**BRAZIL**
**Ministry of Health**
**Health Surveillance Secretariat**
**Department of Surveillance, Prevention and Control of STI and AIDS**
**National Health Foundation**

# BRAZIL: AIDS – SUS PROJECT

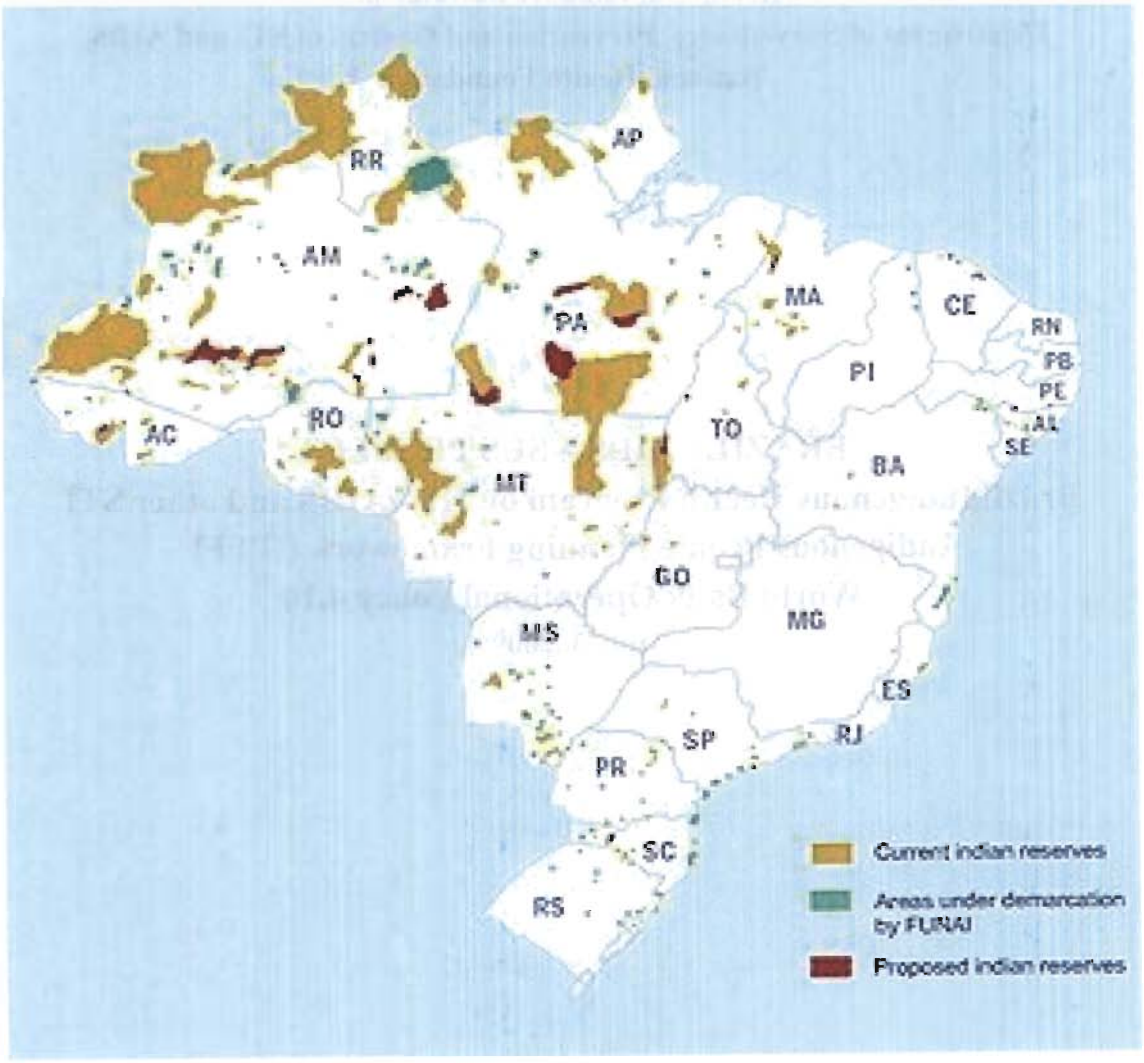
## Brazil Indigenous Health Program on HIV/AIDS and other STI

## Indigenous People Planning Framework (IPPF)

## World Bank Operational Policy 4.10

**July 3, 2009**

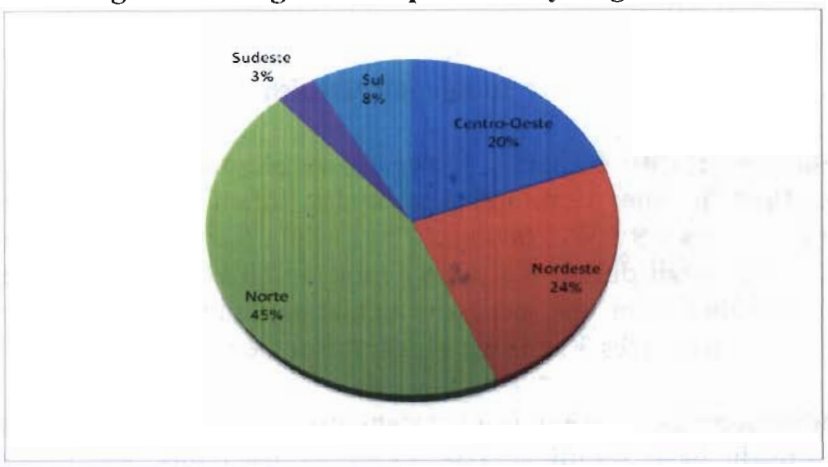
1. **After a long period of population loss, the Brazilian Indian population is growing at an estimated 3.5% rate per year, contrary to what is happening with other indigenous people in the world.** In the last decade, there were high levels of fertility, combined with the fall - though slow - in mortality. This phenomenon has been defined as "demographic recovery." The Brazilian indigenous population has an estimated 530,000 people, of 225 different ethnic groups, spread over 34 Special Indigenous Sanitary Districts (DSEI), and speaking 180 different languages. Between 100,000 to 190,000 live outside indigenous lands, in state capitals and other metropolitan areas, and there are groups that have not been contacted. The indigenous population is 0.25% of the Brazilian population and 2% of the indigenous population of the Americas.




2. **About 60% of the indigenous population live in the Amazon, where 99% of indigenous lands are located, while the other 40% live in land in the East, Southeast, South and Northeast country.** Brazil has 633 officially recognized indigenous lands, corresponding to 14% of the national territory. Most of these lands are concentrated in the Amazon; 405 of them represent 21% of the Amazon and 99% of indigenous land. The rest of the indigenous lands are spread among the Northeast, Southeast, South and the state of Mato Grosso do Sul. The indigenous communities are small - 28% consist of up to 200 people, 40% have between 200 and

1,000 people, and only three communities have more than 20,000 people. Besides the widespread socioeconomic inequality between indigenous and non-indigenous population, there are significant inequalities within this population.

**Figure 1. Indigenous Population by Region 2007**




Source: SIASI FUNASA

3. **The European and other occupation of the Central-West and North of the country, as well as the advancement of the agricultural frontier and mining, have resulted in profound transformations of indigenous cultures.** This impact can be measured in the increase of disease and mortality in indigenous lands, and conflicts that have emerged between indigenous and non-indigenous populations because of agricultural expansion. However, indigenous societies have never existed in a state of total isolation. Prior to establishing contacts with the wider Brazilian society, indigenous groups always maintained relations with each other. In several regions, and in many ways, different people are interrelated through wars, and exchange of objects, from weddings, invitations to celebrations, rituals etc. Although they have been transformed over time, these networks continue to exist today. Such networks may include only a small group of neighboring communities, or can extend over an entire region. In some cases, these are very complex networks of exchange, in which each group has a specialized role.

