



BRAZIL

Fact Sheets on HIV/AIDS Care and Treatment

Updated October 2004



*Regional Office of the
World Health Organization*

ADULT HIV PREVALENCE	3 X 5 ART TARGET	CURRENT ART COVERAGE (%)
0.6% (UNAIDS, 2003)	0 (31/7/2004)	100% (31/7/2004)

1. Introduction

In 2003, the WHO developed a comprehensive strategy that outlines how life-long antiretroviral treatment can be provided to 3 million people living with HIV/AIDS in poor countries by the end of 2005. For the Americas, this initiative translates to a goal of providing 600 000 people living with HIV/AIDS with life-long antiretrovirals.

Within this framework, this Care and Treatment Fact Sheet was developed by the HIV/AIDS unit at PAHO/WHO in an effort to collate the most recent country-specific data on the care and treatment of people living with HIV/AIDS. It gathers information on antiretroviral coverage, lines of treatment, and average prices/year, as well as comprehensive information on laboratory diagnostic and human resources capacity, and voluntary counseling and testing. Finally, this fact sheet also includes details on the various agencies and NGOs working in the country on the fight against HIV/AIDS. The goal is for it to be updated each year until at least 2005, specifically to measure the progress in the 3 by 5 initiative, and preferably thereafter to continue to monitor the improved care and treatment of people living with HIV/AIDS.

The information in these fact sheets was compiled by PAHO/WHO, in collaboration with country focal points and national authorities from the Ministries of Health and NGOs. Not unexpectedly, information on all the agreed-upon indicators was not available for each country. However, these Care and Treatment Fact Sheets do contain a wealth of information that will showcase the particular strengths in current existing programs and comparison between countries. The Fact Sheet will also be instrumental in identifying some weaknesses that can be addressed in the future, either by PAHO/WHO or by another agency/NGO.

Clearly, the fact sheets are as good as the information made available to PAHO/WHO HIV/AIDS unit. Therefore, the HIV/AIDS unit would like to encourage program managers as well as national and international experts to communicate additional information to them, in order to maintain and update the Fact Sheets as needed.

For specific information on the prevalence and incidence of HIV/AIDS, behavior, and prevention strategies, please refer to the country-specific Epidemiological Fact Sheet on HIV/AIDS and STIs, compiled and updated by UNAIDS/WHO.

Situacion Analysis

Epidemic level and trend, for the year –	1990	1995	2000	2002	2004	2006
Prevalence in adults (%)		0.6	0.6	0.6	0.6	
Prevalence in children < 5 years (%)						
Prevalence in children >= 15 and < 20 years (%)						
Prevalence in pregnant women (%)		0.7 (1996)		0.4-0.6		
Gender data and major risk behaviors of HIV/AIDS	1990	1995	2000	2002	2004	2006
Male : female ratio	5.4	2.8	1.8	1.7		
Mechanism for transmission (%)						
Sexual	52	58.1	70.3	72.3		
Perinatal	2.2	3.3	2.7	2.3		
IDU	28.9	21.9	13.4	11.2		
Blood products	3.5	1.7	0.1	0.1		
Unknown	13.3	15.1	13.4	14		

