Latin America

AIDS epidemic update

Regional Summary
About one third of all persons living with HIV in Latin America reside in populous Brazil, where a simultaneous focus on ensuring access to prevention and treatment services has helped keep its epidemic stable. National adult HIV prevalence has stayed at approximately 0.5% [0.3%–1.6%] since 2000 (UNAIDS, 2006). Mother-to-child transmission of HIV was sharply reduced after 1997 (de Brito et al., 2006), from an estimated 16% nationally in 1997 to less than 4% in 2002 (Dourado et al., 2006). Meanwhile, widespread access to antiretroviral therapy halved AIDS mortality rates between 1996 and 2002 (Okie, 2006). However, there are concerns about the sustainability of the current policy of universal access to antiretroviral treatment. Expenditure on antiretroviral medicines increased by 66% in 2005, due to the high numbers of people receiving second-line antiretroviral regimens, the weakening of the national generic drugs industry and difficulties in negotiating pricing and other arrangements with pharmaceutical corporations (Grangeiro et al., 2006).

Initially concentrated primarily in men who have sex with men, Brazil’s epidemic then spread to injecting drug users and eventually into the wider population, with increasing numbers of women becoming infected (Dourado et al., 2007). The key factor for a large proportion of women living with HIV is the behaviour of their male sexual partners (Silva & Barone, 2006), who might have been infected through unprotected sex with another man or woman, or through using non-sterile injecting equipment. Unprotected sex between men remains a significant factor, and is estimated to account for about half of the HIV infections that are sexually transmitted in Brazil.

Although the epidemic is stable overall, HIV transmission is increasing in some impoverished and illiterate sections of society (Fonseca et al., 2003; Dourado et al., 2007). A population-based study in Salvador, in the north-eastern state of Bahia, found HIV prevalence of 0.6% in the adult population. However, the study also found that infection levels were almost three times higher among persons in lower income categories than among those in the higher income groups (0.8% versus 0.3%, respectively) (Dourado et al., 2007).

HIV prevalence in injecting drug users has declined in some cities, especially in those with relatively established epidemics and prevention programmes. The main reasons for the decline are the effects of harm-reduction programmes, shifts from injecting to inhaling drugs and mortality among drug users (UNAIDS & WHO, 2006). Some studies have found that unprotected sex with other men ranks high among key factors for HIV infection in male injecting drug users, highlighting the need for services that can reduce both sexual and drug-related risk practices in this group (Ferreira et al., 2006). Such services also need to be sensitive to the potentially greater vulnerability of female injecting drug users. In a cross-sectional study in the states of Bahia, Rio
Grande do Sul, Santa Catarina and São Paulo, HIV-positive female injecting drug users tended to exchange sex for drugs more often than their HIV-positive male peers, and were also more likely to have sexual partners who injected drugs frequently (Cintra et al., 2006).

Brazil's simultaneous focus on ensuring access to prevention and treatment services has helped keep its epidemic stable.

High HIV prevalence has been found among prisoners. Almost 6% of male inmates tested at a São Paulo penitentiary were found to be HIV-positive (Coelho et al., 2007), as were 14% of the women at a detention facility in the same city (Strazza et al., 2007). Levels of HIV knowledge among prison inmates appear to be high, but access to prevention services inside prisons remains inadequate (Coelho et al., 2007).

In recent years, unprotected sex has become the main route of HIV transmission in Argentina (Cohen, 2006). Most of the estimated 120 000 [80 000–220 000] people living with HIV in 2005 reside in the provinces of Buenos Aires, Cordoba and Santa Fe. An estimated four in five new HIV diagnoses in 2005 were attributed to unprotected sexual intercourse (mainly heterosexual) (National AIDS Program Argentina, 2005). However, up to one quarter of HIV infections could be due to unsafe sex between men, and HIV prevalence of 22% has been found in the capital among men who have sex with men (Montano et al., 2005). The use of non-sterile injecting drug equipment is also an important factor in Uruguay’s epidemic, and accounts for almost one fifth (18%) of HIV infections (National AIDS Program Uruguay, 2007). Substantial HIV transmission has been occurring among injecting drug users in Montevideo, 19% of whom tested HIV-positive in one study (IDES et al., 2006).