4. **The Brazilian Constitution recognizes indigenous groups, their customs, languages, beliefs and traditions, and their rights to the land that they traditionally occupy.** The Brazilian Constitution establishes the duty of the Government to define and establish the boundaries of indigenous lands, and to protect them. For indigenous people, traditional lands signify more than a means of subsistence or a factor of production - land serves as a symbolic world of reference. All dimensions of life for indigenous people are based on their physical territory. With the knowledge and mastery of an area, indigenous groups establish and maintain relations, ideas, beliefs and products of their socio-cultural life.

5. **Recently, some indigenous people have moved to urban centers in search of better standards of living, opportunities to study and/or health care.** However, they do not loose their identity, establishing community spaces for rituals and maintaining ties of kinship and contacts with their original communities. Certain groups have organized ethnic associations in some larger cities - São Paulo and Campo Grande, for example -- or community centers where

families arriving from indigenous lands can gather. Such facilities are usually located in the most impoverished urban centers. In indigenous lands, the sense of marginalization, exacerbated by frequent conflicts between the economic interests of local elites and indigenous territorial rights, contributes greatly to the indigenous resistance to any proposal of "municipalization" of the functions currently assigned to the federal government, and this resistance is very marked in the health sector.

## Indigenous Health

6. **The infant mortality disparity between indigenous and non-indigenous people in Brazil is lower than in other developing countries.** Infant mortality decreased from 57.3 to 48.6 per 1,000 live births between 2000 and 2006, while the overall infant mortality decreased from 26.7 to 21.7 in Brazil during the same period. In all continents, indigenous people have worse health indicators than the general population; and in Latin America, indigenous populations have mortality rates 3 to 4 times higher than the respective national averages.

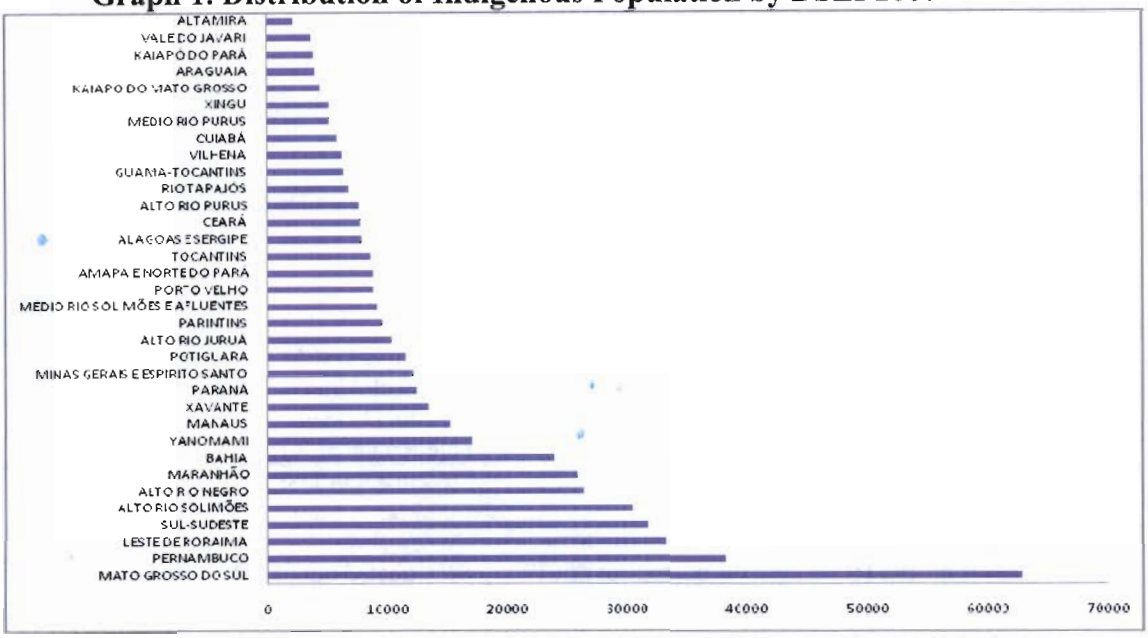
7. **The indigenous population is experiencing a complex epidemiological transition.** Some groups already have significant prevalence of morbidity and mortality from chronic degenerative diseases associated with violence and infectious diseases. This pattern strikes especially males due to the increase in sedentary lifestyle. Other indigenous people are still in a transitional pattern typical of deficiencies in access to public goods and services. Among others, this is characterized by high prevalence of malnutrition among children less than 5 years old, malaria, tuberculosis and leishmaniosis. Mental health, infanticide, alcoholism and suicide among indigenous groups are important and complex issues, which the government has had difficulty in tackling.

8. **In this context, the efforts that Brazil has been making to reverse inequalities, and to rescue the historic debt with indigenous people through the adoption of a national policy, are remarkable.** As a whole, the legislation passed since 1999 attests to the enormous effort made over the last nine years to build a legal and institutional framework for the Indigenous Health Subsystem. The background of this policy is the 1988 Constitution, which recognizes and respects the cultural organizations of indigenous people, ensuring them full civil rights, rendering obsolete guardianship institutions and obligating the government with the exclusive power to legislate on issues related to indigenous people. The Constitution also defined the general principles of the Unified Health System (SUS), recognizing the right to health and ensuring service equity for vulnerable populations. In comparison, countries with a per capita income higher than Brazil have faced great difficulties in structuring systems that can reverse the health inequalities between indigenous people and non-indigenous people (e.g., Australia, Canada and USA).

9. **Consolidation of an Indigenous Health subsystem was achieved with the adoption in 1999 of the Arouca Law, which established the territory-based Special Indigenous Health Districts (DSEI) under the responsibility of the National Health Foundation (FUNASA).** The subsystem works within the same principles promoted by the national health service (SUS), based on equity and integrality, to guarantee indigenous people the right to universal access, based on health needs identified by the communities, and involving indigenous populations in all

stages of planning, implementation and evaluation of actions. The sub-system provides health promotion, disease prevention and health care for indigenous groups.

**Graph 1. Distribution of Indigenous Population by DSEI 2007**




Source: SIASI - FUNASA

10. **Under the Indigenous Health Subsystem, the DSEI are service-oriented organizations,** which carry out technical activities, promote the organization of the health network, and undertake the necessary managerial and administrative activities for the provision of health care, with participation of the indigenous community and social control. The DSEI have technical staff and other professionals such as managers, administrative staff, drivers and others. The multidisciplinary teams of Indigenous Health (EMSI) that act on the DSEI are equivalent to the Family Health Program teams, which also operate on a territorial basis. The EMSI are hired either by FUNASA, through contracts with CSO, or by the respective municipality, and provide services that are DSEI-specific.

11. **In 2009, a Presidential Decree provides that capacity of the DSEI should be built until December 2010 so these can become autonomous.** This will empower the DSEI to coordinate, supervise and implement the activities of the Indigenous Health Subsystem in the context of the SUS.