National Policies

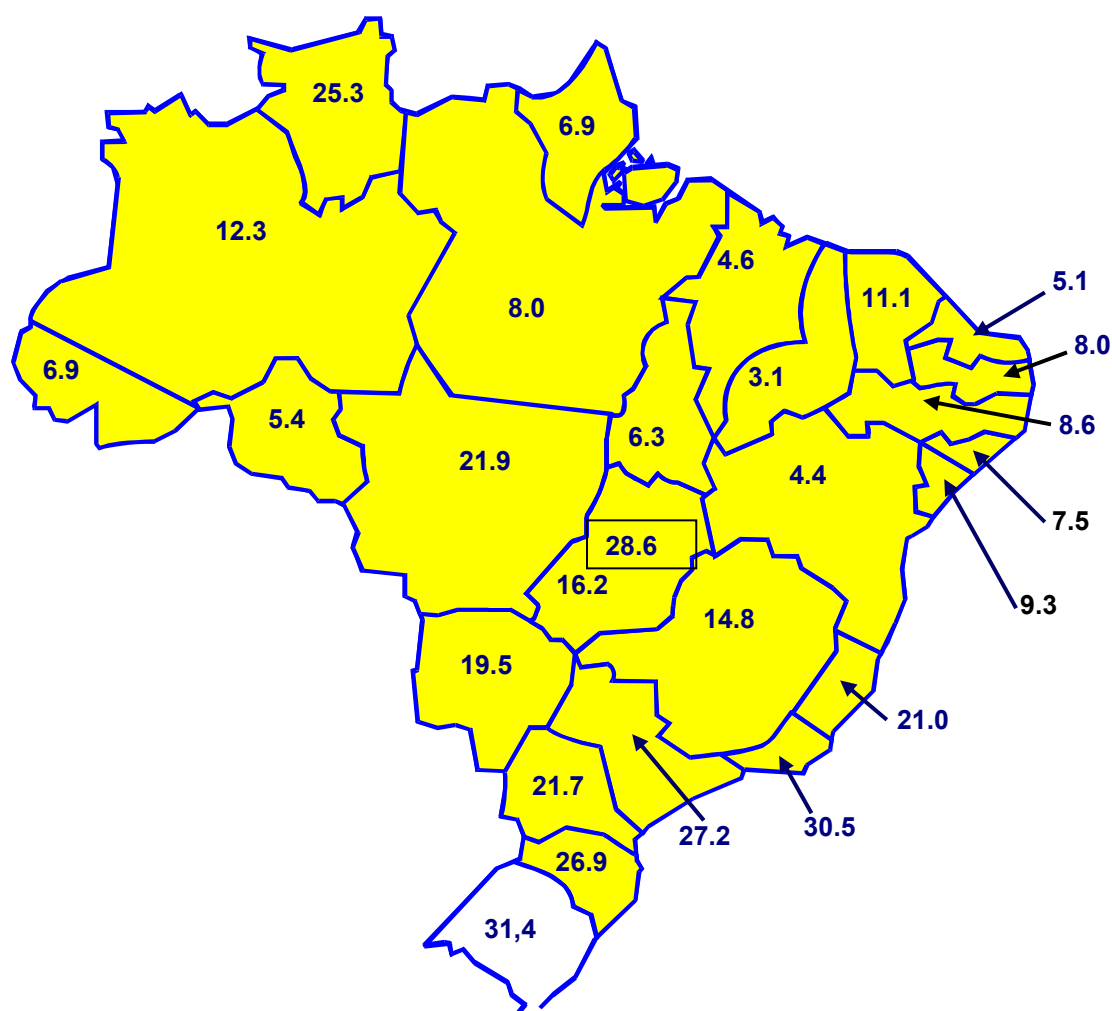
- Is there a national policy on comprehensive ART? No ☐ Yes ☒ Since when? 1996
- Is there a national policy on HIV testing? No ☐ Yes ☒ Since when?

The “Three Ones”

- **Is there ONE agreed HIV/AIDS national framework?** No___ Yes X Dates? ___
Year of last revision: ___ Title? ___
- **Is there ONE coordinating national authority?** No___ Yes X Since when? 1985
Name? National AIDS Control Program
- **Is there ONE agreed country level monitoring and evaluation system?** No___ Yes ___ Since when? ___

Geographic distribution of HIV/AIDS, by major political districts

Incidence rates for 2003 (per 100,000 population)



Source: MS/SVS/PN DST and AIDS/SINAN

Demographic and Socio-economic indicators			
	Estimate	Date	Source
Total Population (thousands)	179,108,134	2004	IBGE
Life Expectancy at Birth	68.4	2003	OPS
Under 5 mortality rate (per 1000 children)	36	2004	UNICEF
Adult mortality rate (per 1000 adults)	Mujeres: 136 Hombres: 246	2002	OMS
GNI Per Capita (US\$)	2,830	2002	Banco Mundial
% Government Budget Spent on Health Care	8.8	2001	OMS
Per Capita Expenditure on Health (US\$)	222	2001	OMS
% Health Care Budget spent on HIV/AIDS	2.6%	2003	SIDALAC

