at birth has declined from 8.6 percent in 2000 to 7.6 percent in 2001 and 3.7 percent in 2002 (MoH statistics).

4.15 With regard to high-risk groups, while available data do indicate some encouraging signals and trends, they must be interpreted with caution as studies were not undertaken in the context of a single methodological framework nor did series of studies necessarily cover exactly the same target populations, or samples, in the same geographical areas (see Annex C, Table 2 for details). With these caveats, HIV prevalence seems to have decreased in the IDU community from 52 percent in 1999 to 36.3 percent in 2001 (UFMG/NASCP). Infection rates among this group in Rio fell to 8 percent by 2000 (Marins, et al. 2003). Prevalence rates of IDUs in Santos are reported to have risen from 63 percent in 1992 to 65 percent during the period 1994-96 and subsequently to have declined to 42 percent in 1999, as both injection frequency and sharing of needles decreased and smoking of crack cocaine increased (Mesquita et al.). While there are no data available on trends in HIV among CSWs and MSM over time, a study on prevalence among 3000 CSW indicated a low rate of 6.5 percent in 2001 (UNB/NASCP), and prevalence among the MSM community was estimated at an average of 10.8 percent (São Paulo SP, Projeto Bela Vista) during the period 1994-99. Overall, it can be noted that some 20 years after the first AIDS cases were identified in the country, Brazil's HIV epidemic remains concentrated among a high-risk population, the prevalence of HIV having been reliably estimated by MoH at 0.65 percent of reproductive age adults.

4.16 ***The project provided major support to expand and improve the quality of diagnosis, treatment and care of persons with HIV, AIDS and STDs.*** With the support of AIDS II the number of CTAs in Brazil more than doubled from 104 in 1999 to 237 in 2003, thus exceeding the project target to establish 100 new CTAs. The project also provided support to the functioning and strengthening of existing CTAs through the provision of training and materials. As shown in Chart F-2 in **Annex F**, there are now CTAs in every state in Brazil. The number of persons who were tested for HIV in CTAs annually rose from 120,468 in 1997 (based on data from 1997 of 100 CTAs) to 271,056 in 2001 (based on reports from 115 of 174 CTAs). Despite this progress, there are still many HIV-positive people who have not been tested.

21. This lack of data is a consequence of the project's failure to strengthen adequately monitoring and evaluation capacity, including epidemiological and behavioral surveillance, discussed later on in this section.

Table 4. HIV Prevalence Estimates for Adults Aged 15-49, in Brazil, Year 2000

<i>Gender</i>	<i>Prevalence (%)</i>	<i>95% CI</i>	<i>Total infections</i>	<i>Low range</i>	<i>High range</i>
Women N= 15, 426	0.47	0.36, 0.58			
Men Estimated	0.84	0.65, 1.04			
Total	0.65	0.51, 0.80	597,000	548,000	647,000

Source: Ministry of Health/NASCP Program Statistics

4.17 The project also financed the significant expansion of low-cost, alternative, in-patient and out-patient treatment and care services. Thirty-five new day hospitals, 20 therapeutic home-based care services and 103 specialized ambulatory services were established and 47 conventional hospitals and 28 day hospitals were accredited. Thanks to this support (and that provided under AIDS I) Brazil boasts an extensive network of treatment and care facilities, including a total of 385 accredited conventional hospitals, 84 day hospitals (of which 77 are already accredited), 381 specialized ambulatory services and 58 therapeutic home-based care services. AIDS II also provided support and strengthening to already existing services/facilities in this network. In addition, a total of 369 civil society projects were financed to address the basic treatment and care needs of HIV/AIDS and STD patients. An array of initiatives were supported including: guest houses for the travel needs of patients, support groups, social reinsertion, income generation support, household support, psychosocial support, mental health services and assistance in assessing and adhering to ART. Some 126 projects financed the establishment of support homes for PLWHA. The number of patients under ARV treatment increased from 33,830 in May 1997 to 129,276 in May 2003 (Ministry of Health/NASCP 2003). The number of HIV-positive pregnant women under injecting AZT (Azido-Deoxy Thymidine) treatment increased from 1,472 in 1997 to 5,958 in 2002 (Ministry of Health/NASCP 2003).

4.18 Also supported were activities to strengthen the diagnosis and treatment of STDs and activities to reduce mother to child transmission of HIV/AIDS and congenital syphilis. Investments included the training of service providers and the development and dissemination of guidelines and protocols. STD case reports have increased since the Bank's involvement, with sustained increases in reporting from 1997-2001 (see Table F-1 in **Annex F**). However, the total reports for that five-year period of 239,357 remain a very small fraction of the likely total.

4.19 The project strengthened laboratory capacity in Brazil to improve the quality and timeliness of services to evaluate and monitor the viral and immune status of HIV/AIDS patients. HIV diagnosis was decentralized through some 70 projects to strengthen capacity in municipal and public health laboratories and to monitor drug resistance (of HIV patients to ARV, and of strains of gonorrhea to antibiotics). The project also supported the National System for Quality Control of Diagnostics in carrying out internal and external quality audits of some 521 facilities for HIV diagnosis, 357 for hepatitis diagnosis, 381 for CD4 and 264 for viral load testing. AIDS II also supported the work

of the Distance Education System for Blood Banks and Public Health Laboratories (TELELAB), set up with AIDS I assistance, to facilitate optimal use of this resource. Studies and other assistance provided under the project contributed as well to the strengthening and expansion of capacity to monitor drug resistance (of HIV patients to ARV, and of strains of gonorrhea to antibiotics). Project support was also provided in the form of technical and software assistance and materials and supplies to strengthen the drugs and condom logistical management system established under AIDS I. AIDS II investments facilitated an increase in the number of public health laboratories that participate in external evaluations of diagnostic quality carried out by the National System of Quality Assurance for AIDS and STD lab tests, from 45 in 1998 to 123 in 2002 (Ministry of Health/NASCP 2003).

4.20 There is no data on access of the poor and marginalized populations to diagnostic services and to ARV treatment, but both public sector and NGO personnel brought to the attention of OED's assessment mission the need to provide social assistance to these groups to encourage and support them in getting tested and in accessing and adhering to treatment protocols. Underutilization of these services by poor and marginal groups was not characterized by those interviewed by the mission as merely a factor of geographical access, but also an aspect of their marginalized status. The mission also noted a concerted effort on the part of CTAs visited to intensify their outreach work to promote and encourage a utilization of these services, especially among vulnerable and marginalized populations.

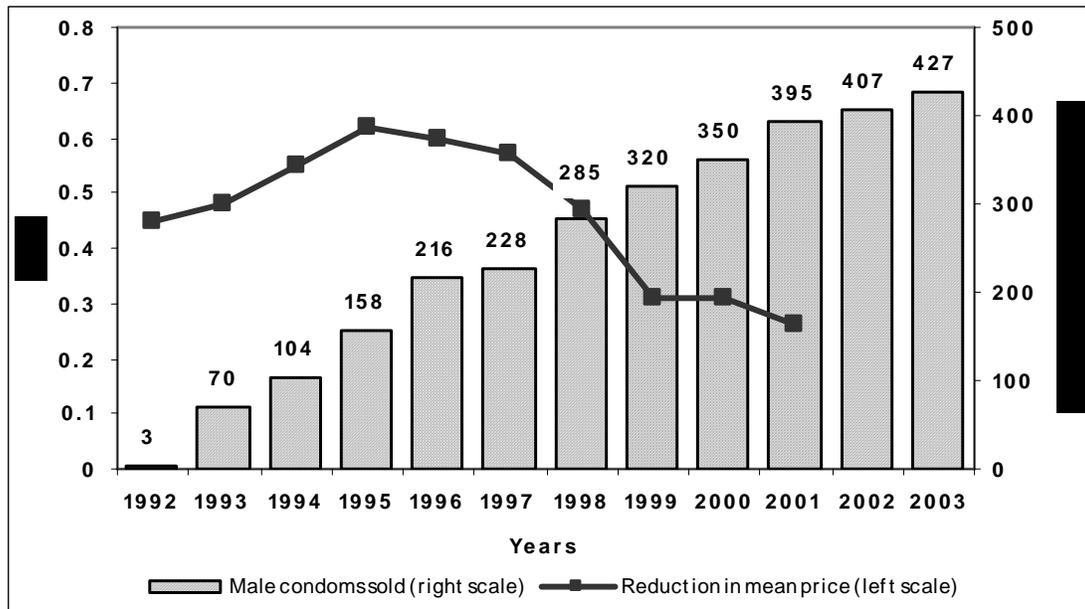
4.21 The mission noted indications of high quality of these services during field visits, including: technical capacity and strong client orientation of service providers, reliable supply of essential drugs and materials and available and good state of infrastructure and equipment. Another important indicator of service quality and effectiveness is the rate of ARV resistance. A recent study has documented Brazil's rate in 2003 at a low 6.6 percent, which is a reflection of rigorous patient management and follow-up and of strict monitoring and control of the distribution of ARV to patients and monitoring of patient adherence, which is built into management information systems set up with project assistance (Brindeiro 2003). Thus far, the possibility of behavior reversals due to Brazil's successful treatment program has not been monitored.

4.22 Survival after AIDS diagnosis has increased sharply from a mean of 5 months in 1989 to 58 months in 1997 and continues to increase (Marins et al. 2003 and Chequer et al. 1992). Since the advent of HAART, the number of hospital admissions per AIDS patient declined from 1.7 per year in 1996 to 0.28 per year in 2001 (SUS data). Brazil's experience with HAART replicates what has been seen in developed country world settings – once HAART is widely available, AIDS largely becomes an outpatient disease, and hospitalization rates, particularly for common opportunistic infections, decline sharply. MoH statistics show that during the period 1996 – 2002 implementation of Brazil's ARV policy has avoided (or delayed) 58,000 new cases of AIDS and 90,000 deaths due to AIDS. Hospitalization was reduced by 70%, with some 358,000 admissions avoided (1997-2001) and resource savings amounting to some US\$2.2 billion (hospitals and outpatients) (See Table F-3, **Annex F**). The number of TB cases in patients with HIV/AIDS declined by 71.8 percent during this same period (MoH Statistics). These outcomes are attributable in part to Brazil's success in reducing the

costs of ART both through the establishment of local production capacity of some of these drugs and through rigorous negotiation of price reductions of other drugs with international drug companies (See Table F-4, **Annex F**, which shows average costs of ART between 1996 and 2002.). These outcomes can also be attributed in part to AIDS II investments in improving and expanding treatment and care services, as well as investments in strengthening the network of laboratories.

4.23 *Building on the support of the first operation, AIDS II made significant contributions to the continued expansion and successful implementation of innovative, state-of-the-art prevention activities in Brazil.* From 1998 to 2002, 20 mass media campaigns were carried out (3 times the number carried out under AIDS I) covering a range of topics aimed at general and specific audiences. Under AIDS II a substantial number of targeted interventions were implemented to prevent transmission among high-risk groups, as well as vulnerable groups, including truck drivers, prisoners, indigenous populations, poor and marginalized populations, adolescents and women. During the period 1999–2003 AIDS II financed 547 projects which covered an estimated 899,386 CSW, 631 projects reaching some 145,807 IDUs (an estimated 18.2 percent of that population), and 486 projects covering some 3,074,980 MSM reaching a reported coverage of 96 percent of that population. Coverage rates are in need of further substantiation and should be interpreted with caution. These figures include both public sector and NGO-executed projects (See Table F-5, **Annex F**). Overall, with project support the volume of prevention activities increased considerably, both those targeted at general populations and those targeted at high-risk groups; and prevention work was further broadened both geographically and in terms of intensified and new interventions aimed at other at risk groups, including, among others: rural, poor and indigenous populations, women, prisoners and street children. OED mission discussions with national, state and municipality program staff and with NGO representatives, combined with site visits undertaken by the mission, revealed that prevention programs are prioritized and carried out with strong commitment and concerted effort. IEC material was plentiful, appropriately targeted to different target groups, widely disseminated and easily available to others who seek information. From the mission's observation in states and project sites visited, prevention work is well grounded in good and trustful exchange with target groups, who are often involved in design, implementation and refinement of interventions. In this respect, program staff and NGOs as well as beneficiaries of prevention work interviewed stressed the success of the project in securing respect and legitimacy for marginalized and stigmatized groups.

4.24 Public sector agencies that undertook prevention activities with project support include: Ministry of Education, Ministry of Justice (Special Secretariat for Human Rights), National Anti-Drugs Secretariat, and Ministry of Labor. Human rights promotion was also undertaken by both public and private sector agencies including capacity building, publications, direct and indirect support of people living with HIV/AIDS (PLWHA) and advocacy work with and through executive, legislative and judicial branches of government.

Figure 1. Annual Sales and Unit Prices of Male Condoms in Brazil: 1992–2003

Source: Ministry of Health/NASCP Statistics

4.25 The project procured condoms that were made available to the public through targeted interventions, social marketing initiatives and distribution through the Ministry of Health. Male condoms distributed through the MoH more than tripled between 2000 and 2003 from 77 million to 270 million and those sold through the commercial sector increased from 228.4 million in 1997 to 427.1 million in 2003 (MoH/NASCP 2003). Table 8 shows that over the implementation periods of AIDS I and II the sale of condoms rose significantly and the mean price of condoms decreased. These trends are attributable in part to the efforts under these projects both to increase the supply and promote the use of condoms and to reduce the costs of condoms in to the Brazilian population through a number of measures, including reduction of duties and taxes. The project also supported operational research which documented high acceptability rates of female condoms, especially among men and women reached by the public health services through community education efforts (Berquó et al. 1999). The results of this study served to fine-tune further project investment in the distribution, provision, targeting and social marketing of female condoms. Among the target groups are CSW, HIV-positive women, female drug users and women at risk for violence.

4.26 While a national survey of sexual behavior and perceptions did establish baseline data for 1998 (CEBRAP 2000), this survey was not repeated at the close of AIDS II, making it difficult to assess the impact of these activities on behaviors of these groups.²² However, it is plausible to assume that sustained prevention activities supported under AIDS II, building on those supported under AIDS I, contributed to Brazil's success in keeping its prevalence rate below 1% and in the continued concentration of the epidemic among high-risk groups. In addition, data generated through studies (encompassing a

22. Government comments (presented in Annex G) do note that NASCP is commissioning a follow-up survey to be conducted in 2004 to enable the tracking of evolutions in this regard.

range of populations, timeframes and methodologies) do provide some indication that during the life of this project awareness of the disease and of how to prevent its transmission has increased and healthier behaviors are being adopted both by the general population and by high-risk groups. Multiple studies on behaviors supported under the project have not been sufficiently systematic or uniform in their design and implementation. As such most of them only reveal levels for a particular population in a particular geographical area over a specific time period, making it impossible to derive trends over time within population groups or to compare levels across regions.