Further north, Paraguay’s epidemic is also comparatively small, and is concentrated mainly in the city of Asunción (the capital) and the department of Central, as well as in some areas bordering Argentina and Brazil (National AIDS Program Paraguay, 2007). HIV prevalence among pregnant women nationally was 0.3% in 2005 (National AIDS Program Paraguay, 2006a), but the majority of the estimated 13 000 [6200–41 000] people living with HIV at the end of 2005 were men (UNAIDS, 2006). Most of these men acquired the virus through either unprotected paid sex, sex with other men or when injecting drugs. In recent HIV sentinel surveys, 12% of injecting drug users tested HIV-positive in Asunción, as did 3.6% of sex worker clients in the same city (National AIDS Program Paraguay, 2006b). At 11%, HIV prevalence among male sex workers is considerably higher than the 1.8% and 2.6% prevalence found in separate studies among their female counterparts (Bautista et al, 2006; National AIDS Program Paraguay, 2006c). However, high syphilis prevalence in male (13%) and female (19%) sex workers suggests
poor access to sexual health services and infrequent condom use—factors that can facilitate the transmission of HIV between sex workers, clients and their other sexual partners (National AIDS Program Paraguay, 2006b).

There is a need for more HIV-related research in Chile among men who have sex with men.

In Chile, too, most HIV infections are in men, although increasing numbers of women are acquiring HIV from their male partners (Martínez, Elea & Chiu, 2006), most of whom were probably infected during unprotected sex with other men. There is a need for more HIV-related research in Chile among men who have sex with men. Studies have found a low HIV prevalence among female sex workers (none of whom tested HIV-positive in a recent study in the capital); therefore, unsafe heterosexual paid sex probably accounts for only a small percentage of current HIV infections (Barrientos et al., 2007). In a study in Santiago, 93% of surveyed female sex workers said they had always used condoms when engaging in commercial sex, which probably reflects the results of past prevention efforts that promoted safer paid sex (Barrientos et al., 2007).

In Bolivia, Ecuador and Peru, HIV continues to affect mostly men who have sex with men. In Bolivia, HIV prevalence of 22% and 15% has been found among men who have sex with men in Santa Cruz and La Paz, respectively. It is estimated that, in 2005, fewer than 3% of men who have sex with men had access to services to help prevent HIV and other sexually transmitted infections, compared to 30% service coverage for sex workers (Ministerio de Salud y Deportes, ONUSIDA, 2007a,b). In Peru, average HIV prevalence in men who have sex with women has stayed between 18% and 22% in various studies conducted between 1996 and 2002 (Sanchez et al., 2007; Ministerio de Salud del Perú, 2006). In a 2002 study in Lima, HIV incidence was estimated to be 8.3% (Sanchez et al., 2007). In Lima, condom use is increasing during sex with both non-regular and steady partners, and there has been a slight decline in syphilis prevalence and a steep drop in gonorrhoea prevalence among men who have sex with men (Sanchez et al., 2007). However, much lower levels of condom use have been reported in the past among the substantial proportion (between one quarter and one half, depending on the study) of men who also have sex with women, fewer than one in five (17%) of whom said that they had used condoms during sex with women in the previous year (Tabet et al., 2002). Most women infected with HIV are likely to have acquired the virus from male partners who also have sex with men (Ministerio de Salud del Perú, 2005). HIV prevalence has been much lower among female sex workers—between 0.6% and 1.6%, depending on the city (Montano et al., 2005).

Overall, national adult HIV prevalence in Peru was estimated at 0.6% [0.3%-1.7%] in 2005 (UNAIDS, 2006). Lower prevalence has been found in specific studies, including 0.2% in a 2002 population-based survey (Carcamo et al., 2003). Evidence has emerged of elevated HIV prevalence among indigenous populations in the Amazon region of Peru. In 2004, among adult Chayahuita, HIV prevalence of 7.5% was found. None of the study participants had ever used a condom, and sex between men appeared to be relatively common (Zavaleta et al., 2007).