2. Antiretroviral Treatment (ART)

This section contains information about the number of people living with HIV/AIDS who require ART and the number who receive it. "People" refers to all ages and sexes. The data come from several sources, listed below, but primarily from UNAIDS or PAHO, where possible, for consistency reasons. The difference between those people requiring ART and not receiving it is the Treatment Gap, which is also the ART target for achieving universal coverage by 2005. Data on ART regimens, guidelines used, and cost of ART is also found in this section, as well as specific ARVs used and the amount required per year, the sources of which are primarily from the Ministries of Health and local NGOs of each country, unless otherwise specified.

ART surveillance

	31/7/ 2003	Source	31/7/ 2004	Source	2005	Source
1 Estimated # of people living with HIV/AIDS	610,000	UNAIDS	660,000	MOH		
2 Estimated # of people requiring ART **	135,000	UNAIDS	154,000	MOH		
** Previous estimate is done by: Applying the 20% standard to the # of PLWHI (#1 in table) No <input type="checkbox"/> Yes <input type="checkbox"/>						
Or by using other method of estimating? No <input type="checkbox"/> Yes <input type="checkbox"/> Specify _____						
% female	(# females requiring ART / total people requiring ART x 100)					
% < age 5	(# under 5 requiring ART / total people requiring ART x 100)					
3 Estimated # of people receiving ART	125,168	WHO	154,000	MOH		
% female	(# females receiving ART / total people receiving ART x 100)					
% < age 5	(# < 5 receiving ART / total people receiving ART x 100)					
4 Estimated Treatment Gap (2 – 3)	9832		0			
5 % ART coverage (3 / 2 x 100)	92.7%		100%			
6 % of health districts that have at least one ART outlet						
(# of health districts with at least one ART outlet / total # of health districts x 100)	100%	MOH				
7 Mortality rate among ART users (# deaths of ART users / total population x 100,000)						
8 % hospital bed occupancy by People infected by HIV/AIDS for a given month (# hospital beds occupied by PLWHA for a given month / # hospital beds occupied for the same month x 100)						

ATR, plans and regimens

- **Are ART treatment protocols in use?** No___ Yes X Since when? _____
Name? _____
- **Have revisions been made to the protocols?** No___ Yes___ When? _____
- **Do the criteria for determining ARV needs include:**
 - CD4 count No___ Yes X
 - Viral Load No___ Yes X
 - Opportunistic Infections No___ Yes X
- **Specify treatment regimens:**
 - First line regimen for adults: Initial therapy is usually composed of two NRTI (preferably AZT/3TC or d4T/3TC) associated to one NNRTI (EVR) or one PI (NFV or LPV/r)
 - Alternative regimen for adults: Two NRTI (AZT/ddl, ddl/3TC, or ddl/d4T) and one NNRTI (NVP) or one PI (SQV/r or IDV/r).
 - First line regimen for new borns: _____
 - Alternative regimen for new borns: _____
 - First line regimen for children: Zidovudine and Efavirenz
 - Alternative regimen for children: _____
 - First line regimen for prevention mother-to-child transmission Zidovudine from the third month to delivery

What is the average cost of first line ARV regime per person / per year in US dollars?

Regimen	2000	2002	2004	2006
First line regimen for adults in the public sector	4,137.20	1,540* (2001)		
Alternative line regimen for adults in the public sector				
First line regimen for adults in the private sector				
Alternative line regimen for adults in the private sector				

* Ministerio de Saude, 2001.

- **Is there a system in place to register adverse reactions involving the use of ARV?**
At the national level: No___ Yes___ Since when? _____ or institutional. No___ Yes___ Since when? _____
- **Is there a system in place to register drug resistance involving the use of ARV?**
At the national level: No___ Yes X Since when? _____ or institutional. No___ Yes___ Since when? _____
- **Does the Government purchase Generic ARVs?**
No___ Yes X Since when? _____ From what pharmaceutical companies? Far-Manguinhos/FIOCRUZ/MS, FURP/SP, LAFEPE/PE, FUNED/MG, IQUEGO/GO, IVB/RJ

	2000	2002	2004	2006
Ministry of Health			100%	
Ministry of Social Security				
Other ministries				
Armed Forces/Military				
NGOs				
Other				

	2000	2002	2004	2006
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Specify the number of NGOs offering ARV treatment in your country?