4.27 *With regard to general populations*, a population survey conducted in 2003 shows a significant increase in the proportion of persons who spontaneously cite the use of condoms as a method for protecting themselves, from 50 percent in 1998 to 88.9 percent in 2003 (CEBRAP 2000 and MS/IBOPE 2003). The proportion of sexually active military conscripts that reported using a condom in their most recent sexual encounter was 68% in 2003, a slight increase from 1998 data that indicate proportions of 51.2 percent in the North and Central West, 66.6 percent in the South and 67.7 percent in Rio and São Paulo. In its final report on AIDS II MoH reports that use of condoms among the general population in all sexual encounters declined between 1998 and 2003 from 63.7 percent to 57.8 percent with casual partners and from 21.0 to 11.4 percent with long-term partners.²³

4.28 A 2001 survey of schools carried out by MoH with support from UNESCO revealed that: 70 percent of the schools carried out prevention activities with students; 97% of all students had correct information on how AIDS was transmitted; and 90 percent of students with active sex lives changed their behavior regarding STD and AIDS after intensive exposure to school prevention activities. According to MoH statistics, between 1986 and 2003 use of condom in first sexual encounter among the general population increased from 4 percent to 55 percent. A 2003 poll reports that 65.2 percent of persons aged 14-19 reported using a condom in their first sexual encounter. The project was also successful in increasing the availability of condoms in the country and in lowering their costs to the public from US\$0.57 per condom in 1997 to US\$0.28 in 2001, due largely to reductions/elimination of duties and taxes (Figure 1).

4.29 *Interventions targeted to high-risk groups* are shown to have had some impact, as derived from studies commissioned under the project. As detailed in Annex C, Table 2 these data must be interpreted with caution given issues of representativity of study samples (primarily participants). Between 1999 and 2001 condom use among IDUs increased from 42.1 percent to 62.9 percent and the proportion of IDUs ever tested for HIV increased from 52 percent to 66.4 percent. In addition, needle sharing among this group decreased over this same time period from 70 percent to 59.4 percent (UFMG/NASCP). A study of 3,000 CSW conducted in 2001 revealed that 73.8 percent of this group (composed of program participants) used condoms with their clients (vs. 60 percent of CSWs not participating in the program) but only 23.9 percent of them used condoms with their regular (non-paying) partners. Almost half of CSWs studied (49.2

23. MoH does caution in its report that this trend is questionable as the earlier study (CEBRAP 1999) documented behaviors of an urban-only population (which typically registers higher condom use) and the 2003 population poll included both urban and rural populations.

percent) have been tested for HIV vs. 36% of those not participating. (UNB/NASCP). Trends in CSW behavior over time are not available. Use of condoms among MSM in 2001 is reported to be high at 81 percent with regular partners and even higher at 95 percent with casual partners (Projeto Bela Vista). No baseline data are available to indicate levels of condom use among MSM at the start of AIDS I or AIDS II thus making it difficult to assess trends over time. Testing history among MSM is reported to be significant, with 73% of urban men reporting having been tested in 2001 (Projeto Bela Vista).

4.30 ***The project was unsuccessful in strengthening evaluation capacity.*** As detailed below, project efforts to develop HIV and behavioral surveillance and to strengthen monitoring and evaluation did not culminate in the design and implementation of adequate systems for tracking program performance and impact.

4.31 ***Epidemiological surveillance.*** The project financed training, technical assistance and supervision to improve routine surveillance of AIDS and STI cases, including the refinement of case definitions both for AIDS (over and under 13 years of age) and for congenital syphilis and the upgrading of SINAN, the national AIDS case report database managed by the National Epidemiological Center. Project support to improve HIV surveillance included technical support and supervision of the sentinel surveillance sites, which monitor HIV prevalence in health services (maternity clinics, emergency rooms and STD clinics). AIDS II also financed the design and application of an instrument and method, and its incorporation into the SINAN, to guide the surveillance of HIV+ women and exposed newborns. In addition the project supported training and technical assistance in epidemiological surveillance aimed at professionals responsible for HIV and STD surveillance and staff working in CTAs. A number of studies were also financed under the project to supplement data and information on HIV, STD and Hepatitis B prevalence, and on behaviors covering different populations.

4.32 AIDS surveillance is well established, but it is HIV surveillance and incidence that are important in measuring and tracking the evolution of this epidemic and in measuring project impact. While Brazil's HIV surveillance system was strengthened under this project, it still falls short of a fully functional system that is able to generate a continuous stream of reliable and representative data that would permit the monitoring of the epidemic as it evolves in different areas of the country and among different population groups. During the three-year period 1997-1999 sentinel surveillance data was reported twice a year from the three types of sentinel sites: maternities, emergency rooms and STD clinics. The numbers of sites reporting has fluctuated with each reporting period, making the data difficult to interpret and also making it difficult to determine the number of fully functional sentinel sites. In October 1999 reports were received from 39 STD clinics, 64 maternities and 46 emergency rooms. HIV testing was done on randomized patients of these clinics producing statistics per semester on around 7,000 STD patients, 12,000 pregnant women and 8,600 emergency room patients nationwide. In 2000 Brazil introduced significant changes to its surveillance system because it was perceived that hospital surveillance sites had become reference centers for HIV/AIDS and thus were providing biased estimates. The Brazilian surveillance system now selects a random sample of 150 hospital maternities which have over 500 deliveries per year to test women delivering in that hospital for a more representative measurement

of HIV prevalence. A different random sample of hospitals, that may include some of the same hospitals, is used for each measurement. Only two measurements have been taken since this change: one in 2000 with data from 128 hospital maternities (15,426 pregnant women tested) and from 25 STD clinics (4,636 STD patients tested) and one in 2003, for which data is not yet available. It was subsequently decided by the program to drop the STD clinic sentinel sites as the quality of the data from these sites was considered too unreliable. The Brazilians have opted for less frequent surveillance measurements because it is considered too expensive to conduct every year. Only half of project funds allocated to surveillance under AIDS II were used to this end.

4.33 At the end of AIDS II HIV surveillance is still limited to pregnant women and to military conscripts (the latter through annual surveys).²⁴ Data on pregnant women for the period 1997 through 1999 are difficult to interpret as the numbers of sites reporting fluctuated from one measurement exercise to the next. Methodology for monitoring HIV among pregnant women has changed in 2000 making it difficult to derive trends from the data stream from 1997-99, and measurement has not been sufficiently frequent since 2000. No routine surveillance of pregnant women was undertaken during 2001 and 2002 and the surveillance data on pregnant women for 2003 was not yet available at the writing of this report. Table F-5 in **Annex F** presents the summary report on Brazil's HIV surveillance efforts from 1997 through 2000. High priority, high-risk groups that are a primary focus of prevention efforts (MSM, IDUs, CSW) are not systematically included in routine HIV sentinel surveillance efforts. Special studies on HIV among these groups undertaken with project support have been carried out to supplement sentinel system data, but they lack a systematic methodology that would have allowed the tracking of trends over time or cross-regional analysis. With CDC support the NASCP initiated in 1998 efforts to strengthen its capacity to estimate the incidence of HIV based on cross-section studies of prevalence.²⁵

4.34 Despite project support, the issues of STD surveillance, identified under AIDS I and II, persist: STDs are considerably underreported, data come primarily from clinics and represent only those who seek services rather than the general population or specific target groups. The syndromic approach to STD treatment²⁶ also undermines the accuracy of reporting. The uncertain validity of STD reporting in Brazil makes this a weak indicator for behavioral trends and a highly uncertain proxy for HIV trends.

4.35 *Behavior Surveillance.* With the exception of annual surveys of military conscripts, there is no surveillance system in Brazil for routinely collecting data on behaviors of segments of the general population or of high risk groups. AIDS II did support the establishment of baseline data for 1998 on sexual knowledge and behavior

24. These data are now being supplemented by an information system established to support routing reporting of epidemiological and behavioral data on CTA clients by the network of CTAs.

25. This support involves the application of the Serologic Testing Algorithm for Recent HIV Seroconversion (STARHS) strategy, developed by the CDC, which allows for the determination of whether people with newly reported cases of HIV were infected within the past year.

26. The syndromic approach to STD patient management bases diagnosis on a group of symptoms and treats for all diseases that could cause that syndrome. This approach is recommended by WHO in developing country settings as it provides for more accurate diagnosis without extensive lab tests and allows treatment with a single visit.

(CEBRAP 2000). However, this survey was not repeated at the close of AIDS II so as to document trends in knowledge and behavior. NASCP has indicated to the team that this survey will be repeated in 2004 both to update data and to provide a baseline for AIDS III. In the absence of a viable system for evaluating program performance and impact, the numerous studies and supervisions carried out by a multiplicity of actors, covering a range of methodologies, indicators, geographical areas, populations, implementers and timeframes. The results of these studies are virtually impossible to consolidate in order to provide a coherent overview of program performance or impact on behaviors.

4.36 *Research.* Building on support initiated under the first loan, AIDS II financed clinical and technological research through a competitive process. Research proposals were widely solicited from a range of qualified public and private institutions and vetted and approved by a National Research Committee. Of the 31 approved research proposals, only two focused on STD prevalence and only 1 was on health economics simply because very few were submitted. Regional breakdown of approved proposals is as follows: 45 percent for Southeast, 26 percent for South, 13 percent for Northeast, 10 percent for Central-West and 1 percent for North. There is no information available as of this writing on the full list of research financed under AIDS II, the main results of this research and whether/how research findings were applied for improved program performance and effectiveness.

4.37 *Monitoring and Evaluation.* For the most part the project financed the activities envisaged in this subcomponent design, including the supervision of activities of states and municipalities and of NGOs, the undertaking of myriad specific studies and evaluations targeted at specific activities, executing agencies and target groups, and annual reporting on project performance. However, a number of important omissions obstructed the goal of systematic monitoring and evaluation of project performance and impact. First, the consolidation of indicators and preparation of a M&E plan were not carried out until the very end of the project. Second, over and above the lack of baseline data and data on trends in HIV and behavior noted above, there is still incomplete data (at national and local levels) on the sizes of target populations for program interventions and on trends in their effective coverage. Baseline studies were envisaged under the project but not carried out.

4.38 Preparation of state and municipal HIV/AIDS action plans (POAs) did encourage local HIV/AIDS coordination teams to establish some baseline data and to set annual targets as a part of their planning process, but these plans were not adequately monitored or evaluated for a number of reasons, most notably the lack of M&E capacity both in the NASCP and within state and municipal teams and the input orientation and administrative nature and treatment of these plans. After a number of failed attempts a plan for the design and implementation of an M&E system was initiated at the very end of AIDS II in the context of preparing AIDS III, with technical and financial support from the Bank, CDC and other partners. Similarly, the establishment of a M&E unit in the NASCP, the recruitment of M&E staff to carry out these functions at the national and state levels, the provision of specialized technical assistance and the design of basic and in-service training all were recently initiated with CDC support and in the context of preparing AIDS III. Up to that point, most staff in decentralized levels of the program did not have the skills to carry out effective M&E and none had the time.

4.39 Interviews with state and municipal coordination personnel and with NGOs indicated a very strong demand for better monitoring and evaluation that would accommodate their expressed desire to know and improve the effectiveness and impact of their efforts. Supervision reporting by the Bank's team during the last few months of project implementation also notes the strong emphasis the incoming (in 2003) government places on demonstrating results, which provides incentive to the central unit to establish good M&E and to move toward a culture of using data for decision-making.

4.40 *The project was successful in improving the sustainability of the program through devolution of some responsibilities to states and municipalities.* It did so through the continued training, technical support and supervision of state and municipal coordination units to improve their capacity and success in designing and implementing their local-level action plans. Approximately 27,500 multidisciplinary professionals in the fields of health and education benefited from HIV/AIDS training delivered through a network of universities, professional training centers, NGOs and other educational institutions. Training encompassed a spectrum of skills building in the design and delivery of prevention and treatment activities and in program management. Fund-to-fund transfer mechanisms, described above, both ensure continued financing of state and municipality HIV/AIDS programs and build government interest and support through co-financing arrangements. The process of NGO subproject bidding and selection was also gradually decentralized to eight states under AIDS II, along with the responsibility to supervise such projects. Ten percent of the financing transferred through the fund-to-fund mechanism will be earmarked for NGOs. These actions are likely to be sustainable as they are coherent with decentralization policy, but will need to be further supported with capacity building efforts to ensure local level success in carrying out newly decentralized responsibilities. Interviews with state and municipal actors (both private and public) indicate that their AIDS mitigation efforts have been increasingly integrated into the government's overall poverty reduction efforts, especially at decentralized levels, but that concerted efforts are still required to improve interface of activities and priorities with local social assistance programs.

4.41 *The project did not achieve the objective to identify the most cost-effective interventions.* No research was undertaken to evaluate the cost-effectiveness of prevention activities. Some analysis of the costs and outcomes of Brazil's treatment and care program was undertaken and reveal substantial increases, as have been observed in developed country settings, in survival after AIDS diagnoses, and decreases in mortality, morbidity, hospitalizations, opportunistic infection rates, and marked improvements in quality of life indicators.

5. Ratings

5.1 **Outcome.** Both AIDS I and AIDS II are judged to have had satisfactory outcomes overall, as substantiated in the following paragraphs on their relevance, efficacy and effectiveness.

5.2 **Relevance.** The relevance of both AIDS I and AIDS II is rated **substantial**. The last full CAS of March 6, 2000 supports the Government's poverty alleviation objective

and includes health services for the poor as a key targeted intervention to this end. While not mentioned specifically in earlier CAS exercises, the fight against HIV/AIDS is given increased prominence in the most recent (May 20, 2002) CAS update. It is presented as one of the seven Millennium Development Goals (MDGs), vigorously embraced by both the Government of Brazil and the Bank, and consistent with their shared poverty alleviation agenda. As such, targets for the prevention and control of HIV/AIDS, as well as for the other MDGs, are specified in the new CAS approved in December 2003. While the projects made considerable effort to extend their coverage of prevention and care services to emerging priority populations and to all regions, efforts to target women remain modest and the North and Northeast regions received less per capita support relative to other regions (see Tables F-7 and F-8 in **Annex F**).

5.3 ***Efficacy.*** Drawing on the assessment of project performance by objective presented in Section 4, the overall efficacy of each of the two projects is rated as **substantial**. They have succeeded in improving and further expanding prevention activities, while maintaining a focus on high-risk groups with state-of-the-art prevention interventions. Both projects have culminated in the considerable extension of a network of voluntary counseling and testing services and of treatment and care services (with a substantial shift to low-cost outpatient services) and in the development of crucial laboratory infrastructure needed to support the treatment program.

5.4 Research capacity was both utilized and strengthened with project assistance, but the research financed did not respond to project objectives to document the cost-effectiveness and impact of various interventions. While HIV surveillance of pregnant women improved with the establishment of surveillance sites and related training and support, data is lacking on HIV trends in high risk groups targeted under the project. Behavior trends among high risk groups and among the general population are not known as multiple studies using multiple methodologies, timeframes, and indicators are not amenable to comparison or documentation of trends. Project emphasis on monitoring and evaluation failed. Finally, establishment of coordination units at state and municipality levels, and of a system of transfers of financial support against negotiated annual plans have made significant headway in building capacity and in obtaining the sustainability of the program.