Sex between men is also the main factor for HIV transmission in Colombia, where prevalence of 10%-18% has been found recently in some cities among men who have sex with men. Unprotected paid sex is another key factor, with HIV prevalence of 3.3% and 5% found among female sex workers in Barranquilla, on the Caribbean coast, in 2006 (ONUSIDA & Ministerio de la Protección Social, 2006). This figure is considerably higher than the 0.7% prevalence found in a 2002 study among sex workers in the capital, Bogotá (ONUSIDA & Ministerio de la Protección Social, 2006).

Central America

Inadequate HIV surveillance systems in Central America hinder up-to-date understanding of the HIV epidemics in this subregion. The available information points to epidemics that are related mainly to HIV transmission during unprotected sex between men and unsafe paid sex, with migration an important factor in the spread of the virus. Against the backdrop of widespread homophobia, hidden epidemics of HIV among men...
who have sex with men are under way in several Central American countries, including Belize, Costa Rica, El Salvador, Guatemala, Nicaragua and Panama. Compared with HIV prevalence in the adult general population, infection levels in men who have sex with men were seven times higher in Honduras, 10 times higher in Guatemala and Panama, 22 times higher in El Salvador and 38 times higher in Nicaragua, according to research from 2002 (Soto et al., 2007).

A sharp decline in HIV prevalence among female sex workers in three Honduran cities appears to be linked to significant increases in condom use during commercial sex.

In El Salvador, almost one in six (15%) men participating in a five-country study in 2002 tested HIV-positive, as did one in eight (12%) in Guatemala and Honduras. The lowest prevalence found was 8% in Nicaragua and 9% in Panama. The relatively high levels of knowledge of HIV prevention methods (ranging from 79% in El Salvador to 96% in Honduras) were contradicted somewhat by the large proportions of men (between one quarter in Honduras and one half in Nicaragua) who harboured misconceptions about HIV transmission. Safe sex was infrequent in Guatemala and Nicaragua, where more than half of the men said that they had not consistently used condoms with non-regular male partners in the month before the study. In Nicaragua, almost half of the male sex workers surveyed had not consistently used condoms in the previous month (Soto et al., 2007).

The findings from these countries also suggest that there is scope for HIV transmission between HIV-positive men who have sex with men and female partners. Except for Panama, between one quarter and one third of the men reported having had sex with at least one man and one woman in the previous six months. In addition, between 30% and 40% of those men said that they had had unprotected sex with both men and women in the previous 30 days. There is an urgent need to expand outreach and integrated clinical and social interventions that are accessible to men who have sex with men in Central America (Soto et al., 2007).

The same study found high levels of HIV prevalence among female sex workers in Honduras (10%), Guatemala (4%) and El Salvador (3%), and low prevalence of 0.2% in Nicaragua and Panama. With almost half of the female sex workers in Nicaragua saying that they had not used condoms consistently with new or regular clients in the previous month, HIV prevention efforts that benefit sex workers will need to be increased in that country if infection levels are to be reversed. Striking disparities in the prevalence of other sexually transmitted infections also highlight the need to improve basic sexual health services in countries including El Salvador (where 15% of female sex workers were infected with syphilis and 11% with gonorrhoea), Guatemala (12% syphilis and 11% gonorrhoea prevalence) and Nicaragua (8% syphilis and 9% gonorrhoea prevalence) (Soto et al., 2007).

Hidden HIV epidemics among men who have sex with men are under way in several Central American countries, including Belize, Costa Rica, El Salvador, Guatemala, Nicaragua and Panama.