ARV Selection, Prices & Amount purchased

Antiretrovirals used				Price/unit (US\$)			Number of units purchased for the year *		
Generic name	Product name	Strength	Unit used **	2003	2004	2005	2003	2004	2005
Zidovudine		100mg	Capsules	0.11	0.11		15.524.780	5.788.100	17.000.000
Zidovudine		10mg/ml Fl.200ml	Oral solution	2.96	2.96		146.242	129.870	147.000
Zidovudine		10mg/ml Fl.20ml		1.40	1.40		10.936	12.480	23.000
Didanosine		25 mg	Buffered tablets	0.07	0.07		1.820.700	917.700	438.000
Didanosine		100 mg	Buffered tablets	0.31	0.31		16.899.840	8.136.000	8.700.000
Didanosine		250 mg	Coated tablets	(a)	(a)		0	123.000	420.000
Didanosine		400 mg	Coated tablets	(a)	(a)		0	810.000	2.610.000
Zalcitabine		0.75 mg	Tablets	(b)	(b)		0	0	0
Lamivudine		150 mg	Tablets	0.23	0.23		23.236.920	26.227.500	28.200.000
Lamivudine		10mg/ml Fl.240ml	Oral solution	8.13	8.13		65.047	45.640	71.900
Stavudine		30 mg	Tablets	0.08	0.09		7.858.380	4.147.500	7.200.000
Stavudine		40 mg	Tablets	0.19	0.18		20.230.800	14.504.520	19.200.000
Abacavir		300 mg	Tablets	1.86	1.86		1.132.440	1.991.220	1.200.000
Zidovudine + Lamivudine	Combivir	300 mg + 150 mg	Tablets	0.46	0.46		40.838.700	47.719.920	60.000.000
Delavirdine	Rescriptor	100 mg	Tablets	(b)	(b)		0	0	0
Efavirenz	Sustiva	200 mg	Capsules	(b)	(b)		0	0	1.980.000
Efavirenz	Sustiva	600 mg	Capsules	2.10	1.575		15.479.670	22.514.400	27.000.000
Nevirapine		200 mg	Tablets	0.28	0.28		15.940.260	10.792.620	13.380.000
Amprenavir	Agenerase	150 mg	Capsules	0.68	0.68		4.746.480	2.520.000	1.368.000
Indinavir	Crixivan	400 mg	Capsules	0.39	(c)		34.677.000	0	2.880.000
Lopinavir/r	Kaletra	133.3/33.3 mg	Capsules	1.50	1.30		23.774.580	39.555.000	64.800.000
Nelfinavir	Viracept	250 mg	Tablets	0.52	0.468		78.036.750	45.850.050	36.720.000
Saquinavir	Invirase	200 mg	Capsules	0.48	0.5304		0	10.800.000	5.760.000
Ritonavir	Norvir	100 mg	Capsules	0.44	0.44		8.912.736	0	5.880.000

ARV Selection, Prices & Amount purchased									
Antiretrovirals used				Price/unit (US\$)			Number of units purchased for the year *		
Generic name	Product name	Strength	Unit used **	2003	2004	2005	2003	2004	2005
* "Purchased" refers to the # of units actually purchased for the people in treatment for that particular year.									
** Specify unit as tablet, capsule, ampoule, bottle, etc.									

3. Laboratory capacity and funding for procurement

For HIV/AIDS to be properly diagnosed and treated at the appropriate time, laboratories need to have access to the right tests at the best price. This section describes the diagnostic and follow-up tests available to the country and the number of tests required for the given year. This section also considers the coverage of laboratories throughout the country, the monitoring and surveillance systems in place, as well as the source of financing for procuring ARV and diagnostic tests.