5.5 ***Efficiency.*** The efficiency of AIDS I and AIDS II was **substantial**. Project design supported government provision of public goods (epidemiological and behavioral surveillance, research, monitoring and evaluation), behavior change interventions targeted at high-risk and vulnerable groups, and early action where the epidemic is not widespread to avert an epidemic, consistent with efficiency in both epidemiological and public economics terms (World Bank 1997). Both projects also supported improved access of patients to cost-effective health care through the development of low-cost, alternative services for inpatients and outpatients, and the full integration of such services into the SUS. The project might have been more forthcoming in extending coverage of prevention activities to high risk groups in low-prevalence geographical regions to reflect the good practice of early intervention to maintain low prevalence. The institutional arrangements for the projects (and the national program) were efficient overall as they drew significantly on the comparative advantages of the multiple partners in the fight against HIV/AIDS. The complementarity of roles and contributions of the

public and non-public sectors, respectively, is very strong. The devolution of program responsibilities to state and municipal levels is still in process, but taking a direction that will make for more efficient use of comparative advantages of the various levels of the program, in sync with overall decentralization efforts. In this light there is scope for scaling back the size of NASCP and strengthening the staffing of local units.

5.6 Institutional Development Impact. Institutional development impact of both projects is rated **substantial**. The projects supported improvements to the technical and managerial capacity of the NASCP to further enhance its leadership, advocacy and coordination efforts as well as its continued efforts to develop and implement state-of-the-art interventions for prevention, treatment and care, and to organize extensive capacity building efforts. The design and conditionality of AIDS I contributed significantly to the development of state and municipal capacity to prepare, negotiate and implement local level operational plans.. AIDS II strengthened, consolidated and extended this capacity. The successful experience under both projects is being institutionalized through the new law, drafted by the NASCP and signed by the Minister of Health in December 2002, establishing a fund-to-fund transfer mechanism for qualifying states and municipalities that are affected by the epidemic.

5.7 Overall the projects have made a significant contribution to Brazil's ability to effectively mobilize and utilize human and financial resources to achieve national objectives for combating STDs and HIV/AIDS. The financing of technical assistance and of specialized contractual staff under both projects supplemented NASCP capacity thus enabling it to mount and coordinate an ambitious program. Both projects stimulated and nurtured public-private partnerships by making financing available for NASCP contracts with NGOs and CBOs to carry out critical components of the National Program, in line with their comparative advantages. This arrangement has been institutionalized and reinforced through capacity building of NGOs/CBOs in proposal-writing and contracting provided by NASCP and financed under both projects; and it is being decentralized increasingly to states and municipalities. Efforts are ongoing to consolidate staffing of NASCP and to strengthen the staffing of state and municipality coordination units commensurate with the increased decentralization of program responsibilities and with the new mechanism for fund-to-fund transfers for HIV/AIDS.

5.8 Sustainability. Both AIDS I and AIDS II are **likely** to be sustainable. Prospects for financial sustainability of project investments have improved considerably since the design of AIDS I, due to (a) considerable reductions in the costs of care and treatment due to (i) the establishment of lower-cost alternative care for inpatients and outpatients and (ii) efforts on the part of the Government to lower the costs of ARV; and (b) the significant investment in prevention efforts that may have slowed the rate of infections and thus of the pool of those requiring care and treatment. These achievements do not, however, deny the need for continued efforts: to contain costs, to strive for efficiency in allocation and implementation and to ensure adequate financing. Devolution of program responsibilities to states and municipalities will underpin sustainability, both from an institutional perspective and from a financial (cost-sharing) perspective. With the important exception of monitoring and evaluation, technical and economic resilience of the program is strong and are likely to continue given the strong capacity and leadership of the program. The program has enjoyed strong Government and popular support for

some 10 years and has thus been supported and its budget protected in the face of economic shocks and changes in leadership (including Ministers of Health and Head of State). Strong political constituencies and the Constitutional mandate for universal access to ART provide strong assurances for the continued sustainability of the treatment program in particular. Many if not most NGOs working on HIV/AIDS in Brazil have relied heavily on transfers from the NASCP for funding under the project. There will be continued need for NGOs' critical contributions to HIV/AIDS control and thus for continued public financing of NGO contracts.

5.9 Bank Performance. *With regard to the design of both projects* Bank performance was **satisfactory**. The quality at entry of each project was adequate. Project designs were technically and economically sound and strategic in their focus. First they were designed to support the Government in ensuring that public good elements of the program continue to be accorded top priority (targeted prevention activities, research, surveillance, monitoring and evaluation) and in supporting care and treatment through studies and investments to contain costs of services and improve their quality and effectiveness. Second, Bank financing was conceived to stimulate innovation and reform, particularly: (i) the use of public monies to finance contracts with civil society to implement HIV/AIDS activities and (ii) the establishment of state and municipal coordination units and the transfer of financing to these entities to implement work program agreements prepared by local-level actors. Preparation was undertaken in a context of strong Government ownership and elicited the inputs and perspectives of multiple stakeholders. The importance of baseline data and monitoring and evaluation were emphasized in both designs, but were not sufficiently pursued during implementation. More upstream support and guidance might have been given to the design of an M&E system and plan, and surveys should have been undertaken to establish epidemiological and behavioral baselines during preparation/launch stages to enhance readiness for implementation and to set the stage for the setting and monitoring of targets.

5.10 The Bank's performance during implementation of AIDS I was mixed, but **unsatisfactory**. Only four full supervision missions were carried out during the four-year implementation period,²⁷ half of the Bank's norm of two supervisions per year; and supervision undertaken was not sufficiently rigorous. None of the three weaknesses of project performance identified in this assessment (inadequate M&E, weak surveillance system, and lack of cost-effectiveness analysis of activities to inform future strategic and resource allocation decisions) were adequately addressed. Bank reports and follow-up communication with Government on the project launch reveal a strong focus on disbursement and procurement and do not address the importance of establishing baseline data for M&E. It was only in 1997, a year before the project's closing, that Bank management first mentioned in a routine follow-up letter to the Government the need to undertake evaluation activities during the next (remaining) 12 months. The mid-term

27. While Bank data on AIDS I reports 9 supervision missions, a review of project status reports crosschecked with documents contained in project files documents only four full supervision missions taking place, respectively, on: 6/17/94, 6/16/95, 9/26/96 and 5/21/97. Remaining missions were not full supervision missions. Rather they were small, often one-person, missions in Brazil on other business but mandated to spend a few days on very selective oversight of project performance, in line with their respective specialties (e.g., IEC, procurement).

review (MTR) was not fully exploited as an opportunity for renewed focus on the project's original development objectives and to address and correct weak performance on surveillance, monitoring and evaluation and cost-effectiveness analysis. The MTR report recommended that the Government consolidate indicators and prepare an evaluation plan (a recommendation also found in earlier supervision reports). Despite these shortcomings, supervision missions did provide technical oversight and sound advice in maintaining an emphasis on prevention activities, especially for high-risk groups, and in refining the content and coverage of prevention and treatment/care interventions.

5.11 *The Bank's performance during supervision of AIDS II* was also mixed, but **satisfactory** overall. During the four-year, four-month life of the project, seven supervision missions were undertaken for an average of one every seven months, in line with Bank coefficients. Supervisions for the most part were candid, proactive and specific in identifying issues and in recommending their resolution. Among other recommendations (on technical quality and coverage/equity issues), persistent weaknesses in surveillance and in monitoring and evaluation were raised and specific direction was provided during every supervision, both in Aide-memoires and in internal reporting. The MTR placed specific emphasis and provided operational advice on identifying the most cost-effective prevention interventions, strengthening M&E capacity, and strengthening epidemiological surveillance. However, baseline data were never established nor was program coverage documented or monitored. A breakthrough was made on the push for monitoring and evaluation during the last year of the project, and is attributable in great part to the leverage of AIDS III preparation. Staffing of missions included consultant epidemiologists who prepared technical reports advising on the nature of improvements needed, but there was insufficient technical advice and rigor in establishing a core program of HIV and behavior surveillance of the general population and of high-risk groups necessary for documenting trends and for tracking program performance and impact. Despite unsatisfactory performance on monitoring and evaluation, this element of the project was rated as satisfactory throughout implementation, as was achievement of development objectives. Had management rated the project components unsatisfactory where warranted, additional effort might have been leveraged to rectify weak aspects of project performance.

5.12 ***Borrower Performance.*** The performance of the Borrower under *AIDS I* was **satisfactory** overall. During the design of AIDS I, Borrower commitment was very strong and it assumed its responsibility in undertaking a sound technical preparation and in ensuring the participation of a range of key stakeholders, encompassing key federal-level agencies, representatives from states and municipalities and from the NGO community. The Borrower's performance during implementation was also satisfactory. Counterpart obligations were met. Program/project management was well staffed and very efficient as evidenced by the following: (a) the project was executed within the original timeframe, (b) financial management was consistently satisfactory; and (c) the loan was fully disbursed. Contracts with NGOs and transfers to states and municipalities were managed and implemented in a satisfactory manner, although supervision of these executing agencies might have been stronger. Most quantitative project implementation targets were met or exceeded (number and targeting of prevention projects, number of NGO-executed projects, numbers of new services established/strengthened). The

Borrower's performance fell short of expectations, however, with regard to its failure to evaluate program/project impact, as well as the cost-effectiveness of prevention interventions.

5.13 Borrower performance under AIDS II was mixed, but **satisfactory** overall. Building on the experience of AIDS I, project *preparation* was technically sound overall and participatory. However, while many relevant lessons of experience under AIDS I were incorporated into the design of AIDS II, Borrower analysis was insufficient with regard to the above-mentioned failures (monitoring and evaluation, cost-effectiveness analysis, and surveillance) and resolve to address and correct them. The Borrower's performance during AIDS II *implementation* was satisfactory overall. Counterpart obligations were met. Project management, NGO contracting, and transfers to states and municipalities continued to be well executed by the Borrower. Most quantitative project implementation targets were met or exceeded on all three project components. Unfortunately, the same failures of AIDS I persisted under AIDS II: weak monitoring and evaluation; weak epidemiological surveillance and no systematic behavioral surveillance; and virtually no cost-effectiveness analysis for informing priority-setting and resource allocation. With the strong capacity in Brazil for research and survey work in a multiplicity of disciplines (economic, epidemiology and sociology), these failures are likely attributable to the lower priority accorded these activities by the Borrower relative to prevention, treatment and care interventions.

6. Findings and Lessons

6.1 *Failure to establish critical baseline data on HIV infection rates and on behaviors among high-risk and general population groups, and failure to undertake systematic surveillance to document trends in HIV and behaviors in both of these groups make it difficult to track the evolution of the epidemic over time and to evaluate the effectiveness and impact of program interventions.* While Brazil has implemented many innovative and theoretically cost-effective interventions, evidence of the actual costs, effectiveness and impact of its efforts is lacking. AIDS I and II have had limited success in strengthening Brazil's surveillance of HIV infection and of behaviors among priority populations. This has undermined Brazil's ability to evaluate the impact of its prevention efforts on behaviors and on the epidemiology of the disease. In the absence of fully functional systems for routine monitoring of epidemiological and behavioral trends, Brazil has been forced to rely on indirect tools (ad hoc research and studies, often covering different populations, timeframes and geographical regions) to gain an appreciation of program performance and impact.

6.2 *Inadequate data on the size and coverage of target populations for the prevention and treatment programs, respectively, especially at the state and local levels, undermine the efficiency and effectiveness of HIV/AIDS interventions.* The size and coverage of high-risk groups for prevention are not adequately documented in Brazil making it difficult to establish viable targets or to estimate the level of effort and resources needed for effective intervention. While there are national estimates of the size of MSM and IDU populations, these are rudimentary at best and not meaningful at state

and local levels. Baseline surveys were planned at the projects' outset, but never carried out. By the same token, the effective coverage and access of the treatment program (as a proportion of ARV-eligible persons) is not known. Baseline surveys, promotion of VCT services, improved outreach and integration of HIV/AIDS interventions with other health services are all critical in this regard.

6.3 *Early, rigorous and sustained prevention efforts are likely to keep the pool of HIV and AIDS patients small relative to the counterfactual, and thus to reduce the burden on a country's health system and make treatment and care more feasible and affordable.* It is plausible from available (albeit limited) data that prevention activities undertaken over the past 15 years in Brazil may have contributed to containing HIV infection rates and the number of new AIDS cases, thus averting a scenario of more rapid spread and the transition to a generalized epidemic. Over and above the avoidance of the devastating consequences of HIV/AIDS on individuals, families, communities and on the country's development prospects overall, the number of HIV infections and AIDS cases averted (as reflected in declining incidence) has reduced significantly the costs and challenges of providing adequate quality and coverage of treatment and care. Simply put, the continued success and affordability of Brazil's treatment and care program depends critically on the success of its prevention efforts.

6.4 *NGOs have a critical role to play in the fight against HIV/AIDS.* In Brazil NGOs have proven highly effective in reaching stigmatized and marginalized groups making available to them both prevention and care services, for which they have a comparative advantage vis-à-vis public services. Their target populations constitute the three highest-risk groups that constitute the top priority for the prevention program: MSM, IDUs and CSW. They have also demonstrated their effectiveness in serving as an interface between vulnerable groups, such as the poor and women, and the public services with a view to improving access and utilization. They also continue advocacy work.

6.5 *Even when financing a relatively modest share of the overall costs of a well-established program, Bank support to HIV/AIDS efforts can make significant contributions to program expansion and capacity building when it is strategically allocated.* While financial support provided under AIDS I and AIDS II amounted, respectively, to only about 30 percent and 10 percent of national expenditure on STDs and HIV/AIDS during their respective implementation periods, such support was channeled to the most cost-effective components, as indicated by evidence amassed on international experience evaluated thus far (World Bank 1997). AIDS I and II devoted significant financial and technical support to the design and delivery of prevention activities, including innovative, state-of-the-art interventions aimed at changing the behavior of high-risk groups, as well as to the expansion and promotion of counseling and testing services. Bank support to improvements and expansion of treatment and care was selective and strategic, focusing on the establishment of lower-cost alternatives, including an increasing shift to outpatient care, and on improving service quality through capacity building of service providers and of the laboratory network. These inputs combined with Brazil's achievements in significantly lowering the cost of ARVs have lowered the cost of care and treatment and improved the quality of these services.

6.6 *Bank support can bring legitimacy and leverage to controversial activities and to stigmatized segments of society.* The strategic orientation of Bank's assistance: (a) has provided leverage in mobilizing additional national resources for HIV/AIDS activities at all levels of government, especially for controversial prevention interventions such as needle exchange programs; and (b) has been instrumental in securing respect and legitimacy for marginalized or stigmatized groups who were both implementers and beneficiaries of Bank support (e.g., commercial sex workers, prisoners, transgender persons and MSM, IDUs, people living with HIV/AIDS and their advocates).

6.7 *A research program that is ad hoc and uncoordinated in its conception is likely to generate a large volume of information and data that will be difficult to interpret and use for measuring and improving program performance and impact.* While the research program in Brazil has produced considerable information and data, it has not been possible to derive trends in the epidemic and in behaviors or insights on other aspects of program performance. Brazil's HIV/AIDS program would have benefited from a master plan for research, conceived to support its strategic objectives, both (a) in the choice and prioritization of topics for studies and operational research, and (b) in the standardization of methodology that would have accommodated the analysis of data across studies and of trends over time.