12. **Since 1997, the Bank-financed VIGISUS Project invested $400 million to assist improving indigenous health and building the capacity of the Indigenous Health Subsystem.** The first phase of the project closed in 2004 with satisfactory results; the second phase is closing this year also with satisfactory results (Table 1); the third phase is under identification. This last phase of the project would focus on improving indigenous health governance and innovation to improve results. Financial transfers from the MOH Department of Primary Care (SAS) and FUNASA and transfers to third parties (agreements) would be tied to the monitoring of targets and management for results. Indigenous Health stakeholders agree on the need for autonomy of the DSEI.

**Table 1. Brazil VIGISUS Project: Indigenous Health: Main Indicators**

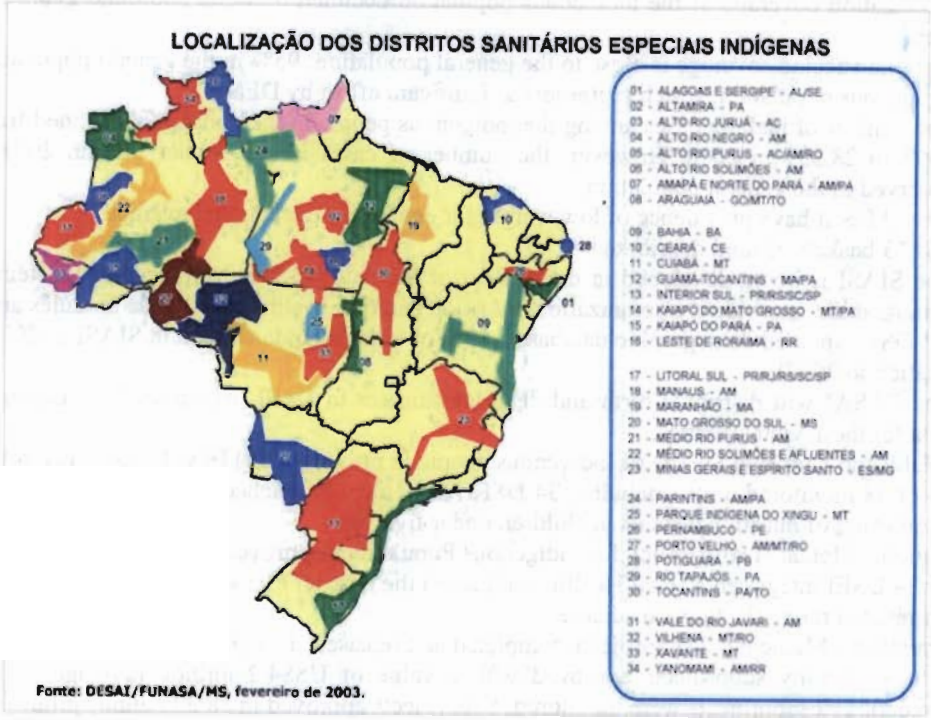
| Indicator | 2004 | 2008 | Target 2009 |
|---|---|---|---|
| **Vaccination Coverage** | 39% in 10/34 DSEI | 65% in 34 DSEI | 60% in 34 DSEI |
| **Prenatal visits according to MOH protocol** | 30% in 21 DSEI received 3.4 visits | 50% in 33 DSEI received 3 visits | 50% |
| **Mothers with children <2 identified with inadequate weight gain receive nutrition education/counseling** | 0 | 100% in 32/34 DSEI < 5 years | 100% |
| **Children <2 in targeted districts weighed according toMOH norms** | 88% in 1 DSEI 8,414 children < 5 years | 56% in 32 DSEI 52,650 children < 5 years 64% in 32 DSEI children under 2 years | 80% |
| **Cases of diarrhea in children <6 treated with ORT** | NA | 76% in 33/34 DSEI | 80% |
| **TB cases on DOTS** | 74% treated out of 617 cases | 87% treated out of 515 cases | 30% increase |
| **Reliable data on nutritional status, substance abuse and suicides available in 10 DSEI** | 1 | 32 DSEI for nutrition 10 DSEI for substance abuse and suicide | 10 DSEI |
| **NGO and public providers operating under performance-based contracting scheme** | 0 | 100% under the project | 50% |
| **Health teams providing integrated, benchmark service plan** | 100% | 100% | 70% |

13. **In 2008, FUNASA started to work under the VIGISUS project on setting targets and designing new models of indigenous health care, financing, organization, management, monitoring and evaluation.** This work aimed at identifying and discussing with the DSEI more realistic, effective and efficient options for the Indigenous Health Subsystem, and levels of integration into the SUS. Proposals for new models of Indigenous Health and an Implementation Plan were completed, and reviewed by 5 Regional Workshops in 2008 and 2009, with participation of the 34 DSEI; a Technical Workshop in March 2009, to review the proposed targets and models; and a National Workshop with participation of representatives of the indigenous leadership, Presidency of Brazil, Ministry of Health, FUNASA and World Bank on May 20-21, 2009. The Bank recommended that FUNASA starts implementation of these new models in 2009, including training, further studies and building capacity for DSEI autonomy, with available project resources.

| Brazil VIGISUS: Indigenous Health Achievements |
|---|
| ▪ Vaccination coverage of the indigenous population declined between 2003 and 2005, but increased since then.<br>▪ Rubeola vaccine coverage is close to the general population: 95% in the general population, and 92% in the indigenous population, which represents a significant effort by DESAI.<br>▪ The number of malaria cases among the indigenous people in the Amazonia declined from 33,907 cases in 2007 to 28,337 in 2008. However, the number of cases is still higher than in 2003 (10.875), as it is observed in the general population.<br>▪ Only 2 DSEI have prevalence of low weight for age below the national average.<br>▪ 14,813 baskets of food distributed.<br>▪ The SIASI is being developed in the context of the national health information system. New versions of demographic, morbidity, immunization, nutrition and oral health surveillance modules are being developed.<br>▪ All DSEI updated demographic databases; 88% of villages updated data in SIASI in 2008 (27% increase in relation to 2007).<br>▪ The DESAI will distribute birth and death certificates to DSEI, which will be responsible for collecting data for these vital statistics.<br>▪ Health and Nutrition Survey of Indigenous people in progress: 70/119 villages visited to collect data.<br>▪ 14 of 38 monitored units (including 34 DSEI) have already reached the target of at least 50% coverage for monitoring of nutritional status in children under five years.<br>▪ National Mental Health Policy for Indigenous Populations approved by the MOH.<br>▪ 23/34 DSEI integrated Mental Health activities in the District Plans<br>▪ Completed research study on suicide.<br>▪ Traditional Medicine: 6 subprojects completed and released, 1 in progress.<br>▪ 149 community subprojects approved with a value of US$4.2 million (average of U.S. $ 28,200 per project). 119 subprojects were monitored. Subprojects approved in 88/225 ethnic groups in the country.<br>▪ Assessment of a sample of 32 subprojects in progress.<br>▪ 29/34 DSEI confirmed the participation of District Councils in the drafting and approval of District Plans for 2008-2010.<br>▪ The draft Protocol of Integral Attention to Women's Health is under preparation. The protocol will be validated in three (3) Macro-regional workshops.<br>▪ Guidelines for integration of traditional medicines in the Indigenous Health Care model was prepared.<br>▪ The National Health Card is being distributed to indigenous people registered in SIASI (about 70% are already registered, the goal is to register and provide the Health Card to 100%).<br>▪ There are currently 40 contracts for Indigenous Health: 33 with NGOs, 2 with universities, 4 with municipalities.<br>▪ Currently there are 547 Indigenous Health Teams, consisting of: 275 doctors, 547 nurses, 514 dentists, 2,076 technical assistants, 206 dental office assistant, and 1,251 AISAN.<br>▪ The total number of Indigenous Health Agents (AIS) is 3,906, and 1,135 AIS are women.<br>▪ 30 indigenous health staff were awarded project scholarships.<br>▪ 87% of civil works completed works, 92 health posts completed, and 4 in progress;<br>▪ Acquired vehicles, boats and communication equipment. |