HIV diagnostic/follow-up tests, Prices & Amount purchased							
Tests used		Price/test (US\$)			Number of tests required for the year		
Type	Diagnostic product	2003	2004	2005	2003	2004	2005
Screening tests	Rapid tests						
	Elisa						
	Agglutination						
Confirmation tests	Western Blot						
	Indirect Immunofloresence						
Follow-up	CD4/CD8 Count						
	Viral load: Technique <u>Plasma</u>						
	Genotyping						

Laboratory services for HIV diagnostics

	2000	2002	2004	2006
% of health districts that have at least one laboratory service for HIV diagnosis (# of health districts with at least one lab service / total # of health districts x 100)				
Is there a system for quality control of laboratory services? At the national level: No ___ Yes <u>X</u> Since when? ___ or institutional. No ___ Yes ___ Since when? ___				
Is there a system in place for conducting external evaluations of the quality of laboratory services? At the national level: No ___ Yes <u>X</u> Since when? ___ or institutional. No ___ Yes <u>X</u> Since when? ___				

Financing and procurement for ARV and diagnostic tests

- **What is the principal source of financing for ARV purchase??** (i.e. through national budget, global fund, out of pocket, bilateral or private donors, etc.) National Health Budget
- **What is the principal source for financing HIV diagnostic supplies?** (i.e. through national budget, global fund, out of pocket, bilateral or private donors, etc.) National Health Budget
- **Is ART procurement done primarily through a**
 - centralized procurement mechanism (at national or provincial level) No ___ Yes X
 - or decentralized procurement mechanism (at institutional level) No X Yes ___
- **How is price solicitation for ARVs obtained?**
 - Through national tender No ___ Yes ___
 - Through international tender No ___ Yes ___
 - From a limited number of local/international suppliers, No ___ Yes ___
 - Through negotiation with supplier?) No ___ Yes ___
 - Other? _____
- **Are HIV/AIDS medicines required to be registered by the national regulatory authority?**
No ___ Yes ___ Since when? _____
- **Are the HIV medicines under patent protection in the country?** No ___ Yes ___ Since when? _____
- **Are ARVs subject to quality control testing prior to product use?** No ___ Yes ___ Since when? _____

4. Voluntary Counseling and Testing, Prevention of Mother to Child Transmission programs, and joint HIV/AIDS and TB/STI programs

Although Voluntary Counseling and Testing (VCT) and Prevention of Mother to Child Transmission (PMTCT) programs fall partly under prevention activities, they also fall under the "Care and Treatment" component, since their testing sites provide an interface between the diagnosis and the follow-up activities. TB and STI programs are also important entry points for Care and Treatment, given the high co-morbidity of TB and HIV/AIDS as well as other STIs and HIV/AIDS. This section therefore describes the coverage of VCT, PMTCT, and TB/STI services as well as the quality and comprehensiveness of such programs.

Voluntary Counseling and Testing (VCT) in the public sector						
	31/7/2003	Source	31/7/2004	Source	2005	Source
% of health services (primary, secondary, or tertiary) that offer VCT services out of all health services that should provide VCT services. (# of health services (primary, secondary, or tertiary) that offer VCT services / total # health services that should provide VCT services x 100)	*		*			
% of health districts with at least one functioning VCT service (# of health districts with at least one functioning VCT service / total # of health districts x 100)	100%	convênios	100%	convênios		
# clients who used VCT services in public sector during the given year	> 4.4 million tests	ARI				
% female clients (# women attending VCT services in public sector / total # clients of the public VCT services x 100)	64%	SI-CTA	65%	SI-CTA		
# clients who used VCT services in NGO sector during the given year	**		**			
% female clients (# women attending VCT services in NGO sector / total # clients of the NGO VCT services x 100)						
% of persons who return for their results (# of persons who return for results / total # of tests done at VCT services x 100)	78,7%	***	74,2%	***		
% of persons who receive post-test counseling (# of persons who come for post-test counseling / total # of tests done at VCT services x 100)	78,7%	***	74,2%	***		
% of positive HIV tests at VCT services (# of tests at VCT services with positive results / total # of tests done at VCT services x 100)	1,54	SI-CTA	2,94	SI-CTA		