6.8 *Project design and conditionality can be strategic in initiating and supporting institutional innovations which are capable of expanding and using more fully program implementation capacity,* most notably: (a) use of public monies to further stimulate and mainstream the contracting of NGOs to work on prevention and care/treatment, in line with their comparative advantages; (b) the creation of state and municipality level HIV/AIDS and STD Coordination Units, the funding of locally developed work program proposals that would be the subject of formal agreements (contracts) between respective Coordination Units and the NASCP, and the co-financing of overhead costs and inputs by local governments; and (c) the funding of multisectoral responses for prevention and human rights promotion with Ministries of Education, Justice, Interior, among others. These innovations (described in paragraph 2.3-2.6) have served to solidify and expand partnerships with civil society and with other development sectors and local government and are being consolidated and institutionalized.

7. Future Directions

7.1 Over the past five years OED has distilled the experience of the World Bank in Brazil through a number of reviews that are relevant to the fight against HIV/AIDS.²⁸ Taken together, these reviews point to a number of challenges for poverty alleviation and health sector development in Brazil over the coming years. They highlight the importance of: improving M&E to measure performance and impact and thus to improve effectiveness and outcome; reaching poor marginalized groups and regions (especially the North and Northeast); and sustaining and further improving public-private

28. These reviews include most notably: the [Country Assistance Evaluation: Brazil](#) of May 15, 2003, [The Brazil Health System: Impact Evaluation Report](#) of June 30, 1998, [Brazil Maternal and Child Health](#) of February 26, 2002, and [NGOs in World Bank-Supported Projects in Brazil: A Background Paper for OED's Study of NGOs in World Bank-Supported Projects](#) of July 29, 1999.

partnerships. The decade of experience of Bank support to HIV/AIDS in Brazil resonates with themes and recommendations raised in the previous OED reports. With the imminent launch of a third Bank-financed loan for HIV/AIDS in Brazil, whose design has incorporated many of the lessons of the past decade, the following suggestions for further improving the development effectiveness of HIV/AIDS efforts in Brazil are offered.

7.2 *First and foremost, Brazil should take the necessary steps to improve its capacity and incentives to monitor and evaluate program performance and impact and to document the cost-effectiveness of program efforts.*

- *First*, in line with UNAIDS guidelines (UNAIDS 2000 and 2002), Brazil should continue refining and expanding its surveillance efforts to enable the routine and systematic monitoring and analysis of trends in HIV infection as well as trends in behaviors among key populations. Second generation surveillance systems are designed to permit the analysis of behaviors both to anticipate and to explain trends in HIV infections. Given the current status of the epidemic in Brazil (still concentrated among populations with high risk behaviors, with heterosexual transmission being the primary and growing mode of transmission), the surveillance of HIV infection and of behaviors should focus on high-risk groups with more than 5 percent infection rates (MSM, IDU, CSW) and should also monitor trends in the general population, paying particular attention to links between these two groups, particularly through bridge populations (female partners of IDUs and bisexuals and clients of CSW), and to consequent risks of rapid spread of the virus in the general population. HIV and behavioral surveillance of high-risk groups should be carried out on a regular basis and may be most efficiently executed at the decentralized level with a view to facilitating more in-depth assessment of local-level issues and trends and improved responses. AIDS III is supporting Brazil in its efforts to exploit fully the voluminous data currently available through ad hoc studies and surveys and through the health information system, but this will not eliminate current and future needs for systematically collected data on HIV and on behavior of key populations. NASCP's plans to carry out a national sexual and risk behavior survey in 2004 to update the 1998 baseline survey (CEBRAP 2000) is an important step in this regard.
- *Second*, the time is ripe to design a monitoring and evaluation system and strategy that is decentralized and results-based: (a) the recently adopted fund-to-fund transfer mechanism for supporting HIV/AIDS in states and municipalities is based on the principle of results-based planning and management; (b) as noted earlier, local level public sector staff and NGOs have expressed a strong demand for good and meaningful M&E indicators, guidelines and training to enable them to track and improve their performance and impact; and (c) the new government is very committed to the design and implementation of a results-based approach to development programs. Such a system should establish baseline data on the size and current program coverage of target populations at the state and local levels to permit realistic target setting and effective monitoring and evaluation of program performance, as well as to assess the level of effort and resources needed for a successful program. The monitoring and evaluation system should also accommodate the need for systematic evaluation of interventions implemented by NGOs against

program targets set at the national, state and local levels. Government comments (provided in Annex G) highlight recent achievements and ongoing efforts to redefine the M&E strategy for HIV/AIDS in favor of a more decentralized and results-based orientation, and note the continued support of CDC and the World Bank to this end. Of particular note are (i) the recent establishment of five sites of excellence in each of Brazil's five regions to foster and promote M&E activities at the decentralized level; and (ii) the development of postgraduate training in M&E of STD/HIV/AIDS designed to foster decentralization and institutionalization of M&E activities.

- *Third*, the government should commission studies to document systematically the cost-effectiveness of program components and pilot interventions through (a) the design and active direction of a research program that emphasizes cost-effectiveness and impact analysis; and (b) the solicitation and exploitation of considerable research capacity available in Brazil in the disciplines of economics, epidemiology (especially HIV incidence research) and sociology. Studies should prioritize the evaluation of the cost-effectiveness of current interventions aimed at MSM, IDUs and CSW. Such a program should be iterative in the sense that it should both influence and monitor a continued fine-tuning of interventions and approaches that will enhance cost-effectiveness and improve the efficiency of resource allocation. Cost-effectiveness analysis will also be useful to other countries looking to build their HIV/AIDS programs on the experience of Brazil's long-established and innovative programs.
- *Finally*, rigorous monitoring and evaluation of Brazil's treatment program is critical, both because it will allow Brazil to track and improve the effectiveness and impact of its treatment and care program, and because the Brazilian experience, well documented, will provide guidance and insight to many other countries seeking to establish or strengthen national treatment programs. Monitoring and evaluation of the treatment program should encompass: behavior and compliance of those under treatment and their long-term effects on transmission, drug resistance, effective coverage, and equity in access to services and in adherence.

7.3 *In the meantime, in order to further consolidate and sustain Brazil's fight against HIV/AIDS and to achieve maximum impact, NASCP leadership must mobilize human and financial resources around the highest priorities of the program, as evidenced by international experience to date.* Government support to prevention should remain strong, ensuring that it is accorded highest priority. This will remain a challenge, especially as Brazil's treatment policy is mandated by the constitution and has a strong public constituency, whereas the many positive externalities of prevention are typically less appreciated by the public. Prevention efforts must continue to target behavior change in high-risk populations (MSM, IDUs, CSW) and expand efforts to better target emerging vulnerable groups (such as women, the poor, rural/interior populations). In addition, efforts to improve and expand surveillance, diagnosis and treatment of STDs, including enhanced outreach and targeting, must be renewed and intensified as this package of activities constitutes a critical element of an effective prevention strategy. Sustained efforts are also needed to monitor and contain (if not reduce) the costs of care and treatment, as well as to ensure adequate financing of such services, all in the face of changing costs and technologies. By their very nature, public goods provision should be a priority for Government support, most particularly:

surveillance, research, monitoring and evaluation, capacity building and institutional development, and sustained support/development of the laboratory network.

7.4 *In light of the trends of the epidemic, which indicate a spread to bridge populations, many of whom include women, poor populations, and rural/interior populations, equity will become an even more important objective of the national HIV/AIDS program as it attempts to reach these groups.* This being said, there is also a need to continue and intensify targeted behavior change interventions aimed at highest-risk groups (MSM, IDUs and CSW). Both prevention and care and treatment interventions were relatively easy to mount when high-risk and affected populations were concentrated for the most part in and around the South and Southeast Regions and in urban areas. Both NGOs specialized in reaching high-risk target groups (MSM, IDUs, CSW) and health services responsible for monitoring and treating those affected by HIV and AIDS were more readily available and generally capable of providing needed services. This being said, only coverage of MSM is satisfactory at 96 percent. Considerable effort needs to be made to increase the coverage of IDUs (roughly estimated at 18 percent) and of CSW, whose effective coverage by the program is not known (Ministry of Health/NASCP draft final evaluation). Equity has been an important principle of the program from the outset and will become an increasingly challenging goal in the future. The emerging vulnerable groups are considerably harder to reach by nature of their locations and their status in society; and they do not typically seek out social support and services, even where they are available. More effort needs to be made to improve coverage of HIV/AIDS interventions especially in the Northeast (see Tables F-7 and F-8, Annex F). Furthermore, women and the poor should not be addressed, respectively, as homogeneous groups given that subgroups within each of these categories are exposed to a spectrum of risks according to the multiplicity of situations and vulnerabilities of these subgroups. Operational research and concerted efforts to effectively reach these groups will be a major challenge of the program.

7.5 *Given the maturity of Brazil's HIV/AIDS program and its emerging challenges, consolidation and decentralization of the institutional framework for the fight against HIV/AIDS and STDs should be pursued with a view to strengthening the capacity of state and municipality HIV/AIDS units to assume considerably increased responsibilities for strategic program management, oversight and implementation, as well as for managing partnerships with civil society and local level government.* Such activity might be underpinned by the undertaking of an assessment of the overall institutional and organizational framework for the fight against HIV/AIDS (at all levels of the system) in light of decentralization and other reforms and in light of its emerging priorities. Such an assessment would be complemented by state/municipal-level assessments of opportunities for improved public-private partnerships. On the basis of these assessments, fine-tuning of the organization, mandates and staffing of different levels of the program, and of mechanisms for partnerships could render program efforts more efficient and cost-effective. Local level establishment of more operationally relevant baseline data on program coverage and performance is needed to facilitate both the setting of targets and the monitoring and evaluation of program performance. Instruments and processes can be improved to evolve more fully towards performance-based management. Pedagogical supervision and accountabilities need to be strengthened considerably.

7.6 *Now, more than ever, efforts should be devoted to the integration of HIV/AIDS and STD control activities into the SUS, particularly special programs within the SUS, such as family health and reproductive health.* It will be impossible to make significant headway in reaching the emerging target groups and vulnerable populations (women, the poor, rural/interior populations) of the program unless basic health services are more accessible to them and more fully utilized. This is indeed a formidable challenge, which will require improvements to the quality, coverage, equity and outreach of priority health programs and services. Improvements to HIV/AIDS work and to health system performance, especially primary health care and public health, can and should be simultaneous and synergistic.

7.7 *NASCP should intensify efforts to encourage a fuller utilization of CTA services now available in the country.* Most people in Brazil who are infected with HIV are not aware of their seropositive status. An important contribution to prevention efforts is for people to be aware of their status and to take necessary action both to seek treatment and care and to prevent the transmission of infection to their partners.

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ANNEX A. BASIC DATA SHEET

AIDS and STD Control Project (Loan 3659-BR)

Key Project Data (amounts in US\$ million)

	<i>Appraisal estimate</i>	<i>Actual or current estimate</i>	<i>Actual as % of appraisal estimate</i>
Total project costs	250	250	100%
Loan amount	160	159.8	100%
Cofinancing			
Cancellation		0.2	

Cumulative Estimated and Actual Disbursements

	<i>FY94</i>	<i>FY95</i>	<i>FY96</i>	<i>FY97</i>	<i>FY98</i>	<i>FY99</i>
Appraisal estimate (US\$M)	17.7	53.2	88.7	124.3	160	–
Actual (US\$M)	0	52.2	101.8	126.3	159.6	159.8
Actual as % of appraisal	-	98	115	102	100	100

Date of final disbursement: May 06, 1999

Project Dates

	<i>Original</i>	<i>Actual</i>
Board approval	11/09/1993	11/09/1993
Signing	03/16/1994	03/16/1994
Effectiveness	06/01/1994	06/01/1994
Closing date	06/30/1998	06/30/1998

Staff Inputs (staff weeks)

	<i>FY92</i>	<i>FY93</i>	<i>FY94x</i>	<i>FY95</i>	<i>FY96</i>	<i>FY97</i>	<i>FY98</i>	<i>Total</i>
Preappraisal	21.8	24.3	15.4					
Appraisal & Negotiations	12.8							
Supervision			11.3	7	10.3	15	7.2	50.8
Midterm review					6.5			6.5
Total	21.8	37.1	26.7	7	16.8	15	7.3	131.6

Mission Data

	Date (month/year)	No. of persons	SW in field	Specializations represented ^b	Performance rating ^a	
					Impl. Status	Devt. Objs.
Through appraisal						
Preparation	1992	4	21.18	D, A, B, M		
Preparation	1992	3	18.9	D, B M		
Appraisal through Board approval						
Appraisal	1993	6	12.8	L, B, D, M, M, M		
Post appraisal	1994	2	2.0	M, M		
Appraisal	1996	4	13.4	B, C, C, M		
Supervisions						
Supervision 1	1994	3	11.3	B, D, M	1	1
Supervision 2	1995	4	7.0	B, B, A, K	S	HS
Supervision 3	1996	4	6.5	B, M, M, N	HS	S
Supervision 4	1996	1	1.2	F	HS	S
Supervision 5	1996	1	2.0	G	HS	S
Supervision 6	1996	1	0.6	F	HS	S
Supervision 7	1997	3	0.8	H, B, K	HS	S
Supervision 8	1997	3	0.8	H, B, K	HS	S
Supervision 9	1998	3	7.2	B, H, K	S	S
Mid-Term Review	1996	5		I, I, K, J, M		

a. 1 = Problem free; S = Satisfactory; HS = Highly satisfactory

b. A = Public Health; B = Economist; C = Lawyer; D = Consultant; E = Operations Analyst; F – Procurement; G = IEC; H = Population Health Spl; I = Disease Control Spl; J = Project Spl; K = NGO Coordinator; L = Operations Officer, M = AIDS/STD Specialists; N = Disbursement

Second AIDS and STD Control Project (Loan 4392-BR)

Key Project Data (amounts in US\$ million)

	<i>Appraisal estimate</i>	<i>Actual or current estimate</i>	<i>Actual as % of appraisal estimate</i>
Total project costs	300	296.50	99%
Loan amount	165	161.5	98%
Cancellation		3.5	

Cumulative Estimated and Actual Disbursements

	<i>FY99</i>	<i>FY00</i>	<i>FY01</i>	<i>FY02</i>	<i>FY03</i>	<i>FY04</i>
Appraisal estimate (US\$M)	20.27	52.82	88.82	137.39	165.00	–
Actual (US\$M)	20.0	55.6	88.5	137.2	154.0	161.5
Actual as % of appraisal	99	105	100	100	93	98
Date of final disbursement: August 26, 2003						

Project Dates

	<i>Original</i>	<i>Actual</i>
Board approval	09/15/1998	09/15/1998
Signing	12/11/1998	12/11/1998
Effectiveness	02/09/1999	02/09/1999
Closing date	12/31/2002	06/30/2003

Staff Inputs (staff weeks)*

Stage of Project Cycle	Actual/Latest Estimate	
	No. Staff weeks	US\$ ('000)
Appraisal/Negotiation		135,266
Supervision	70.81	330,713
ICR	1.66	32,183
Total	73.47	498,162