14. **The Indigenous Health Information System – SIASI – is a specific tool that combines information on demographics, epidemiology, healthcare, and management information.** The present version (3.0) of the system makes available modules on demographics, registry of the indigenous population, disease records, and immunization; and version 4.0, which is being prepared, will have five more modules: supervision of nutrition; women's and children's health; oral health; human resources; and infrastructure. Analysis of the quality of information revealed some problems arising from the absence of a phonetic routine in filling in the data collection fields of the SIASI, and other problems related to inconsistency between the political division of the country and the territorial organization of the DSEI, and the format for storing the variables. The Indigenous Health evaluation system is at the consolidation phase, which has great possibilities for adjustment to improve its yield in terms of results.

**Figure 2. Special Indigenous Health Districts (DSEI)**




15. **From 2003 to 2007 there was an increase of 154% in nominal terms, and 100% in real terms, in the share of the Ministry of Health's budget represented by indigenous health funding.** The tendency of funds for indigenous health to grow, however, has slowed down in the last two years. In 2007 there was a total allocation of funds of R$ 504.2 million, equivalent to per capita spending of more than R$ 987 (significantly higher than for the general population). There are, however, significant inequalities in per capita expenditure between DSEI – which, even considering the particular characteristics of each region, indicates the need for establishing criteria to correct inequities in areas less structured and difficult to access and require different incentives. Of the total funds spent locally, 59% originated from FUNASA and 41% from the Healthcare Secretariat (SAS/MS). In 2007, approximately one-quarter of the financing was executed directly by FUNASA (drugs, fuel, transport of patients). There was an increase over the years in service incentive transfer payments for basic healthcare as a percentage of total service incentive transfer payments funds transferred by the SAS to municipalities for Indigenous Health.

16. **In the present scenario, there is a need to reflect on mechanisms to unify the financing of the Indigenous Healthcare in Brazil, and to establish a single management structure for execution of expenditure,** whether through public consortia, or through the creation of a district-level fund for Indigenous people' Health, allied to the autonomy of the DSEI. There is a fragmentation of resources between the sources of financing, and also between providers of services, and this results in management and control being more difficult. Both in service incentive transfer payments – tied transfers to municipalities and hospitals for healthcare of indigenous people – and in working agreements and funds for direct execution, transfer of funds is based on historic series, not adequately taking into account the costs of actions and

services, and also the health needs of each District.

17. **Recent regulation of the transfers to municipalities and hospitals for health care of indigenous people has been signaling the importance of a results-based management approach, and has made some of the existing financing mechanisms more transparent,** establishing a new regulatory framework in the relationships between municipalities, states and the federal government. However, it it has also given rise to contrary reactions due to the possibility of it representing a first step in the direction of municipalization of Indigenous Health policy in the country.

18. **The national policies, based on the principles of universality, comprehensive healthcare, and equity, which seek to reduce the differences in health conditions, are reflected in the Indigenous Health Subsystem.** However, there is little clarity on what would be a model for differentiated healthcare in Indigenous Health, with the prevailing conception being that of the districts as an organizational model, and practices centered on treatment procedures. Also, the Indigenous Health System has a welfare approach, dealing reactively with demand and emphasizing the use of symptomatic medications. The process of planning does not yet allow for a description of health needs and problems, and adaptation of resources, activities and targets. Although there are improvements in the organization of the services in indigenous territories, these services still have little capacity to resolve problems. The challenges of the healthcare model are access[1], comprehensive healthcare, ethical and cultural acceptance and adaptation, permanent education of the indigenous health agents (AIS) and the need for investments in infrastructure, transport and communication.

19. **The elements of the indigenous healthcare network that are recognized institutionally are the 34 DSEI and the 57 CASAIs.** The *Pólos-Base* (primary care team stations) and Health Posts do not yet have formal institutional recognition (although they have been included recently in the National Register of Health Establishments), and serve populations that are very diverse ethnically and in size. The *Hospital Amigo do Índio* ("Friend of the Indian" hospital certification system) is a strategy for integration between the Indigenous Health subsystem and the SUS, which may turn out to be useful, especially if it guides agreements on receipt of Indigenous Health incentive funds.

20. **Significant investment has been made on infrastructure, but additional investment is necessary.** Only 7 of the 21 DSEI that need waterborne transport have more than 50% of their needs met (Upper Rio Negro and Porto Velho have less than 10%); and only 8 of the 20 DSEI that need radio service have more than 50% of their needs supplied (*Upper Juruá* and *Maranhão* indicated that they do not have any radio equipment). Eight DSEI reported irregular supplies of inputs, although the Indigenous Health Subsystem has a higher per capita expenditure on drugs than the national average (more than R$ 120 per person per year, compared with a national average of R$7 in the public sector). The logistical cycle of pharmaceutical supply (acquisition, warehousing and distribution of medications), is being improved.

[1] Defined as access to an AIS or a health team, even by radio, involving less than 4 hours walking distance or transport.

**Table 2. Indigenous Population and Health Network 2007**

| | Number |
|---|---|
| **People** | 530,000 |
| **Families** | 118,915 |
| **Households** | 92,049 |
| **Families per household** | 1,3 |
| **People per household** | About 6 |
| **Villages** | 4,095 |
| **Pólos-Base** | 316 |
| **DSEI** | 34 |
| **Municipalities** | 388 |
| **States** | 24 |

Source: SIASI - FUNASA

21. **As it happens in the public system in general, only 10% of the total 13,000 personnel in indigenous health are government employees, and the precarious nature of the employment relationship is a significant factor of dissatisfaction among the human resources of the subsystem.** As it happens in the health system in general, it is difficult for the indigenous health subsystem to retain health professionals, mainly in the Amazon region. In total, there is only 57% of the necessary number of doctors; 2 DSEI do not have doctors (*Amapá* and *Vale do Javari*); and 13 DSEI in the Amazon region have less than one doctor per 3,000 people. Various strategies have been used for qualification of human resources in Indigenous Health, but these activities are distributed among different sectors of FUNASA (the President's Office, CORE and DSEI) and among the organizations operating under agreements. Training of the AISs has been proposed as an organization strategy of the DSEI and for bringing health professionals together with peoples of different cultures. There is a structured program for the AIS training, with a proposal based on in-service training, but the majority of the DSEI have had difficulties in realizing the modules, especially the distance-learning phases.

22. **Between 2001 and 2007, FUNASA signed approximately 10,000 service provision agreements (*convênios*), including those relating to Indigenous Healthcare services** (more than 90% of all *convênios* were for water and sanitation services in small municipalities). The competencies necessary for the function of purchaser – planning, control and evaluation of fulfillment of contracts – were not satisfactorily assumed by the various spheres of government, especially due to insufficient management capacity, allied to contracts dissociated from performance, and to financial reporting that centers on funds passed through rather than meeting of targets. FUNASA plans to substitute *convênios* by direct implementation by 2012, which although it is a step taken for good reasons – to diminish bad management of public funds and corruption – merits more analysis and discussion. The prospect of hiring personnel to meet the management demands arising from district autonomy, and also to substitute outsourced entities in the functions of indigenous healthcare, will have significant impact on financing, especially in relation to re-defining the service incentive transfer payments for basic healthcare.