* Em 2003, havia no Brasil 249 CTA; em 2004, esses serviços passaram para 289, superando a meta governamental de implantação de serviços especializados de testagem e aconselhamento. A partir de 2003, os Programas Estaduais de DST/Aids passaram a ampliar o diagnóstico da infecção pelo HIV para rede básica de saúde, obedecendo ao princípio da descentralização do Sistema Único de Saúde. Os municípios definem a necessidade de ampliação do número de serviços realizando testagem, levando-se em consideração critérios epidemiológicos e estruturas de serviço disponíveis. Em 2002, a cobertura nacional de diagnóstico do HIV existente (30%) apontava a necessidade premente de ampliação. Em resposta à esta necessidade, foram estabelecidas e atingidas metas de ampliação para os anos de 2003 (50%) e 2004 (60%).

** Informação não disponível para o setor governamental.

*** Dados obtidos a partir dos relatórios do sistema informatizado de 06 CTA, localizados nos municípios de São Luís (MA), Sinop (MT), Rio de Janeiro (RJ), Palmas (TO), Brasília (DF) e Curitiba (PR). Os serviços selecionados são considerados representativos das realidades regionais.

VCT framework and country strategies

- **Is VCT part of the Primary Health care package?**
No ___ Yes X Since when? _____
- **Is VCT integrated into a global health network that includes medical, social and emotional supports?**
No ___ Yes X Since when? 1988
- **Is there a system for quality management system for VCT activities?**
No ___ Yes X Since when? 1988
- **Is there an operational strategy for identifying barriers to VCT?**
No ___ Yes X Since when? 1990

Prevention of Mother to Child Transmission (PMTCT) services in the public sector

	31/7/ 2003	Source	31/7/ 2004	Source	2005	Source
% of health services that provide PMTCT services of those that should provide PMTCT services (# of health services that provide PMTCT services / total # of health services that should provide PMTCT services x 100)						
# of women who used PMTCT services during the given year						
% of women tested for HIV at PMTCT services (# of women tested for HIV / # of women who used PMTCT services x 100)	72.5	MOH				
% of women tested who tested positive for HIV (# of women tested at PMTCT who tested positive for HIV / # of women tested for HIV who used PMTCT services x 100)						
% of babies born of HIV+ mothers with a confirmed diagnosis of HIV (# of babies born of HIV+ mothers with confirmed HIV status / # of babies born of HIV + mothers x 100)	20%	MOH				

PMTCT programs

- **Are there protocols/guidelines used for PMTCT services?** No ___ Yes ___ Since when? _____
- **Is there a national plan for PMTCT services?** No ___ Yes ___ Since when? _____

Tuberculosis, Sexually Transmitted Infections, and HIV/AIDS services in the public sector

	31/7/ 2003	Source	31/7/ 2004	Source	2005	Source
% of health services that diagnose and treat TB and offer concurrent VCT services for HIV/AIDS (# of health services that offer TB diagnosis and treatment and concurrent VCT services / total # of health services that treat and diagnose TB x 100)						
% of health services that offer STI treatment services and offer concurrent VCT services for HIV/AIDS (# of health services that offer STI diagnosis and treatment services and concurrent VCT services / total # of health services that treat and diagnose TB x 100)						

5. Trained Human Resources

The presence of sufficient trained human resources in all aspects of HIV/AIDS care and treatment is essential in the fight against HIV/AIDS. This section describes the coverage of trained health care workers, certification and accreditation mechanisms, and the existence of guidelines for supervising staff.

Human Resource capacity						
	31/7/ 2003	Source	31/7/ 2004	Source	2005	Source
# of Doctors who participated in ART training, during the given year						
# of Nurses who participated in ART training, during the given year						
# of other health workers who participated in ART training, during the given year						
% of health care workers trained in ART (# of doctors, nurses, health care workers trained in ART [including those trained before 2003] / total # of doctors, nurses, health care workers in the country x 100)						
# of Doctors who participated in VCT training, during the given year	*					
# of Nurses who participated in VCT training, during the given year						
# of other health workers / community members who participated in VCT training, during the given year						
% of health care workers trained in VCT (# of doctors, nurses, health care workers trained in ART [including those trained before 2003] / total # of doctors, nurses, health care workers in the country x 100)						
# of Doctors who participated in PMTCT training, during the given year						
# of Nurses who participated in PMTCT training, during the given year						
# of other health workers who participated in PMTCT training, during the given year						
% of health care workers trained in PMTCT (# of doctors, nurses, health care workers trained in ART [including those trained before 2003] / total # of doctors, nurses, health care workers in the country x 100)						