Mission Data

	<i>Date (month/year)</i>	<i>No. of persons</i>	<i>Specializations represented</i>	<i>Perform ance rating*</i>	<i>Rating trend*</i>
Supervision	0/6/26/1999	5	Task Team Leader (1); Cons. Diagnostic Treatment (1); Cons. Health Spec (1) Procurement Spec (1); Financial Specialist (1)	S	S
	02/09/2000	7	Health Spec (1); HIV AIDS Epidemiologist(1); HIV AIDS Spec (1); Procurement Spl (1); NGO Spec (1); Financial Spec (1); Epidemiologist-SIDALAC (1)	S	S
	09/24/2000	3	Public Health Spec (1); HIV AIDS Epidemiologist (1); HIV AIDS Spec (1)	S	S
	05/09/2001	4	Pub. Health spec (1); Epidemiologist (1); Proj. Impl. Spec (1); Proc. Spec (1)	S	S
	01/22/2002	2	Public Health Spl (1); Epidemiologist (1)	S	S
	09/13/2002	9	Task Manager (1); Operations Analyst (1); CONS. Diagnostic, Treatment (1); Procurement Spec (1); Financial Mgmt Spec (1); Civil Society Spec (1); OPS/UNAIDS (1); CDC-Monitoring/Eval. (1); CDC- Epidemiologist Survey (1)		

* Satisfactory

Annex B. Persons and Organizations Consulted

Federal District of Brasilia

National Program for STD and AIDS Control (NASCP):

Paulo Roberto Teixeira, WHO (formerly Coordinator, NASCP)
 Alexandre Grangeiro, Coordinator, NASCP (formerly Deputy Coordinator, NASCP)
 Raldo Bonifacio, Deputy Coordinator
 Aristides Barbosa Junior, Coordinator, Monitoring and Evaluation
 Moises Francisco Baldo Taglietta, Coordinator, Planning
 Maria Alice Lipparelli Tironi, Planning Unit (ASPLAV)
 Rosemeire Munhoz., External Cooperation Unit (COOPEX)
 Denise Doneda, Director, Prevention and Education (PREV)
 Pamela Díaz Bermudez , Research Area (UEPI/Pesq)
 Diderô Carlos Lopes, Finances Unit (UOF)
 Draurio Barreira, Epidemiology Unit (UEPI)
 Josué Lima, Diagnosis, Treatment and Care Unit (UDAT)
 Karen Bruck de Freitas, Civil Society and Human Rights Unit (SCDH)
 Mauro Siqueira, Communications Unit (ASCOM)
 Jackeline Fabíola E.F. de Souza, Human and Institutional Development Unit (UDHI)
 Carmen Dhalia, Epidemiologist (UEPI)
 Mauro Sanchez, Epidemiologist (UEPI)
 Leila Rossi, Director for MSM Prevention Programs (PREV)
 Paulo Junqueira Aguiar, Prevention Unit (PREV)
 Denise Serafim, Harm Reduction Coordinator (PREV)
 Omar Bravo, Consultant, Prison HIV/AIDS Programs

State Program for STD and AIDS Control: Federal District of Brasilia

Maria Josenilda Goncalves da Silva, Coordinator
 Suely Andrade, Health Coordinator
 Staff of State Coordination
 Managers/staff of Federal district HIV/AIDS facilities

Civil Society

Arco-Iris DF
 GAPA Brasilia

State of Pernambuco

State Program for STD and AIDS Control

François José de Figueiroa, Coordinator
 Staff of State Coordination
 Managers/staff of State HIV/AIDS facilities (including visit to State Blood Bank)

Municipal Programs for STD and AIDS Control, Municipality of Rio de Janeiro

Municipal coordinators and coordination staff, including:

D. Sair Pereira de Sena, Coordenadora, Olinda
 Maria Helena Gomes dos Santos, Coordenadora Municipal, Petrolina
 Maria do Socorro Ratis, Gerente Administ., Paulista
 Francisco Leone Vay, Coordenador Municipal, Paulista

Maria Candida Araujo de Oliveira, Coordenadora, Jaboatão dos Guarapes
 George C. Sa Barreto, Consultor Administr., Jaboatão dos Guarapes
 Scheyla M Silva Goncalices, Gerente, SAE
 Municipality coordination unit of Gonçalo

Managers/staff of selected municipal HIV/AIDS facilities

Civil Society

Roberto Augusto de Brito, Rede Nacional de Pessoas Vivendo com HIV/AIDS Seção Pernambuco
 Vladimir Cardoso Ruis. Grupo de Trababos
 Articulação de Movimento Homossexual do Recife et Area Metropolitana
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 Nanci Feijo de Melo, Coordenadora Geral, Associação Pernambucana de Profissionais do Sexo (APPS)
 Ivaldo Soles Alaide Alvias da Silmes, Presidente, ASAS: Associação Solidaria Grupo Viva Rachid
 Josenita Dura Ciriaco, Socia Coordenadora, Crece Comunitaria Vivendo e Aprendendo
 Maristela Moraes, Asesora de Projetos/Coordenadora, Instituto PAPAI/Associação Usuarios Alcohol e Drogas de Pernambuco

State of Rio de Janeiro

State Program for STD and AIDS Control

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 Denise Ribeiro Franqueira Pires, Deputy Coordinator
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 AIDS Program – State Health Department, Prevention
 Managers/staff of State HIV/AIDS facilities

Programs for STD and AIDS Control

Betina Durovni, Transmissible Diseases Department Head
 Municipal coordinator and coordination staff

Research/Academic Community

Francisco Inácio Bastos, Deputy Coordinator – Fiocruz AIDS Programme
 Célia Landman Szwarcwald, Senior Epidemiologist, Fiocruz AIDS Programme
 Paulo Fieja Barroso, Federal University of Rio de Janeiro, Projeto Praca Onze
 Mauro Schechter, Professor of Infectious Diseases and Head of AIDS Research Laboratory,
 Federal University of Rio de Janeiro, Projeto Praca Onze

Civil Society

Maria Cristina Pimenta, ABIA
 Secretaria, FORUMONG/RS
 Coordenador Geral, S.O.S. Vida
 Alex Uma dos Santos, Presidente, S.O.S. Vida
 Marisa Campany, Coordenadora, Movimento Mulheres em São Goncalo
 Centro Especial de Orientação a Mulher – Zuzu Angel
 Norma Maria Gomes, Tesoreira, Associação Carioca de Redução de Danos
 Edmundo, Coordenador, Adaps

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 Forum de ONG/AIDS do Estado do Rio de Janeiro

State of Santa Catarina

State Program for STD and AIDS Control

Ana Maria Henrique Martins Costa, Coordinator
 Staff of State Coordination
 Managers/staff of State HIV/AIDS facilities

Municipal Programs for STD and AIDS Control

Municipal coordinators and coordination staff (municipalities of Florianópolis and Itajaí)
 Managers/staff of municipal HIV/AIDS facilities

Civil Society

Grupo de Apoio Regional Para Reabilitação da AIDS, Lages, SC
 IINST Tuto Arco Iris, Florianópolis, SC
 Casa – Centro de Assessoria a Adolescência, Florianópolis, SC

State of Rio Grande do Sul

Ministry of Health

State Health Secretary

State Program for STD and AIDS Control

Geralda Maria Bauer Pereira Rigotti, Coordinator
 Staff of State Coordination
 Managers/staff of State HIV/AIDS facilities

Municipal Programs for STD and AIDS Control

Municipal coordinators and coordination staff, municipalities of:

Porto Alegre
 Alvorada
 Uruguaiana
 Rio Grande
 São Leopoldo
 Caxias do Sul

Managers/staff of municipal HIV/AIDS facilities

Research/Academic Community

Dr. Paulo Naud, Clinicas Hospital, University of Rio Grande do Sul, Porto Alegre

Civil Society

Consortio Intermunicipal de Saude, Região Centro do Estado, Santa Maria, RS
 Grupo de Apoio a Prevenção da Aids (GAPA) do Rio Grande do Sul. Porto Alegre

State of São Paulo

State Program for STD and AIDS Control: State of São Paulo

Oswaldo Yoshimi Tanaka, Deputy State Secretary of Health, Cabinet Secretary, Government of São Paulo State

Artur Olhovetchi Kalichman, Coordinator (and Head, Referral and Training Center)

Maria Clara Giana, Deputy Coordinator

João , Human Resources Head

Christiano Azevedo Marques, Head, Institute Adolfo Lutz

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Anna Luiza Luns Gryscek, Nurse Technician

Managers/staff of State HIV/AIDS facilities

Municipal Programs for STD and AIDS Control

Thomas Soderberg, Municipal Secretary of Health (Santos)

Municipal coordinators and coordination staff (São Paulo and Santos)

Managers/staff of municipal HIV/AIDS facilities

Civil Society

Jorge Beloqui, Grupo Pela VIDDA

Forum ONG/AIDS São Paulo

Forum ONG/AIDS ABC

Grupo CORSA

Lutando Pela Vida

NASP – Núcleo de Apoio Solidiario e Prevanção

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Indermit Gill, Economic Adviser, PRMVP (former Lead Economist, LCC5A)

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Theresa Jones, Lead Operations Officer, LCSHS (former Task Manager AIDS I and AIDS II)

Maureen A. Lewis, Sector Manager, HDNVP (former Task Manager AIDS I)

Gobind Nankani, Vice President, PREM (former Country Director, Brazil)

Sandra Rosenhouse, Senior Population and Health Specialist, LCSHH (Task Manager AIDS II and III)

Joachim von Amsberg, Lead Economist, LCC5A (Brazil)

Other

Pedro Chequer, UNAIDS Country Program Adviser, Moscow (former Coordinator, NASCP)

Michael Merson, former Head, Global Programme on AIDS

William McFarland MD, PhD, Co-Director HIV/AIDS Statistics and Epidemiology Section, San Francisco Department of Health

Dr. Theresa Diaz, Epidemiologist, Outgoing Chief of Party for Brazil, United States Centers for Disease Control

Annex C. HIV/AIDS Epidemic in Brazil.

With the first AIDS cases diagnosed in 1982, the HIV/AIDS epidemic in Brazil is now entering its third decade. HIV/AIDS in Brazil was first characterized by early (1980-85) and rapid spread of HIV-1 among urban homosexual and bisexual men (MSM), an epidemic similar in scope, spread and epidemiology to the epidemics in North America and Western Europe. This outbreak was concentrated in major coastal cities, including São Paulo and Rio de Janeiro. It was soon followed by substantial spread in urban injecting drug users (IDU), again in São Paulo and Rio, but also in the southern States of Rio Grande Do Sul and Santa Catarina. By 1990, IDU spread accounted for approximately 20 percent of HIV infections in Brazil (World Bank 1993). Since both MSM and IDU outbreaks involved few women, the early gender ratio of infection was roughly 25:1 male to female.

The second decade of HIV/AIDS, roughly 1992-2002, was marked by increasing spread of HIV among high-risk heterosexuals, including commercial sex workers (CSW), sexually-transmitted disease (STD) clinic attendees, and the wives and sex partners of male IDUs or bisexuals. The gender ratio in AIDS case reports has fallen to 1.7:1 male to female in 2003, suggesting a feminization of the epidemic, as well as declines in infections among men that have occurred some 10 years ago. During this period AIDS morbidity and mortality rose, as those infected progressed clinically and developed opportunistic infections, most importantly HIV-associated tuberculosis. AIDS mortality peaked at 12/100,000 in 1995, before the advent of highly active antiretroviral therapy (HAART), and has been declining ever since, reaching 6.3/100,000 by 2000. As of 2000 there were an estimated 600,000 Brazilians living with HIV infection, down from PAHO's estimate of 750,000 in 1992²⁹. As of March 2002, 237,588 AIDS cases and 110,651 deaths from AIDS had been reported since the beginning of the epidemic. In the absence of adequate HIV surveillance data, the population prevalence of HIV has been reliably estimated at 0.65 percent through national probability sampling of pregnant women in 2002³⁰, well below the 2 percent rate UNAIDS has suggested for describing generalized epidemics (Szwarcwald (CL) 2002). Brazil's HIV epidemic in 2003 thus remains concentrated, still largely limited to individuals and groups engaging in high-risk behaviors for HIV, including MSM, IDU, CSW, heterosexuals with multiple partners and female partners of IDU and bisexual men. While transmission doubtless continues to occur in persons at risk (and an increasing proportion of persons at risk are women, especially partners of IDUs and bisexual men), there is no evidence of acceleration or increasing rates of new HIV infection. Rather HIV infections are stable or slightly declining, while HIV/AIDS survival times are significantly increasing.

29. As part of the preparation of AIDS III, the Bank estimated that about 800,000 Brazilians were infected in 2002. The government is currently preparing an estimate for 2003.

30. A study by Szwarcwald (CL) and Carvalho (2001) included 132 sentinel sites and anonymous blood collections from 15,426 pregnant women. Overall 0.47% of women (95% CI 0.36, 0.58) were HIV infected. Using a gender ratio derived from recent AIDS reporting, rates in men of reproductive age were estimated at 0.84% (95% CI 0.65, 1.04). This gave a combined population prevalence of 0.65% (95% CI 0.51, 0.80) for the population aged 15-49 years nationwide. This well-done study is likely to be the best estimation available of the actual HIV infection rate in Brazil in 2000. Using wider (68%) confidence intervals and census data on the national population generates total numbers of HIV infections at 597,000 with a lower limit of 548,000 and an upper bound of 647,000. It is this study that generated the widely used figures of 0.65% HIV prevalence and the estimate of 600,000 people living with HIV in 2000, and there is little reason to think that these estimates are substantially lower or higher than the 68% confidence intervals. While the history of HIV/AIDS suggests complacency is always a danger, the characterization of a still concentrated epidemic seems, on the whole, correct.

The modes of transmission of the epidemic, the prevalence and behaviors of high-risk groups, and the prevalence by region of the country have evolved since the early 1980s. From 1980 to 1990 sexual transmission accounted for 63.8 percent of AIDS cases and this has gradually increased to 74.4 percent of AIDS cases in 2000. Within this category, transmission through MSM decreased by more than half from an estimated 47.4 percent of all AIDS cases during the 1980s to 20.3 percent in 2000, while the share of cases attributable to heterosexual transmission more than tripled from 16.4 percent to 54.1 percent. Heterosexual transmission is still limited to high risk groups (partners of IDUs and bisexual men and people with multiple partners). Transmission through intravenous drug use rose from an estimated 18.5 percent of total cases in the 1980s to a high of 24.8 percent in 1992 and subsequently declined in the ensuing years to 11.4 percent in 2000. Transmission by transfusion has decreased as a share of reported AIDS cases from 5.3 percent in the 1980s to 0.2 percent in 2000 and perinatal transmission rose from 1.8 percent in the 1980s to 2.5 percent in 2000 (see Table 1).