23. **The intra- and inter-sector relationships make up a complex institutional picture where various State and public organizations, co-operation agencies and NGOs need to act**

**in a coordinated manner to ensure adequate working of the Indigenous Health Subsystem.** Analysis of the intra-sector relationships of the Subsystem points to various problems. A notable effort has been made to ensure establishment of service user oversight bodies, but their effectiveness and capacity to operate as a mechanism of co-ordination and political control are dubious. The Subsystem appears as a partially autonomous structure insulated from the verdict of the ballot box, since its oversight is dependant, above all, on the technical and administrative controls, which points to the importance of seeking to promote partnerships and systematically combine technical, political and social accountability mechanisms.

**Figure 3. DSEI Organization**


24. **The main challenges of the organizational model are: the complexity of the Indigenous Health Subsystem; superimposition and duplication of structures and functions;** and imbalances between the number of FUNASA CORE and DSEI, and the associated flows of planning, financing and administration. The new organizational model should: (i) achieve a good balance between centralization and decentralization, and between equity and quality; (ii) identify categories of DSEI; (iii) simplify the organizational architecture of Indigenous Health; (iv) help define coordinated flows of planning, provision of service, evaluation and financing, controls (administrative, political and social) and partnerships (between political leaderships, managers, providers of service and users); and (v) create a knowledge base on the Indigenous Health Subsystem.

25. **The instances of inter-institutional management and relationships involve FUNASA's Department of Indigenous Health (DESAI), the DSEI, the CORE and the District Councils.** FUNASA has undertaken to strengthen the DSEI through greater administrative and financial autonomy. The District Health Plans have the power and potential to be important instruments of management, but the structure and the institutional practices have contributed to weakening of this tool. In spite of the many difficulties identified in the appropriation of the District Plan by the DSEI, this appropriation is necessary because the Plan is institutionalized as an instrument of management and agreement with other players: the District Indigenous Health Council (*Conselho Distrital de Saúde Indígena*); the Health Departments of the individual States (*Secretarias Estaduais de Saúde*); the Health Departments of Municipalities

(*Secretarias Municipais de Saúde*); and other public bodies or non-government entities. The management capacity of the DSEI is limited, which will call for significant training and skills development in results-based management in the context of Terms of Agreement between the DSEI and service providers.

**HIV/AIDS and other STI in the indigenous population**

26. **In the period 1988-2007, 624 cases of AIDS were reported in indigenous groups;** between 2000 and 2008, SINAN recorded 401 cases of AIDS in indigenous populations. The gender ratio is similar to the general population with 1.6 cases in men for every case among women, but this trend has been changing toward higher numbers of women being affected; people 30-60 years are most vulnerable, representing 65% of all reported cases (Tables 3 and 4).

27. **Epidemiological data show that the main category of exposure is heterosexual, accounting for 61% of cases reported.** Nevertheless, 21% of cases are recorded in the categories gay and bisexual and 6.7% are in the category of injecting drug users. With regard to vertical transmission of HIV, from 2001 to 2008, 94 cases of women were registered in the SINAN; and in the period 2005-2007, 132 cases of congenital syphilis.

**Table 3. AIDS Cases in Indigenous Areas by Gender 2000-2008**

| ear | Male | Female | Total |
|---|---|---|---|
| 2000 | 39 | 21 | 60 |
| 2001 | 36 | 22 | 58 |
| 2002 | 21 | 17 | 38 |
| 2003 | 22 | 16 | 38 |
| 2004 | 22 | 16 | 38 |
| 2005 | 23 | 21 | 44 |
| 2006 | 32 | 19 | 51 |
| 2007 | 49 | 20 | 69 |
| 2008 | 4 | 1 | 5 |
| **Total** | **248** | **153** | **401** |

Source : SINAN up to June 30, 2008

**Table 4. AIDS Cases by Age Group 2000-2008**

| Age Group | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| < 5 anos | 1 | 0 | 2 | 0 | 3 | 1 | 0 | 0 | 1 | 8 |
| 5-12 | 0 | 0 | 0 | 0 | 4 | 1 | 1 | 0 | 1 | 7 |
| 13-19 | 0 | 1 | 4 | 2 | 0 | 1 | 1 | 0 | 0 | 9 |
| 20-24 | 6 | 11 | 1 | 3 | 3 | 9 | 5 | 4 | 0 | 42 |
| 25-29 | 9 | 10 | 8 | 7 | 7 | 6 | 12 | 13 | 1 | 73 |
| 30-34 | 13 | 5 | 8 | 12 | 7 | 3 | 9 | 13 | 1 | 71 |
| 35-39 | 15 | 10 | 6 | 6 | 7 | 7 | 6 | 11 | 1 | 69 |
| 40-49 | 13 | 14 | 7 | 5 | 5 | 10 | 12 | 18 | 0 | 84 |
| 50-59 | 2 | 5 | 2 | 3 | 2 | 5 | 3 | 6 | 0 | 28 |
| 60 e mais | 1 | 2 | 0 | 0 | 0 | 1 | 2 | 4 | 0 | 10 |
| **Total** | **60** | **58** | **38** | **38** | **38** | **44** | **51** | **69** | **5** | **401** |

Source: SINAN up to June 30, 2008

**Table 5. AIDS Cases by exposure category and gender 2000-2008**

| Exposure Group | | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Male** | Homosexual | 5 | 7 | 5 | 4 | 5 | 4 | 5 | 12 | 2 | 49 |
| | Bisexual | 5 | 7 | 3 | 4 | 2 | 2 | 6 | 5 | 0 | 34 |
| | Heterosexual | 17 | 16 | 9 | 10 | 9 | 10 | 9 | 24 | 0 | 104 |
| | IDU | 5 | 3 | 2 | 0 | 3 | 3 | 3 | 2 | 0 | 21 |
| | Transfusion | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| | MTCT | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 1 | 6 |
| | Unknown | 5 | 3 | 1 | 4 | 1 | 3 | 9 | 5 | 1 | 32 |
| | **Subtotal** | **39** | **36** | **21** | **22** | **22** | **23** | **32** | **49** | **4** | **248** |
| **Female** | Heterosexual | 20 | 21 | 13 | 16 | 11 | 18 | 19 | 20 | 1 | 139 |
| | IDU | 1 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 6 |
| | MTCT | 0 | 0 | 1 | 0 | 5 | 1 | 0 | 0 | 0 | 7 |
| | Unknown | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | **Subtotal** | **21** | **22** | **17** | **16** | **16** | **21** | **19** | **20** | **1** | **153** |
| | **Total** | **60** | **58** | **38** | **38** | **38** | **44** | **51** | **69** | **5** | **401** |

Source: SINAN up to June 30,2008

28. **The most affected DSEI in each region are:**

- North: Alto Solimões; East Roraima; Amapá and North of Pará; DSEI Manaus; Parintins
- Northeast: Potiguara; Maranhão; Pernambuco
- Midwest: Mato Grosso do Sul; Araguaia; Cuiabá
- South/Southeast: South and Interior Litoral

29. **The first notified case of AIDS in a Brazilian indigenous population occurred in the state of Paraná in 1987.** A review of the epidemiological data shows that a case of AIDS was also found in the indigenous population in 1987 in the state of Mato Grosso,. Identification of the first cases is controversial, because the expansion of the epidemic from urban areas into the interior has happened in areas that are not contiguous, but instead the disease has leapfrogged into places that were not predictable. Two years later, in 1989, the National STI and AIDS

program was established, and included indigenous communities among its priority populations, with specific activities for the prevention of HIV/AIDS and other STI within this population.