Recent sentinel surveys have cast more light on the epidemic in Honduras, where most HIV transmission occurs during unsafe paid sex and unprotected sex between men. Elevated HIV prevalence has been found among female sex workers and men who have sex with men (Ministry of Health Honduras, 2006), although there is recent evidence of declining prevalence in those population groups (Secretaría de Salud de Honduras et al., 2007a,b). Preliminary findings from a 2006 study show HIV prevalence of 5.7% among men who have sex with men in Tegucigalpa (down from 8.2% in 2001 and 10% in 1998) and 9.7% in San Pedro Sula (down from 16% in 2001). However, rising syphilis prevalence found in the 2006 study suggests that access to and uptake of sexual health services need to be improved, together with increased condom use. Three quarters or more of the men participating in the study reported using condoms consistently with non-regular partners in the previous month, and two thirds or more also did so with their steady
partners. Conversely, though, one quarter or more of men who have sex with men were still having unprotected anal sex (Secretaria de Salud de Honduras et al., 2007b).

A sharp decline in HIV prevalence among female sex workers has also been observed in three cities in Honduras (see Figure 1). Consistent condom use during the previous 30 days was high in all three cities (>80% in Tegucigalpa and San Pedro Sula, and 98% in La Ceiba with paying clients, and 87% or more with non-regular partners), which suggests that condom promotion and other prevention efforts have been successful (Secretaria de Salud Honduras, 2007a).

Mexico’s epidemic remains concentrated largely in men who have sex with men, sex workers and their clients, and injecting drug users. In various studies in 2005, HIV prevalence of 2%-4% was found among injecting drug users in Tijuana and Ciudad Juarez, along the American border (White et al., 2007; Frost et al., 2006). More than 85% of injecting drug users said they had used non-sterile injecting equipment, which highlights the importance of introducing harm-reduction programmes (White et al., 2007). HIV prevalence of 5% was found among female sex workers in the same cities, with unprotected sex (31% of sex workers in Ciudad Juarez were infected with syphilis) and injecting drug use being the key factors for HIV (Patterson et al., 2006). These findings are confirmed by another study which found HIV prevalence of 12% in sex workers who injected drugs and 5% among their non-injecting counterparts. The female sex workers who were injecting drug users also had higher levels of other sexually transmitted infections and were more likely to have unsafe sex with clients, compared with their counterparts who were not injecting drug users (Strathdee et al., 2007). Focused prevention efforts are needed to help protect sex workers who are injecting drug users, their clients and their respective other sexual partners against HIV.

Overall, unprotected sex between men accounts for more than half (57%) of the HIV infections recorded to date in Mexico (Bravo-Garcia, Magis-Rodriguez & Saavedra, 2006), though there are indications of increasing risk for HIV infection among women (Magis-Rodriguez et al., 2004). Male sex workers, in particular, appear to be at high risk of exposure to HIV. A study in Mexico City and Guadalajara found HIV prevalence of 20% in this population group, and another study in Acapulco and Monterrey found prevalence of 15% in 2005 (Magis et al., 2006).

Figure 1

**HIV prevalence in female sex workers in various cities in Honduras, 1996–2006**

![HIV prevalence chart](source)

LATIN AMERICA


Secretaria de salud de Honduras et al. (2007b). Estudio Centroamericano de vigilancia de comportamiento sexual y prevalencia de VIH/ITS en poblaciones vulnerables: Hombres que tienen sexo con hombres (HSH), Julio. Tegucigalpa.


Tabet S et al. (2002). HIV, syphilis and heterosexual bridging among Peruvian men who have sex with men. AIDS, 16(9):1271–1277.


UNAIDS, the Joint United Nations Programme on HIV/AIDS, brings together the efforts and resources of ten UN system organizations to the global AIDS response. Cosponsors include UNHCR, UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO and the World Bank. Based in Geneva, the UNAIDS secretariat works on the ground in more than 80 countries worldwide.
The annual AIDS epidemic update reports on the latest developments in the global AIDS epidemic. This 2007 Regional summary provides the most recent estimates of the epidemic's scope and human toll and explores new trends in the epidemic's evolution in Latin America.