Table 1: Reported AIDS Cases by Mode of Transmission and Year of Diagnosis (percent)

	<i>Cumulative</i>	<i>Annual</i>					<i>Cumulative Total</i>
	<i>1980-90</i>	<i>1992</i>	<i>1994</i>	<i>1996</i>	<i>1998</i>	<i>2000</i>	<i>1980-2002</i>
Sexual	63.8	59.2	60.0	61.5	70.2	74.4	65.6
MSM	47.4	33.5	26.9	21.8	22.4	20.3	26.6
Hetero	16.4	25.7	33.1	39.7	47.8	54.1	39.0
IDU	18.5	24.8	21.4	17.9	13.3	11.4	17.2
Transfusion	5.3	2.4	1.8	1.7	0.2	0.2	0.5
Perinatal	1.8	2.8	3.4	4.0	3.3	2.5	3.0
Unknown	10.7	10.8	13.3	15.0	13.0	11.6	12.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100

Source: Ministry of Health Epidemiological Bulletin, March 2002.

Studies on the HIV prevalence of the highest risk groups reveal prevalence levels of 36.3 percent among IDUs, 10.8 percent among MSM and 6.5 percent among CSW (see Table 2) for recent years in various samples, most of them non-national. As noted in Table 2, these data must be interpreted with caution. Trend data on HIV prevalence over time are not available for these groups.

Incidence of AIDS in Brazil, as measured by year of diagnosis, increased from 8.2/100,000 in 1991 to a high of 18.2/100,000 in 1998 with a decline to 12.0 recorded in 2002, but patterns across regions vary. In 2002 the South surpassed the Southeast as the region with the highest incidence; and incidence rates in the North and Northeast, while showing slight decline in 2000, are still of concern (See Table 3). Again, trends in AIDS cases reflect levels of transmission that occurred some 10 years before.

Table 2: HIV Infection Rates and Risk Indicators for High-Risk Populations (IDU, CSW, MSM) in Brazil, 1999-2002

<i>Indicator</i>	<i>IDU</i>	<i>CSW c3/</i>	<i>MSM</i>
HIV prevalence	1999 a/ 52% 2001 b/ 36.3%	2001 6.5%	1994-99 10.8%
HCV prevalence	1999 60% 2001 56.4%	2001 4.5%	
Condom use	1999 42.1% 2001 62.9%	clients, 73.8% reg. partners 23.9%	2001 d/ reg part. 81% casual 95% 2002 e/ 70% use in all anal intercourse over last 6 months
Ever HIV tested	1999 52% 2001 66.4%	49.2%	2000 73% 2002 69%
Needle sharing	1999 70% 2001 59.4%		
Sample sizes	N 1999= 287 N 2001=869	N 2001= 3000	N 94-99= 1,082 N 2001= 800 N 2002= 1,200

Source: Ministry of Health/NASCP 2003, compiled from the following studies:

- a/ Federal University of Minas Gerais and NASCP on 287 IDUs in five cities
- b/ Federal University of Minas Gerais and NASCP on 869 IDUs in seven cities
- c/ Federal University of Brasilia and NASCP on 3000 CSW in five cities
- d/ Opinion poll carried out by IBOPE on 800 MSM in seven capital cities
- e/ Opinion poll carried out by IBOPE on 1,200 MSM in 10 capital cities

Note: All of these data need to be interpreted with caution. The first study on IDUs was of dubious quality and included only program users. The data on CSW condom use and HIV testing refer only to the CSWs who participated in the project. Use of condoms with clients by non-participating CSWs is less than that for participating CSWs (60% vs 74%) as is the percentage of those ever tested for HIV 36% vs 49%. Data on MSM for 1994-1999 relies on a very biased sample, given that more was considerable sample attrition.

Table 3: Reported AIDS Cases (number) and Incidence (per 100,000) by Region, 1980-2002

<i>Region</i>	<i>Cumulative</i>	<i>Annual</i>										<i>Total</i>
	<i>1980-1990</i>	<i>1992</i>		<i>1994</i>		<i>1996</i>		<i>1998</i>		<i>2000</i>		<i>1980-2003*</i>
	<i>Cases</i>	<i>Cases</i>	<i>Incidence</i>	<i>Cases</i>	<i>Incidence</i>	<i>Cases</i>	<i>Incidence</i>	<i>Cases</i>	<i>Incidence</i>	<i>Cases</i>	<i>Incidence</i>	<i>Case</i>
North	221	185	1.8	317	2.9	455	4.0	644	5.4	663	5.3	5992
Northeast	1637	1039	2.4	1405	3.2	2005	4.5	2773	6.1	2692	5.8	25905
Center West	760	653	6.8	925	9.2	1243	11.8	1330	12.1	1349	11.8	13824
Southeast	20723	11918	18.8	14067	21.5	17803	26.6	19295	28.0	16299	23.0	203537
South	1831	1523	6.8	2517	11.0	3813	16.2	5327	22.1	5470	22.1	48190
Brazil	25172	15318	10.3	19231	12.5	25319	16.1	29370	18.2	26474	15.9	297468

Source: Ministry of Health 2003

*Includes preliminary data through September 2003.

<i>2002</i>	
<i>Cases</i>	<i>Incidence</i>
606	4.5
2383	4.9
957	7.9
11861	15.9
5089	19.8
20897	12.0

Annex D. AIDS I and II: Presentation of Project Components

AIDS and STD Control Project I – Components

Prevention through:

- (a) information, education and communication (IEC) programs emphasizing targeted interventions to inform both the general population and, particularly, certain populations, of the risks of HIV/AIDS and means to prevent or treat it;
- (b) expanding medical staff capacity for diagnosing HIV, AIDS and STDs through increasing sites and upgrading staff expertise;
- (c) broadening public sector capacity and capability in counseling and testing and early intervention; and
- (d) condom procurement and distribution.

Services, including:

- (a) establishment of systems for identifying and treating STDs; and
- (b) integrating HIV/AIDS prevention and medical services with long-term counseling to improve access and delivery of services and to direct patients to effective, low cost substitutes for hospitalizations;

Institutional Development to build capacity to control HIV/AIDS and STDS through:

- (a) training of (mostly existing) health workers in service delivery, quality control and monitoring of AIDS, for laboratory testing and quality control, and for counseling and treatment across the SUS;
- (b) upgrading State Reference Laboratories to a basic standard in each macro-region to support HIV/AIDS and STDs testing; and
- (c) technical assistance;

Surveillance, Research and Evaluation through:

- (a) epidemiological surveillance;
- (b) program evaluation in IEC, counseling and testing, services and laboratory quality assurance; and
- (c) special studies, including epidemiological analysis and projections/ costs and cost effectiveness of interventions; and the economic impact of HIV/AIDS.

AIDS and STD Control Project II - Components

Prevention of AIDS and STD (\$128 million), including:

- (a) mass media campaigns to raise awareness and understanding of AIDS and STD transmission and promote safer practices;
- (b) promotion of safe practices through education, condom distribution and needle exchange programs;
- (c) targeted interventions among specific sub-groups at greater risk of contracting and/or spreading the HIV virus, including homosexual and bisexual men, intravenous drug-users, sex workers; adolescents, prisoners, truck drivers, and others; and preventive activities oriented to other vulnerable groups such as women and low income populations;
- (d) a National Human Rights Network promoting non-discrimination against persons with HIV/AIDS;
- (e) NGO executed sub-projects for AIDS and STD prevention, selected on a competitive basis; and
- (f) Counseling services and dial-in AIDS information (Pergunte AIDS).

Diagnosis, Treatment and Care for persons with HIV, AIDS and STD (\$102 million) that would support/improve:

- (a) the operation, standardization and quality control in diagnostic laboratories; implementation of nearly 100 new anonymous testing and counseling centers (CTAs) and maintenance of selected existing CTAs; support municipal public health laboratories through the purchase of equipment and supplies for viral load cd4 cell and other diagnostic testing; *in complement to the investments being financed by the REFORSUS project in public labs, blood banks and control of transfusions*;
- (b) care and treatment of persons with HIV, AIDS and STD including about 80 group homes (casas de apoio) for the care of AIDS patients and about 40 homes for orphans of AIDS; it would also support about 80 existing specialized care units, 30 existing day hospitals, 40 existing home care programs and AIDS in-patient care in about 100 hospitals;
- (c) strengthening of STD diagnosis and treatment services through: training in STD case management; licensing of about 10 national STD reference centers which will review and test norms and procedures and undertake special studies; and provision of re-agents, drugs, condoms, educational materials and other supplies; and
- (d) implementation of a centralized logistical control system for drugs and condoms, the implementation of a cost control system for HIV/AIDS care and the development of a reference system for gynecological care of HIV positive women.

Institutional Strengthening (\$70 million) of Executing Agencies Responsible for AIDS and STD Control, in support of:

- (a) epidemiological surveillance including sentinel surveys for HIV/AIDS and expansion or upgrading of the HIV and STD case notification system, as well as a national study of STD transmission, HIV prevalence studies among specific risk groups, HIV sub-type studies and other epidemiological studies;
- (b) the National Reference Laboratories for HIV and STD including support for quality control in lab testing, expansion of the national network for STD drug resistance studies, implementation of a network to monitor HIV susceptibility to anti-retroviral therapy;
- (c) training activities, including training of CN-DST/AIDS staff, specialized training of health workers involved in prevention and treatment among high-risk groups, training for NGO personnel in project development and reporting, as well as training in counseling and testing, epidemiology and laboratory diagnostics for AIDS and STD;
- (d) research, including studies of survival, case notification delay, opportunistic, epidemiology and projections, cost and impact, behavioral change, AIDS among indigenous populations and in mining camps and extractive reserves, a national study of sexual behavior change, and others. The component would also support selection of, and support for, about 3 scientific centers of excellence to carry out long term multidisciplinary research; and monitoring and evaluation activities, including strengthening supervision and evaluation of CTAs, public health labs, and the syphilis case investigation network; evaluation of all state and municipal institutions undertaking project activities; evaluation of NGO projects including monitoring of 80 NGO projects, KAP studies on impact of preventive activities in the workplace; workshops for NGO participants on evaluation; preparation of monitoring and evaluation reports; project impact studies; and evaluation of interventions among specific populations.

Annex E. Project Costs and Financing

Table E-1: AIDS I
Project Cost by Component
 (US\$ million)

Component	Appraisal Estimates*		Actual Cost**		
	Base Cost	Full Cost	Amount	% of Base	% of Full
Prevention	93.9	102.7	120.0	128%	117%
Services	75.7	84.6	75.0	99%	89%
Institutional Dev	42.3	46.5	47.5	112%	102%
Surveillance, Research And Evaluation	14.6	16.2	7.5	51%	46%
Phys. Contingencies	8.7	-			
Price Contingencies	14.8	-			
Total Project Cost	250.0	250.0	250.0		100%

*Source: Project Appraisal Document – PAD

**Source : Implementation Completion Report

Table E-2: AIDS II
Project Cost by Component
 (US\$ million)

Component	Appraisal Estimates *		Actual Cost**		
	Base Cost	Full Cost	Amount	% of Base	% of Full
Prevention	119.0	128.0	132.92	112%	104%
Diagnosis, Treat- ment, Care	94.0	102.0	87.23	93%	86%
Institutional Strengthening	65.0	70.0	76.35	117%	109%
Phys. Contingencies	0	-			
Price Contingencies	22.0	-			
Total Project Cost	300.0	300.0	296.50		99%

* Source: Project Appraisal Document -- PAD

** Source : Relatório de Implementação e Avaliação 1998 a 2003, Acordo de Empréstimo BIRD 4392/BR – Projeto AIDS II, Versão Preliminar, Ministério da Saúde, Secretaria de Vigilância em Saúde, Programa Nacional de DST e Aids, Brasília-DF, agosto de 2003

Table E-3: Transfers to Local Government through AIDS I Nominal US Dollars

State	Transfers 1994-1998	Population 2000	Total per capita (2000)
Acre	\$690,902	557,882	1.24
Alagoas	\$830,654	2,827,856	0.29
Amapá	\$328,544	477,032	0.69
Amazonas	\$973,099	2,817,252	0.35
Bahia	\$4,641,070	13,085,769	0.35
Ceará	\$5,359,740	7,431,597	0.72
Distrito Federal	\$5,260,998	2,051,146	2.56
Espirito Santo	\$1,191,234	3,097,498	0.38
Goiás	\$1,376,667	5,004,197	0.27
Maranhão	\$1,825,543	5,657,552	0.32
Mato Grosso	\$1,567,443	2,505,245	0.62
Mato Grosso do Sul	\$4,075,972	2,078,070	1.96
Minas Gerais	\$4,227,125	17,905,134	0.24
Pará	\$2,350,517	6,195,965	0.38
Paraíba	\$1,281,765	3,444,794	0.37
Paraná	\$7,053,120	9,564,643	0.74
Pernambuco	\$4,453,386	7,929,154	0.56
Piauí	\$2,683,067	2,843,428	0.94
Rio de Janeiro	\$14,732,832	14,392,106	1.02
Rio Grande do Norte	\$2,777,622	2,777,509	1.02
Rio Grande do Sul	\$5,741,235	10,187,842	0.56
Rondônia	\$1,165,395	1,380,952	0.84
Roraima	\$1,224,480	324,397	3.77
Santa Catarina	\$6,081,919	5,357,864	1.14
São Paulo	\$30,909,393	37,035,456	0.83
Sergipe	\$1,611,172	1,784,829	0.90
Tocantins	\$1,425,299	1,157,690	1.23
Total/Average	\$115,840,193	169,872,859	0.68

Source: Ministry of Health, NASCP

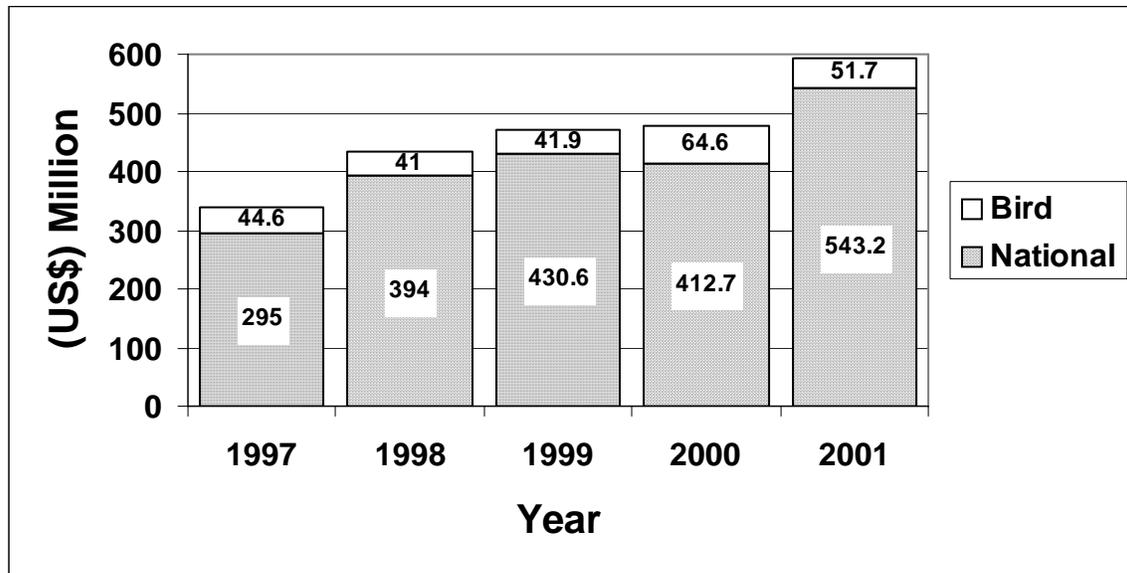
Table E-4: Project Financing**Brazilian Government
Investment in STD/AIDS
(1997–2001)**