30. **In the 1990s, the epidemiological profile of HIV/AIDS in Brazil began to change, with data showing the epidemic moving towards the interior, poorer groups and women. These trends are also reflected in the reported cases in the indigenous population**. The current scenario of the epidemic has tracked economic growth in the interior of the country, especially in medium-sized cities and regions where major development projects are underway, such as agribusiness or mining projects that are located near, or sometimes even within indigenous lands. Reported data show an increased incidence of HIV/AIDS and other STI among indigenous residents and visitors from urban areas and the border regions.

31. **Sexual practices in indigenous populations are traditionally characterized by an asymmetry between age groups,** as it can be observed in the frequency of sexual relations between older men and young women. However, young people, particularly young men, are establishing more frequent contact with surrounding populations, due to the ease of mobility between village and town, which may increase their risk of HIV/AIDS and other STI. In certain situations, indigenous practices such as polygamy must be accepted as culturally relevant, as observed in the case of the Waiãpi, since acceptance is crucial for the establishment of preventive actions.

32. **The risk of HIV transmission from an HIV-positive mother to a newborn during childbirth is probably greater among indigenous women than in women in general, since most indigenous births occur in the village, without the presence of specialized formal medical care.** However, it is considered likely that many cases occur via breastfeeding, since the practice is prevalent in indigenous people. The recommendation for replacement of breastfeeding by formula milk requires careful consideration of cultural issues, which can vary from one ethnic group to another.

33. **The issue of homosexuality in indigenous communities has not been addressed in a systematic way in terms of prevention of HIV/AIDS and other STI.** National Program coordinators have drawn attention to the importance of addressing HIV/AIDS and other STI among indigenous gay, MSM and transvestites within program activities focusing on cultural issues related to sexuality in indigenous populations and possible ramifications through their social networks. Cases of HIV/AIDS among IDU is another issue to be considered, especially in indigenous populations living in urban areas, who are very vulnerable where drugs are present.

34. **Indigenous people' social vulnerability to HIV/AIDS and other STI is affected by increasing interaction with economic activities surrounding the exploitation of natural resources, both in urban areas and indigenous lands.** In addition to causing major environmental impact, these projects add significant risk of increased exposure to HIV/AIDS and other STI by indigenous groups. Indigenous people's poverty adds to their vulnerability. Indigenous social networks are very complex and the anthropological and political dimensions of such networks, including how they operate in the spread of diseases, should be investigated and identified. In this way, each ethnic group could be understood in its own particular context, and also placed within the general dynamic of inter-group contacts, such as:

- Inter-ethnic contacts related to the intrusion on indigenous areas by miners (informal sector miners), timber cutters, farmers and development projects, such as construction of hydroelectric dams and roads;
- Inter-ethnic contacts in the borders of the indigenous regions;
- Mobility and seasonal migration to urban areas in search of work, education and health;
- Kinship and sexual arrangements for some ethnic groups that may facilitate exposure to situations of risk and vulnerability, such as the practice of cross-feeding, the *escarificações* rituals, polygamy and early sexual initiation;
- Breakdown of traditional power structures within the community; and
- Conflict between the concepts of traditional medicine and the Western conceptions of health and disease, causing many health professionals to find themselves unprepared to deal with such situations and automatically rejecting traditional concepts, making prevention actions problematic.

**The Brazilian response to HIV/AIDS and other STI epidemic among indigenous people**

35. **These challenges are central to the integrated efforts of the Department of Surveillance, Prevention and Control of HIV/AIDS and STI (DSTD/AIDS) and FUNASA to reduce inequalities and disease among indigenous groups.** Others challenges that relate to the provision of services to these populations include access to prevention activities complemented by information and prevention materials, HIV/testing and diagnosis, pre-natal testing and counseling, condoms, and health services.

36. **Since the end of the 1980s, the national program has supported several initiatives aimed at prevention of HIV/AIDS and other STI among indigenous populations (Annex 1).** At the time, actions were conducted in partnership with the National Indian Foundation (FUNAI), and the main objectives were to investigate and initiate field work on HIV/AIDS and other STI. In general, actions were conducted on an ad hoc basis and were not sustained over time, and thus did not result in consolidated structures for systematic development of prevention and care. Considering the growing number of cases, one of the principal challenges was to develop sustainable support to the DSEI on surveillance, prevention, assistance and monitoring.

37. **Since 1994, under the AIDS I Project, preventive actions targeted at indigenous population have been institutionalized and have gained relative importance.** At the time, the precarious health situation of indigenous people was recognized, due to information about localized epidemics of STI. However, these activities were still conducted on an ad hoc basis and considered 'emergency' measures. In the period 1996-1998, the national response became focused on strengthening indigenous organizations through regular and continuous training of indigenous health agents and the establishment of a specific forum for discussion of HIV/AIDS and STI in indigenous communities. This initiative gave a decisive contribution to building the indigenous health care model that developed in subsequent years.

**Brazil Indigenous HIV/AIDS and other STI Program**
**Main Results and Challenges in 2008**

**Main Results**

- Improvement of notification.
- All 34 DSEI have been carrying out prevention activities, including condom distribution. The main clientele are youth and adolescents.
- 52% DSEI supply condoms in sufficient quantity to meet demand .
- More than 60% of the health centers aere involved in prevention actions.
- DSEI established partnerships with states and municipalities to coordinate the logistics of condom distribution and roll-over of staff trained in administering the rapid test; and coordinated logistical plans to receive the diagnostic kits and monitor their implementation.
- More than 700 indigenous health agents, who have an important role in prevention activities, were trained.
- 35% DSEI implemented rapid testing.
- Community acceptance of the rapid test was positive (83.3%) in 10 DSEI where it was used.
- The DSEI adopted syphilis and HIV testing for pregnant women: 61% had access to the syphilis test and 49% had access to the HIV test.
- In 2007, the best coverage (measured by the percentage of pregnant women served by health centers that took either an HIV or syphilis test) were in the Southeast and Mid-west regions.
- There are more pregnant women with syphilis in the Mid-west Region, from which 82% made at least one test, followed by the North Region with 50%.
- In 2009, the rapid test for syphilis will be implemented as a pilot project in the 7 DSEI of the state of Amazonas and the 2 DSEI of the state of Roraima, in partnership with the Alfredo da Matta Foundation, with a preferential access given to pregnant women.
- All DSEI have adopted STI syndromic management, improving the diagnosis and treatment of STI.
- 52% DSEI supply medication for the treatment of STI.
- All DSEI received treatment protocols and instructional materials for training health staff.
- All DSEI established partnerships in the context of the newtwork of specialized services for reference for treatment of cases of AIDS among indigenous people.