* Os programas de capacitação de recursos humanos para o aconselhamento em HIV/Aids são planejados e executados pelos Programas de DST/Aids locais. O Programa Nacional elabora propostas de capacitação que são repassados para os CTA, que multiplicam para as Unidades Básicas de Saúde. O número de profissionais e equipes multidisciplinares treinadas não é repassado para o nível federal.

Human Resource capacity, continued

	31/7/ 2003	Source	31/7/ 2004	Source	2005	Source
# of laboratory workers who participated in laboratory training for HIV diagnosis testing and/or follow-up, during the given year						
# of health care workers (doctors, nurses, other health care workers) who participated in stigmatization reduction strategies training, during the given year						
% of health care workers who participated in stigma reduction strategies training (# of doctors, nurses, health care workers trained in stigma reduction training [including those trained before 2003] / total # of doctors, nurses, health care workers in the country x 100)						
# of health care workers (doctors, nurses, social workers, other health care workers) who participated in training for psycho-social support services, during the given year						
# of community members (PLWHA, family of PLWHA, other community members) who participated in training for offering psycho-social support services, during the given year						

Human resources

- **Is there a national accreditation process for training institutions and programs in HIV/AIDS?**
No ____ Yes ____ Since when? _____
- **Is there a certification process for HIV/AIDS training providers?**
No ____ Yes ____ Since when? _____
- **Is there a certification process for HIV/AIDS training participants?**
No ____ Yes ____ Since when? _____
- **Are there national standards for evaluating the competence of health workers involved in scaling up ART?**
No ____ Yes ____ Since when? _____
- **Is there a National Plan for ART, VCT, PMTCT training?**
No ____ Yes: ____ Since when? _____

Data sources

Data presented in this Fact Sheet on Care and Treatment of People Living with HIV/AIDS comes from several sources, primarily in the country, but also globally. This section contains a list of the more relevant sources used to prepare the Fact Sheet. If applicable, it also lists websites where additional information on HIV/AIDS can be found, however, the information found on these sites could change or may be incomplete, so due consideration must be taken.

- UNAIDS National Responses: <http://www.unaids.org/nationalresponse/result.asp>
- Proyecto presentado al Fondo Global para SIDA, malaria y tuberculosis, 2003. www.theglobalfund.org
- Informe sobre la epidemia mundial de SIDA, ONUSIDA, diciembre 2002. www.unaids.org
- Situación de la epidemia de SIDA, UNAIDS, diciembre de 2003
- Informe de avance, UNGASS 2003 – 2004
- UNAIDS/WHO Epidemiological Fact Sheets for HIV and STIs: 2002 update.
- Ministério de Saúde, Programa Nacional de DST e Aids, www.aids.gov.br
- Galvão, Jane. "Access to antiretroviral drugs in Brazil". *The Lancet*, November 5, 2002
- Goldani, Marcelo Zubaran, Giugliani, Elsa Regina Justo, Scanlon, Thomas *et al.* "Voluntary HIV counseling and testing during prenatal care in Brazil". *Revista Saúde Pública*, Oct. 2003, vol.37, no.5, p.552-558. ISSN 0034-8910.
- Relevé Epidemiologique Hebdomadaire, No 50, 2001, p 393.
- Bacon O, Pecoraro ML, Galvão J, Page-Shafer K, HIV/AIDS in Brazil. AIDS Policy Research Center, University of California San Francisco August 2004. <http://ari.ucsf.edu/ARI/policy/profiles/Brazil.pdf>
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Contact information

For more information on care and treatment of people living with HIV/AIDS in this country, please contact the HIV/AIDS unit at the Pan American Health Organization, by phone at (202) 974-3842 or by email at sida@paho.org.