Table E-5: Transfers to NGOs in AIDS I and AIDS II, by state

State	No. NGOs Support	Outreach	Total	Population	Per capita outreach spending (% of average)	Per capita spending (% of average)	
North							
Amazonas	8	\$30,387	\$163,844	\$194,231	2,817,252	46%	58%
Acre	10	\$34,185	\$283,201	\$317,386	557,882	379%	506%
Amapá	6	\$43,557	\$31,166	\$74,723	477,032	104%	65%
Para	25	\$302,882	\$326,930	\$629,812	6,195,965	68%	53%
Rondônia	14	\$19,435	\$237,646	\$257,081	1,380,952	124%	172%
Roraima	3	\$10,039	\$43,845	\$53,884	324,397	111%	135%
Tocantins	7	\$0	\$86,279	\$86,279	1,157,690	50%	74%
Northeast							
Alagoas	6	\$93,683	\$52,444	\$146,127	2,827,856	34%	19%
Bahia	44	\$351,337	\$1,070,365	\$1,421,702	13,085,769	72%	82%
Ceará	46	\$244,589	\$915,160	\$1,159,749	7,431,597	104%	123%
Maranhão	10	\$44,948	\$161,729	\$206,677	5,657,552	24%	29%
Paraíba	17	\$241,374	\$300,962	\$542,336	3,444,794	105%	87%
Pernambuco	22	\$250,710	\$717,311	\$968,021	7,929,154	81%	90%
Piauí	10	\$83,816	\$107,149	\$190,965	2,843,428	45%	38%
Rio Grande do Norte	10	\$66,188	\$235,225	\$301,413	2,777,509	72%	84%
Sergipe	12	\$91,130	\$274,466	\$365,596	1,784,829	137%	153%
Center-West							
Mato Grosso	16	\$34,869	\$268,967	\$303,836	2,505,245	81%	107%
Mato Grosso do Sul	31	\$77,907	\$678,721	\$756,628	2,078,070	243%	326%
Goiás	21	\$350,425	\$327,932	\$678,357	5,004,197	90%	65%
Distrito Federal	35	\$397,388	\$589,357	\$986,745	2,051,146	321%	287%
Southeast							
Espírito Santo	14	\$62,040	\$133,872	\$195,912	3,097,498	42%	43%
Minas Gerais	32	\$601,722	\$554,654	\$1,156,376	17,905,134	43%	31%
Rio de Janeiro	124	\$1,152,101	\$2,717,906	\$3,870,007	14,392,106	179%	188%
São Paulo	185	\$2,594,280	\$3,780,495	\$6,374,775	37,035,456	115%	102%
South							
Paraná	45	\$307,852	\$1,110,555	\$1,418,407	9,564,643	99%	116%
Rio Grande do Sul	45	\$608,063	\$1,061,197	\$1,669,260	10,187,842	109%	104%
Santa Catarina	35	\$345,975	\$795,091	\$1,141,066	5,357,864	142%	148%
Brazil	830	\$8,440,882	\$17,026,468	\$25,467,350	169,872,859	100%	100%

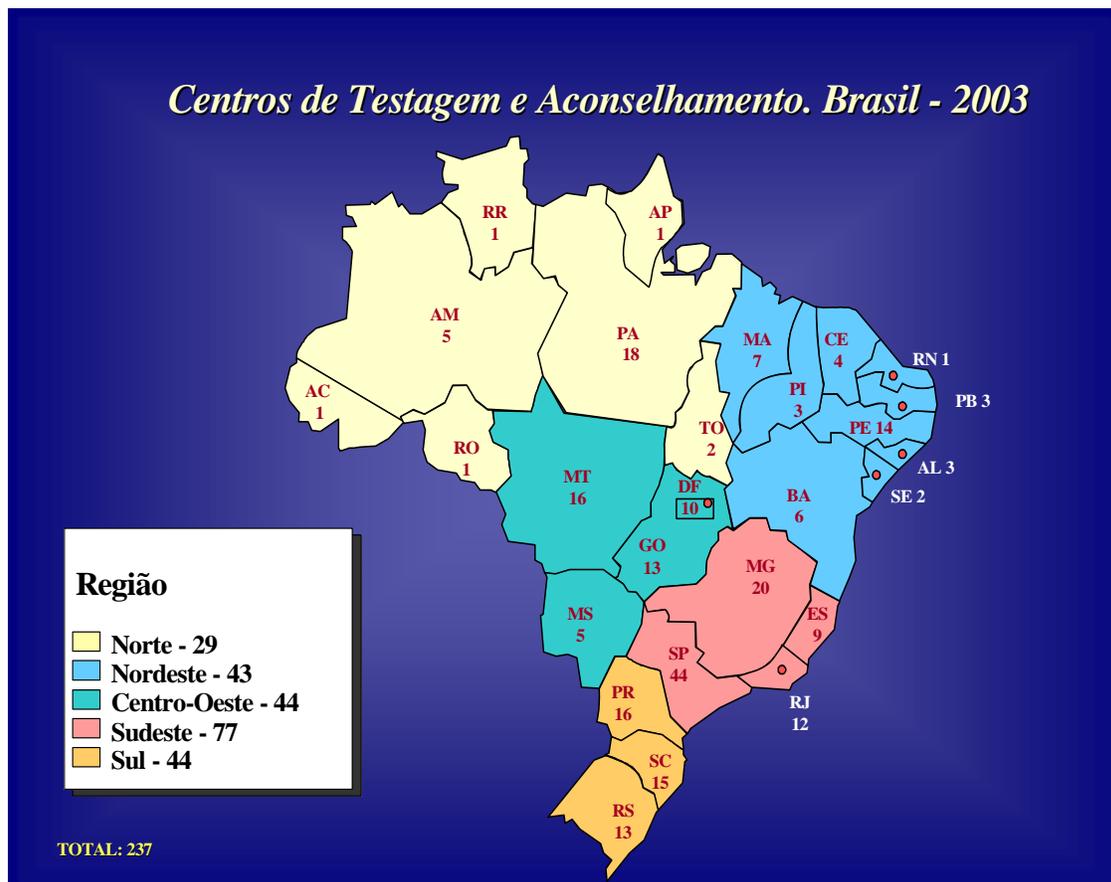
Annex F. Selected Data on Project Performance

Table F-1: STD Case Reports by year. Brazil, 1996-2001.

STD	1996	1997	1998	1999	2000	2001	TOTAL
Cervicitis	826	241	373	6.893	24.703	32.212	65.248
HPV	659	389	1.867	5.941	15.852	15.570	40.278
Genital Herpes	44	94	172	790	2.131	2.204	5.435
Syphilis	2.710	1.254	2.395	11.496	15.968	13.138	46.961
Genital Ulcers	69	49	101	1.083	2.696	2.861	6.859
Urethritis	1.165	796	2.075	10.940	21.974	19.188	56.138
Congenital syphilis	376	2.025	3.868	4.366	4.487	3.316	18.438
TOTAL	5.849	4.848	10.851	41.509	87.811	88.489	239.357

Source: SINAN

Table F-2: Number and Distribution of Counseling and Testing Centers (CTAs) in Brazil 2003



Source: NASCP, 2003

Table F-3: AIDS admissions in the SUS, Number of Admissions Avoided and Resource Savings, 1996-2001

	1996	1997	1998	1999	2000	2001
No. of AIDS admissions registered in DATASUS	25.458	25.157	24.700	25.027	26.655	25.274 (*)
Estimated number of patients attended by SUS (year)	15.390	31.140	43.823	57.604	69.447	90.400
Average number of admissions/patients by year.	1,65419	0,81	0,56	0,43	0,38	0,28
Estimated number of admissions in year, maintaining average number of admissions for 1996		51.511	72.491	96.542	114.876	149.539
Estimated number of admissions avoided in year		26.354	47.791	71.54	88221	124.265
Estimated cost of admissions avoided in year (US\$million)		76.27	138.31	207.06	255.32	359.64

(*) figures up to 30/11/2001

Table F-4: Average Cost (US\$) of ARV Therapy by Patient/Year Brazil, 1996 to 2002*

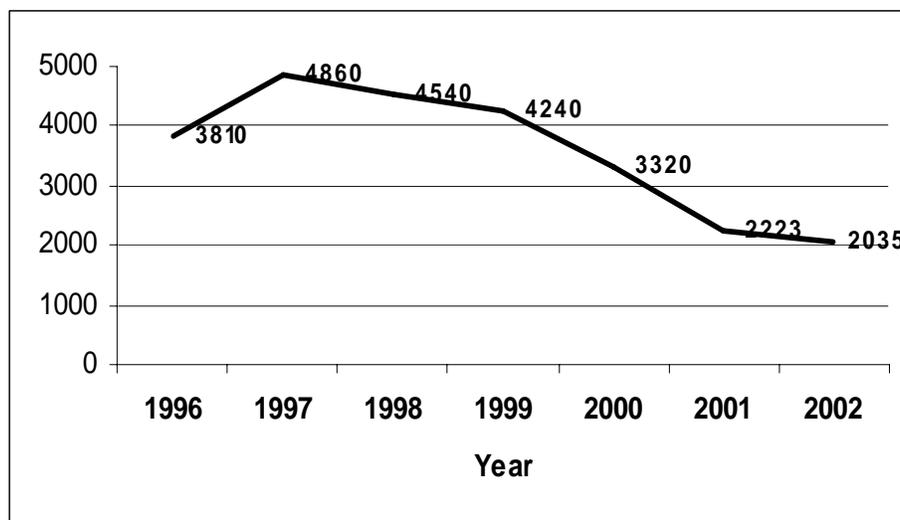


Table F-5: Targeted Interventions for Commercial Sex Workers, Injection drug users and Men who have Sex with Men: 1998–2003

Target Group	N° of Projects	Total	Population Covered	Estimated Population	Rate of Coverage
CSW	1999 –	25	899.396		
	2000–	54			
	2001 –	106			
	2002 –	235			
	2003 –	127			
		547			
IDU	1998/99 –	30	145.807	800.000	18,2%
	2000 –	49			
	2001–	125			
	2002 –	160			
	2003 –	267			
		631			
MSM	1999 –	17	3.074980	3.200.000	96%
	2000 –	30			
	2001 –	57			
	2002 –	138			
	2003 –	234			
		486			

Source: Ministry of Health/NASCP 2003

Table F-6: HIV SEROPREVALENCE BY TYPE OF GROUP/SENTINEL SITE AND REPORTING PERIOD BRAZIL 1997 – 2000

Reporting Period	Group	# Sites	# Persons Tested	HIV-positive		Confidence Interval of 95%
				#	%	
March 1997	STD patients	19	3392	143	4,22	[3,54 – 4,89]
	Pregnant women	32	6091	71	1,17	[0,90 – 1,44]
	Emergency room patients	27	5100	220	4,31	[3,76 – 4,87]
October 1997	STD patients	36	6102	205	3,36	[2,91-3,81]
	Pregnant women	55	10234	89	0,87	[0,69-1,05]
	Emergency room patients	44	7941	342	4,31	[3,86-4,75]
March 1998	STD patients	38	7247	221	3,05	[2,65– 3,45]
	Pregnant women	55	10656	58	0,54	[0,40 – 0,68]
	Emergency room patients	44	8288	173	2,09	[1,78 – 2,40]
Outubro De 1998	STD patients	32	6327	179	2,83	[2,42 – 3,24]
	Pregnant women	51	10218	61	0,60	[0,45 – 0,75]
	Emergency room patients	41	8214	217	2,64	[2,30 – 2,99]
March 1999	STD patients	36	6901	121	1,75	[1,44 – 2,06]
	Pregnant women	61	12081	90	0,74	[0,59 – 0,90]
	Emergency room patients	45	8869	213	2,40	[2,08 –2,72]
October 1999	STD patients	39	6711	198	2,95	[2,55 – 3,36]
	Pregnant women	64	11222	91	0,81	[0,64 – 0,98]
	Emergency room patients	46	8688	248	2,85	[2,50 – 3,20]
2 nd Semester 2000	Pregnant women	128	15426	88	0,57	[0,45 – 0,69]
	STD patients	25	4636	124	2,67	[2,21 – 3,14]

Source: Ministry of Health/NASCP Statistics

Table F-7: Brazil AIDS II: Distribution of Targeted Interventions

<i>Region</i>	<i>Civil Society Projects</i>		<i>MSM Projects</i>		<i>Prison Projects</i>		<i>Truck Driver Projects</i>			
	<i>Inci- dence 2000</i>	<i>% Total Pop</i>	<i>US\$</i>	<i>% share</i>	<i># Proj</i>	<i>% share</i>	<i># Proj</i>	<i>% share</i>	<i># Proj</i>	<i>% share</i>
Center	9.8	7	6.4	9	59	13	5	8.5	1	4
West										
Northeast	5.0	28	11.1	16	122	26	11	19	2	7
North	3.8	8	4.2	6	21	4	5	8.5	7	26
Southeast	16.9	42	36.4	52	209	44	25	42	10	37
South	18.7	15	11.6	17	61	13	13	22	7	26
Total/ Average	12.4	100	69.7	100	472	100	59	100	27	100

<i>Region</i>	<i>Projects Targeted to Poor</i>		<i>Women's Projects</i>		<i>NGO Projects for Adolescents</i>		<i>Projects for Resettled Populations</i>		<i>Indigenous Peoples Projects</i>	
	<i># Proj</i>	<i>% share</i>	<i># Proj</i>	<i>% share</i>	<i># Proj</i>	<i>% share</i>	<i># Proj</i>	<i>% share</i>	<i># Proj</i>	<i>% share</i>
Central	12	8	na	7	18	16	21	29	15	34
West										
Northeast	36	22	na	23	28	25	23	32	2	5
North	9	6	na	6	4	4	13	18	17	39
Southeast	90	56	na	45	50	45	12	16	5	11
South	13	8	na	19	11	10	4	5	5	11
Total	160	100	na	100	111	100	73	100	44	100

Source: Ministry of Health/NASCP 2003

Table F-8: Brazil AIDS II. Share of Projects vs. Share of Total Population

<i>Region</i>	<i>AIDS Case Incidence for 2000 (per 100,000 population)</i>	<i>% of Total Population</i>			
			Less than	Equal to (within 3 percentage points)	More than
Center West	9.8	7		C. Society: 9% Tr. Drivers: 4% Poor: 8% Women: 7% Prisoners: 8.5%	MSM: 13% Indigen: 34% Adolesc.: 16% Resettled: 29%
Northeast	5.0	28	C. Soc: 16% Prisoners: 19% Tr. Drivers: 7% Poor: 22% Women: 23% Indigenous: 5%	MSM: 26% Adolesc. 25%	Resettled : 32%
North	3.8	8	MSM : 4% Adolesc.: 4%	Prisoners: 8.5% C. Soc: 6% Poor : 6% Women : 6%	Tr. Drivers: 26% Resettled: 18% Indig: 39%
Southeast	16.9	42%	Tr. Drivers: 37% Resettled: 16% Indig: 11%	Prisoners: 42% MSM: 44% Women: 45% Adolesc: 45%	C. Soc: 52% Poor: 56%
South	18.7	15%	Poor: 8% Adolesc: 10% Resettled: 5% Indig: 11%	MSM: 13% C. Soc: 17%	Prisoners: 22% Tr. Drivers: 26% Women: 19%

Annex G. Borrower Comments

Ministry of Health Health Surveillance Secretariat National STD/AIDS Control Program

COMMENTS ON THE ASSESSMENT REPORT ON THE AIDS I AND AIDS II PROJECTS, PREPARED BY IBRD

The IBRD Operations Evaluation Department submitted a draft Project Performance Assessment Report on the First and Second AIDS and STD Control Projects (IBRD Loans 3659-BR and 4392-BR) to the National STD/AIDS Control Program (NASCP), with the request that the National Program (NP) review the draft and provide feedback on the document.