**Main Challenges**

- Indigenous groups have different patterns of living sexuality with extensive and complex networks of sexual partnerships.
- There is underreporting of HIV and AIDS cases, and the pre-filling of information in the notification sheets of HIV-positive pregnant women and children.
- There are cases of HIV among injecting drug users who are indigenous pregnant women in the Southern region.
- Prevention activities are sporadic and not all villages are covered.
- Rapid testing should be available in all DSEI, especially for indigenous pregnant women, and it is necessary to shorten the waiting time for results in hard to reach communities.
- Condom distribution as a response to spontaneous demand needs to be better planned and cover all locations frequented by the population.
- Urban indigenous populations are not covered by these interventions.
- DSEI have a high rotation of health professionals in multidisciplinary teams.
- The national health service (SUS) has low capacity to meet the demand for the indigenous population and incorporate the intercultural dimension.
- The SUS network is less structured and decentralized in the Northern Region, and offers fewer services for STIs and HIV/AIDS.

38. **In 1995, to guarantee program implementation in the DSEI, the DST/AIDS and FUNASA established a technical and financial partnership.** The AIDS II and AIDS III Projects consolidated these earlier initiatives and gave new impetus to preventive actions. Initially, project activities were devoted to specific areas and focused on certain segments and indigenous groups, without reaching all indigenous people nationwide. The 2002 National Health Policy on Indigenous people identified AIDS as one of the serious health problems that affected the indigenous population.

39. **In 2003, under the AIDS III Project, the Executive Secretariat of the Ministry of Health and FUNASA signed an agreement with the objective of supporting the Indigenous Health Subsystem organizing actions for control of HIV/AIDS and other STI.** Meetings were held in the 5 macro-regions to define strategies for prevention of HIV/AIDS and other STI, social control of health activities and mobilization of indigenous people. These meetings supported the development of guidelines to implement the national STI and AIDS and program in the DSEI. As a result of this partnership, the DSEI have incorporated into their plans and have implemented HIV/AIDS and STI activities in the last 6 years.

40. **In 2004, given the need to ensure the sustainability of these activities in indigenous communities, the DST/AIDS and FUNASA agreed to direct resources to strengthening the network of health services in indigenous areas.** Under the AIDS III Project, which closed December 31, 2008, four decrees were published regarding the transfer of funds for implementation of HIV/AIDS and STI activities in the 34 DSEI through the Indigenous Health subsystem and the SUS. A total of R$10 million was allocated to HIV/AIDS and other STIs activities among indigenous groups, and the Ministry of Health approved the guidelines for implementation of HIV/AIDS and STI activities among indigenous populations. These prioritize the delivery of prevention activities, including provision of free male condoms, STI syndromic approach, prevention of vertical transmission from mother to child of HIV and syphilis, diagnosis of HIV and syphilis, and reference for treatment of HIV/AIDS and other STI.

41. **In 2008, the indigenous health system set quotas for states and municipalities to provide condoms to indigenous communities; 35 % of DSEI were equipped with rapid test for HIV; reference for diagnosis and treatment of HIV and syphilis was established, including tests for viral load, CD4 and others; and the DSEI were provided with drugs for treatment of STI**. The 34 DSEI approved Plans to prevent and control HIV/AIDS and STI in indigenous communities, with FUNASA's funding and the DST/AIDS technical assistance. This process has strengthened the institutionalization of the program in the Indigenous Health Subsystem. The District Plans were discussed and approved by the DSEI social control mechanism, with 50% of indigenous representation The Ministry of Health, through the Department of Science and Technology, approved an assessment of the implementation of HIV/AIDS and STI activities in the 34 DSEI, This study will be carried out by a team of a federal public university in 2009.

42. **Today, one important aspect of the work is the community participatory approach and the respect of the indigenous culture and their traditional knowledge and experiences. The responsibilities are divided as follows:**

- **DST/AIDS**
  - Develops surveillance, M&E, and management of HIV/AIDS and STI interventions in indigenous communities; and prevention activities for urban indigenous groups, who are not covered by the DSEI.
  - Develops protocols, and provide condoms, rapid HIV tests and ART to indigenous populations.
  - In partnership with the University of Brasilia (UNB), DST/AIDS is evaluating the HIV/AIDS and other STI programs implemented by the DSEI.
  - These activities were partly financed by the AIDS I, II, III Projects.
- **FUNASA**
  - Delivers health care services to Indigenous Populations.
  - Trains indigenous groups, CSOs working with indigenous groups, and health staff working in Indigenous Health Districts on HIV/AIDS and other STIs.
  - Activities are implemented by indigenous organizations, CSOs and universities working with indigenous populations, states, and municipalities.
  - These activities have been partly financed by the VIGISUS I and II Projects.

**Action Plan for HIV/AIDS and STI intervention in Indigenous Communities**

43. **The proposed AIDS-SUS project would support the current policy of focusing on the groups most at risk,** including men who have sex with men, sex workers, drug users and prisoners. Indigenous communities are also considered vulnerable populations, and strategies should take into account the epidemiological issues discussed above, in particular the strengthening of prevention and assistance programs within DSEI and preparation of indigenous health worker teams to deal with issues of sexual orientation. These issues may be decisive factors in containing the growth of the epidemic in indigenous communities.

44. **Specifically, the Brazil AIDS-SUS Project** would (i) provide technical assistance to State and Municipal Health Secretariats to support DSEI improving HIV/AIDS and other STI prevention, diagnosis and treatment activities in indigenous populations (Annex 2); (ii) monitor the implementation of the DSEI Plans on HIV/AIDS and other STI through a project monitoring indicator (Annex 3); (iii) carry out a review and dissemination of the findings of the 2009 evaluation; and (iv) it would carry out a second evaluation of the program implementation in 2011.

45. **In addition, the following interventions are being developed by the DST/AIDS and FUNASA, and would be further supported by the AIDS-SUS and the VIGISUS Projects**:

1) **Improve the surveillance and notification of HIV/AIDS and STI in indigenous populations.** In 2000, information about skin color and race were incorporated into data gathered and analyzed by the SINAN. This allows for analysis of health problems of indigenous populations. However, these variables are not always collected and/or available for all diseases, reflecting the need for incentives and to increase professional awareness of the importance of completing this data fields when information is gathered in the field.

**Actions**: (i) Improve the system of surveillance and notification and combine the information in the DST/AIDS and SIASI databases; (ii) Improve access to HIV testing and diagnosis for this population; (iii) Increase reporting of cases; and (iv) Increase completion of the data field for race/color.

2) **Improve Monitoring and Evaluation.** A set of basic data on HIV/AIDS and other STI is to be monitored in all DSEI through the Indigenous Health Information System (SIASI ). However, completion of datasets by the DSEI is still weak and intermittent.
**Actions**: (i) Use HIV/AIDS and STI indicators that are already collected by the Indigenous Health network; (ii) Prepare the indigenous health network to monitor HIV/AIDS and other STI prevention projects; and (iii) Carry out another evaluation in 2011.

3) **Strengthen the mobilization of indigenous communities.** Follow up on agreements reached at the 2003 macro-regional meetings.
**Actions**: (i) Promote indigenous participation and mobilization, together with health services that reflect indigenous health policies.

4) **Improve prevention of HIV/AIDS and STI in indigenous populations living in urban areas, including the promotion of safe sex practices and provision of condoms in a culturally appropriate manner**. Indigenous populations living in urban areas have little or no access to preventive actions developed by the DSEI, which prioritize villages within the indigenous lands.
**Actions**: (i) Deliver preventive actions to indigenous populations residing in urban areas through community mobilization; (ii) Effectively and appropriately promote access to condoms; and (iii) Develop actions that strengthen the human rights of indigenous people of all sexual orientations and those living with HIV/AIDS.

5) **Improve prevention of HIV/AIDS and STI among indigenous populations living in villages, including the promotion of safe sex practices and provision of condoms in a culturally appropriate manner.** The 34 DSEI undertake prevention activities related to HIV/AIDS and STI. These actions are carried out in the community, in schools and on home visits. All the DSEI report providing condoms, with higher demand from young people. However, most are done in a sporadic manner and not all villages are covered. An important aspect of these actions is the role played by Indigenous Health Agents, who work in the communities, expanding access to information and services.
**Actions**: (i) Increase the coverage of the village population by prevention activities, increasing the frequency and outreach activities in all DSEI; (ii) Increase the availability of condoms; and (iii) Develop actions that strengthen the human rights of indigenous people of all sexual orientations and those living with HIV/AIDS.

6) **Prevent vertical transmission of HIV, hepatitis and congenital syphilis.** The DSEI offer testing for HIV and syphilis for pregnant women. However, in 2007 only 61% of indigenous pregnant women had access to diagnosis of syphilis and 49% for HIV.
**Actions:** (i) Expand the supply and safety of testing services for indigenous women, and shorten the time for availability of test results especially in areas of difficult access; (ii) provide two tests to each indigenous woman; (iii) implement the rapid test for HIV and syphilis in all DSEI; (iv) with states and municipalities, provide infant formula; and (v) inform indigenous women with HIV about the importance of restricting breastfeeding.

7) **Expand access to testing and diagnosis of HIV and syphilis.** Teams were trained to deploy rapid tests for diagnosis of HIV in 12 DSEI (35%): Alto Rio Negro, Bahia, Xingu, Kaiapo MT, Mato Grosso do Sul, Minas Gerais, Araguaia, Rio Alto Purus, Altamira, PA Kaiapo, and Porto Velho. In the DSEI of Bahia and Mato Grosso do Sul, although trained, teams did not implement the rapid test. Where it was implemented, 83% DSEI reported that community acceptance was good. In 2009, the seven DSEI in the state of Amazonas and the two DSEI in Roraima are implementing the rapid test for syphilis as a pilot, in partnership with the Fundação Alfredo da Matta, with priority given to pregnant women.
**Actions**: (i) Increase the access of indigenous people with STI and TB to testing for HIV; and (ii) increase access to test results/diagnosis of HIV and syphilis.

8) **Improve adoption of the STI syndromic approach**. All DSEI adopted the syndromic approach for treatment of STI as a result of the training of multidisciplinary teams of indigenous health workers. This approach is improving the diagnosis of STIs, and increasing the screening of women of childbearing age for cervical and uterine cancer.
**Actions**: (i) Further improve the logistics of STI drug distribution in the 34 DSEI; (ii) Increase the number of health workers trained in the STI syndromic approach; and (iii) familiarize indigenous health teams with the traditional forms of STI treatment used by communities.

## Annex 1. Components of the Indigenous Health Program on HIV/AIDS and other STI 1999-2008

| Model | Projects<br>1999 - 2002 | Organized Network of Services<br>2003-2008 |
|---|---|---|
| **Objectives** | Reduce the incidence of HIV/AIDS and other STI in indigenous people through projects implemented by NGOs and indigenous specialists. | Reduce the incidence of HIV/AIDS and other STI in the indigenous population through the implementation of a number of ongoing activities, implemented by the indigenous health network service. |
| **Focus** | Strategies for the prevention of HIV/AIDS and other STI over a period of one year in defined areas.<br>Participatory methods of prevention, training of peer educators, development of bilingual educational materials. | Promotion of safe prevention practices (education, provision of condoms, development of information materials, training of indigenous health teams); diagnosis of HIV and syphilis, STI syndromic approach, prevention of vertical transmission of HIV and syphilis; definition of references to specialized services in HIV/AIDS and other STI. |
| **Coordination** | Ministry of Health - PN | Ministry of Health – FUNASA- Department of Indigenous Health |
| **Partners** | NGOs, universities, states and municipalities | DSEI, states, municipalities, CSO and universities |
| **Coverage** | 41 projects supported in 1999-2000<br>25 projects supported in 2001- 2002 | 34 DSEI |
| **Financing** | Government budget and AIDS I and II<br>The subprojects funded included: the geographic area of operations, strategies and methodologies, implementation schedule and budget. | Government budget and AIDS III<br>Resources for the 34 DSEI to perform actions defined locally, based on guidelines recommended by the MOH, were managed by FUNASA's CORE as the DSEI did not have managerial autonomy. |
| **Expected Outcomes** | Expansion of knowledge of indigenous communities on hows to prevent transmission of STI and HIV and adoption of safe sex practices. | Execution of HIV/AIDS and other STI actions in the 34 DSEI<br>Iincrease the knowledge of indigenous communities on ways to prevent transmission of STI and HIV<br>Increase access to inputs such as for prevention, early diagnosis of HIV, treatment of HIV/AIDS and other STI;<br>reduce the cases of vertical transmission of HIV and syphilis; promote participatory activities for prevention with indigenous cultures. |
| **Outcomes obtained** | Development of participatory methodologies for the prevention of HIV/AIDS and other STI in different indigenous communities from all regions. | Implementation varies among the 34 DSEI.<br><br>34 DSEI with HIV/AIDS and other STI actions incorporated into its planning and implemented in indigenous communities |

**Source:** Adapted from **Santos Vera** 2009. Evaluation of the Implementation of the Program of STI/AIDS in the Special Indigenous Sanitary District of Mato Grosso do Sul - Region Dourados (draft).

**Annex 2.BRAZIL AIDS-SUS: Budget of Indigenous Health Activities**

| COMPONENT | ACTION | ACTIVITIES | US$ THOUSANDS | | | | TOTAL R$000 |
|---|---|---|---|---|---|---|---|
| | | | YEAR I | YEAR II | YEAR III | YEAR IV | |
| **Component 2.Build decentralized governance capacity and innovation.** | Technical assistance to State and Municipal Health Secretariats to support DSEI improving HIV/AIDS and other STI prevention, diagnosis and treatment in indigenous populations | Training | 15 | 15 | 15 | 15 | **60** |
| | | Supervision | 30 | 30 | 30 | 30 | **120** |
| | | Preparation of Reference documents | 20 | 20 | 20 | 20 | **80** |
| | | Regional events | 60 | 60 | 60 | 60 | **240** |
| | | Technical intersectoral meetings | 25 | 25 | 25 | 25 | **100** |
| **TOTAL** | | | **150** | **150** | **150** | **150** | **600** |

**Annex 3. BRAZIL AIDS-SUS: Indicator of Indigenous Health Activities**

| | | |
|---|---|---|
| 1 | 34 DSEI with an HIV/AIDS and STI Plan implemented by 2013 | The Indicator will measure:<br>▪ Distribution of male condoms<br>▪ Implementation of STI syndromic approach<br>▪ Availability of HIV and syphilis diagnosis<br>▪ Availability of prevention of mother to child transmission<br>DSEI implementing<br>▪ 3 or more of the above actions will be considered as having implemented the Plan;<br>▪ 2 of the above actions will be considered as having partially implemented the Plan;<br>▪ One or none of the above actions will be considered as not having implemented the Plan.<br><br>Source: DSEI Reports and SIASI |