After a process of shared team work by the NP units, the following comments were produced and submitted.

Epidemiological surveillance: In accordance with the UNAIDS guidelines, Brazil is required to develop Second Generation Surveillance by combining a set of strategies designed to ensure "information useful for action in public health." These strategies are: universal and compulsory notification of AIDS (since 1986) and of Seropositive Pregnant Women and Exposed Newborns (since 2000); sentinel surveillance of HIV and risky behaviors (by means of formation of sentinel groups and sentinel services); monitoring of HIV prevalence in more vulnerable populations; and performance of cross-section studies in the general population and among groups at high risk of infection, in addition to cross-linking of the national databases (National Notification System for Communicable Diseases, Mortality Data System and Hospital Data System, plus SICLOM [Control of pharmaceutical procurement, stock and distribution information system], SI-CTA [Information Systems - Testing and Counseling Centers] and SISCEL [Control of laboratory tests and examinations of the AIDS/STD program]).

In the case of AIDS I, *"150 sentinel surveillance sites (target: 80) were established in maternity clinics, emergency rooms [these sites did succeed in generating data on HIV prevalence in time for the evaluation of the AIDS I project] and STD clinics [not considered reliable]"* (pp.13-14, paragraph 4.11) and, in addition, *"research and studies undertaken with project support provided important information and insight on HIV and behavioral trends"* (p. 14, paragraph 4.12). In point of fact, the research was not only financed by the NASCP but actually formed its surveillance system.

With regard to the AIDS II project, 2001 was the year in which we started setting up the Testing and Counseling Centers Information System for STD/AIDS (SI-CTA), with the aim of generating a continuous flow of reliable and representative data for serological and behavioral surveillance of HIV among pregnant women and some groups at high risk of infection. In 2003, during the time of the Bank mission, there were already data recorded in this system and it is not true that *"at the close of AIDS II, surveillance is still limited to pregnant women and military conscripts,"* that *"no routine surveillance was undertaken during 2001 and 2002,"* and that *"the data for 2003 is not yet available"* (pp. 22-23, paragraph 4.33).

The incidence of AIDS is remaining stable, at around 25,000 new cases per year, or 15 new cases per 100,000 inhabitants five years ago. As regards HIV infection, a study of HIV prevalence among pregnant women, on a populational basis, performed in 2000 in 140 maternity clinics, indicated an HIV prevalence among pregnant women in Brazil of 0.61% (CI95% 0.48%-0.73%). If this finding is compared with those of prevalence studies among pregnant women done in sentinel sites from March 1997 to October 1999, the stabilization of HIV infection in this population is also apparent (March/97 - 1.2%; October/97 - 0.8%; March/98 - 0.5%; October/98 - 0.6%; March/99 - 0.7%; October/99 - 0.8%). *"It can be noted that some 20 years after the first AIDS cases were identified in the country, Brazil's HIV epidemic remains concentrated among a high-risk population, the prevalence of HIV having been reliably estimated by MoH at 0.65 percent of reproductive age adults"* (pp.15-16, paragraph 4.15).

With regard to the monitoring of the sexual behavior of the population in general, special mention should be made of the performance of a nation-wide research study in 1998 designed precisely to serve as a baseline for surveillance of the Brazilian population's sexual behavior in AIDS II. The repeating of this study in 2004 will enable an assessment of the trends of the Brazilian urban population's sexual behavior in the interval between the two studies, while also serving as a baseline for AIDS III, which will greatly facilitate the assessment of the effectiveness and impact of this project and of the Brazilian program in general.

As regards "a routine of behavioral and HIV surveillance" among groups at high risk of infection (MSM, commercial sex workers (CSWs) and intravenous drug users (IDUs)), studies were done with CSWs (1 section) and IDUs (2 sections), while a study among STD carriers is in the final phase of execution and special studies (assigning priority to the MSM population) are to be carried out with project support. However, it is clear that Brazil *"must give priority to and expand its surveillance efforts to enable routine and systematic monitoring and analysis of HIV infection trends, and of behavioral trends among target populations"* and that *"the surveillance of HIV infections and of behaviors must focus on the high-risk groups"* (MSM, IDUs, CSWs), without neglecting the monitoring of trends among the population in general, and paying special attention to the links between these two groups, particularly through the bridge populations (female partners of IDUs and bisexuals, and clients of CSWs).

AIDS III is supporting Brazil in its efforts to fully explore the huge volume of data currently available from studies and research, but it is certain that this will not eliminate the present and future need to gather data on HIV and on the behavior of the target populations. We do not agree, however, that behavioral and HIV surveillance among high-risk groups should be done annually, or that it can be performed more efficiently at the state level.

Finally, it must be emphasized regarding the actual collection of the information by the members of the World Bank mission, that with the evaluation being focused as it was on surveillance, monitoring and evaluation activities, one might have expected that the team and its technical managers would have been consulted in the information-gathering process.

The National STD/AIDS Control Program is constantly seeking to refine its actions and intervene effectively to control the epidemic. The criticisms expressed by the members of the Bank mission will be taken into consideration and, where pertinent, will serve to improve the quality of the program; however, we cannot refrain from pointing out that a good part of them derive from incomplete analyses or information obtained from interlocutors insufficiently familiar with the STD and HIV/AIDS surveillance system operated by the Ministry of Health.

Monitoring and Evaluation: During the implementation phase of AIDS I, in the period between 1994 and 1998, some individual cross-section studies of the KAPB (Knowledge, Attitudes, Practices and Behaviors) type were made which produced baseline information generating indicators of behaviors and testing and counseling services. In partnership with the SESI/Nacional, for instance, a population-based study was done covering industrial-sector workers and also young men conscripted into the Brazilian army. These studies made it possible to assess variables associated with condom use, risk perception and sexuality. In the case of the conscripts, the KAPB study was also correlated with serological evaluation, thereby marking the start of second generation surveillance in the country. During the same period, an opinion study was also carried out by Datafolha and CGT among urban workers, in order to evaluate the national campaigns and the knowledge, attitudes and risk perceptions of those workers. These studies provided the baseline for the HIV/AIDS prevention activities in the workplace. Regarding the CSWs and prospectors, two rapid assessments were conducted to ascertain the scope of the situation and of the vulnerability contexts of those populations, focusing on social groups, social mobilization, perceptions of risk and condom use. These studies used the tools derived from the ethnographic method. The methodology employed made intensive use of in-depth interviews, focus groups, document consultation and interviews with key informants.

In the same period, a study involving serology and evaluation was made with IDUs, based on harm reduction centers. This study used the capture and recapture method and made it possible to determine the scale of the incidence of HIV among IDUs, as well as to obtain behavioral data in the five sites involved. In addition, the research also made it possible to establish the baseline for the IDU population. As regards the Testing and Counseling Centers (TCCs), the STD/AIDS program also produced, in the same period, a qualitative evaluation study of the actions connected with testing, counseling and the quality of the services. This research served to guide the restructuring of the TCCs and promoted changes in the approach adopted to the most vulnerable groups.

The implementation period of AIDS II confirmed the need to carry out evaluation actions and to proceed with the preparation of the National Evaluation Plan, which envisioned formulation of indicators and their linking with the program management process. The intent of these initiatives was to move beyond the fragmentation stage and the residual nature attributed to the evaluative processes of the implementation period of AIDS I. A more integrated process was accordingly set in motion which combined the need to produce knowledge with the generation of data to assist the decision making process. It was in this phase that studies were produced on epidemiological trends and generation of baselines for different segments of the population while at the same time the use of the evaluative processes as management support instruments was consolidated. One of the most important studies in this period was the household survey on sexual behavior of the Brazilian population aged between 16 and 65 years, done by CEBRAP in December 1998 in the 169 microregions of the country.

The main lines of action pursued in this period included the studies to evaluate the National STD/AIDS Program's intervention in populations with greater inherent vulnerability, such as CSWs, IDUs and adolescents, which were defined in conjunction with the World Bank in the AIDS II loan agreement. Another significant initiative in this period, within the scope of AIDS II, was the formulation of a set of indicators for monitoring and evaluation of the effectiveness of actions undertaken within the framework of the loan agreement. Also during this period, information technologies were devised for facilitating the monitoring and evaluation of actions to assist and treat persons living with HIV/AIDS, for example SISCEL and SIAIDS [Information System of AIDS Project], while recognizing that these systems present limitations, with a view to fostering their full implementation as evaluation tools. Another step worthy of

mention was the establishment of the evaluation program for external quality of laboratory examinations for monitoring the performance of the public health laboratories in connection with testing for HIV and viral load.

From the organizational standpoint, the National STD/AIDS Program's structure for the implementation of evaluation actions was located in the *Assessoria de Planejamento e Avaliação* (ASPLAV - Planning and Evaluation Advisory Unit), which has assumed the primary function of reducing the degree of segmentation formerly prevailing in these processes. Notwithstanding the substantial advances achieved, efforts have been concentrated on planning and the search for a sustainable policy that will ensure continuity of the program's actions for dealing with the epidemic in Brazil.

Redefinition of the Monitoring and Evaluation Strategy for the National STD/AIDS Program

Recognizing the strategic importance of the recommendations made by the various World Bank missions during the implementation of the AIDS I and AIDS II projects, as of the beginning of 2003 the National STD/AIDS Program redefined its strategy for strengthening the monitoring and evaluation (M&E) of its activities--M&E were always present in some form in the program's activities, albeit not on a very systematized basis--with the creation of an Evaluation Area located in ASPLAV. The area team currently consists of two internal consultants and two external consultants, plus one evaluation expert and another expert in epidemiology and data analysis, while it is also able to draw on technical and financial support from the Global Aids Program of the Centers for Disease Control and Prevention (CDC-GAP).

In the past year, the Evaluation Area developed the National Evaluation Plan (NEP) for the National STD/AIDS Program, which plan focuses basically on monitoring of impact and results. The strategic thrust of this plan presumes extreme diversity and complexity of the Brazilian program and sets two fundamental premises: (a) the commitment inherent in the institutionalization and decentralization of the evaluative processes, and (b) an integrational approach that renders viable evaluation of the program based on its real incorporation into the country's health system.

In March of the present year, the National Public Health School (ENSP/FIOCRUZ), in partnership with the National STD/AIDS Program and CDC-GAP, launched the *Postgraduate Course (Specialization and Master's conferring professional qualification) in Evaluation of Programs for Controlling Endemic Processes, with emphasis on STD/HIV/AIDS*. This course is the chief strategy for decentralization and institutionalization of M&E activities. It aims to train teams for the STD/HIV/AIDS programs of the various levels of government, but assigning priority to the national level and to the technical staff of the five sites of excellence in evaluation.³¹

Recognition of the National STD/AIDS Program efforts in M&E

The National STD/AIDS Program's efforts in establishing the process of institutionalizing and decentralizing M&E activities are already gaining recognition, as for

31. Five sites of excellence have been strategically selected that will serve to foster and promote M&E activities in each of Brazil's five regions. These sites are Manaus, the State of Pernambuco, the State of São Paulo, Curitiba and Campo Grande.

instance in a cable³² sent by the U.S. Embassy in Brazil, in which, under the heading "Experts praise, discuss next steps for CDC Aids Monitoring and Evaluation Program," it is stated that:

"Throughout the course of the meetings and at its conclusion, the CDC representatives in attendance expressed their optimism about the M&E unit and its training programs, which they agreed showed great potential and represented a necessary evolution in Brazil's HIV/AIDS Control Program."

Then the World Bank itself, following its last mission,³³ declares that:

"The mission was most satisfied with the progress achieved in establishing the monitoring and evaluation system for the program. The team has been strengthened and now there is a unit chief and a statistics expert, and it can draw on support as needed from FIOCRUZ and the collaboration of CDC. These partnerships have proven very fruitful....The National Evaluation Plan has been refined to include, in addition to evaluation of results, the construction of a system for monitoring the establishment of the program and the creation of an evaluation culture. With the collaboration of the CDC the National Plan personnel are being trained in M&E and five centers of excellence are being established in two state and three municipal coordinating entities.... The results of the efforts of recent months are already being felt. The NP management units are focusing on results, the Terms of Reference for studies are including the participation of the M&E unit, the findings of the IBOPE survey were used in the design of the last national campaign on testing, the campaigns are starting to be evaluated, and the management units at the national and state level are requesting assistance in preparing monitoring tools."*

EQUITY

- The NP takes steps to reduce inequality of access to health for the various segments of the population with differing degrees of vulnerability. The challenge of expanding populational coverage to these segments is one of this program's commitments.
- The actions to assist persons living with HIV/AIDS and STD carriers promoted by the National STD/AIDS Program are included in the unified public health system (SUS) and the directives and standards that regulate the establishment and implementation of the SUS are observed by means of constant agreements between its three levels of management, which operate under a directive to promote equity.
- Access to health services and diagnosis and treatment inputs for these citizens, while not yet uniform throughout all of Brazil's vast national territory, is guaranteed by legal rules and instruments, and the NP is continually supporting the states with a view to expanding this access and the care and assistance network, and using new technologies with the aim of ensuring not just quick and easy access to care but also improving the quality of the care by making it more effective in managing and resolving problems.
- The active and intense participation of organized civil society is spurring the NP to continually seek solutions that are better aligned with the SUS and with the needs of its users.
- Tables E-7 and E-8 of Annex E are not in the report submitted, so a better analysis is not possible.

32. Document generated by the Department of Science and Health and sent to all U.S. embassies and Washington, with a view to sharing successful experiences.

33. Quotation from the Aide Mémoire of the Partial Supervision Mission of December 8-12, 2003.

* [Translator's note: citation translated without reference to the original].

Some errors noted:

Preface, under vii, first paragraph: The amount of the AIDS II agreement....was US\$165.0 million IBRD and US \$135 million national counterpart funds, amounting to a total cost of US\$300 million. The total funds released by IBRD were US\$161.5 million after deduction of the misprocurement in the AIDS I project in the amount of US\$3.5 million from IBRD. The total amount applied in AIDS II was accordingly US\$296.5 million.

Page 4, under 1.10: In 2000,135,000 are on ART

At the end of 200, about 93,500 patients were receiving ART and at the end of 2003 this number had grown to 140,000.

Page 5, under 2.4: The number of municipalities in AIDS I was 43 and not 41.