HIV/AIDS in the Americas

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The Americas have accounted for the highest number of reported cases of AIDS of any region in the world since the beginning of the epidemic, primarily due to the high number of cases reported in the United States and Brazil. The characteristics of the epidemic vary by country, some countries having a pattern similar to the United States (HIV infection primarily among men who sex with men and intravenous drugs users) and others having patterns similar to Africa (HIV infection primarily through heterosexual transmission). The magnitude of the epidemic is difficult to determine in many of the countries of the region because of the low proportion of AIDS cases that are reported and because surveillance for HIV infected individuals among risk groups is conducted in very few of the countries. Although knowledge of HIV/AIDS is reasonably high in the region, knowledge alone has been demonstrated to be insufficient to alter behavior, especially among economically deprived groups. Nonetheless, in the absence of an effective vaccine and affordable treatment, health education and behavioral intervention remain the key weapons in the fight against the epidemic in the majority of the countries of the region.

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COMPARISON WITH OTHER REGIONS

The Americas have accounted for the highest number of reported cases of AIDS in the world every year since the beginning of the epidemic, due primarily to the large number of cases reported in the United States and Brazil (Figure 1). As of June 1996, Latin America and the Caribbean, accounted for 13.4% of cases reported world-wide.

The level of under-reporting, however, varies in different parts of the world from a low of 10% percent in Europe and North America to greater than 90% in many of the developing countries. Thus, other regions, particularly Africa, probably have higher rates of both AIDS and HIV-infected individuals.

COMPARISONS OF COUNTRIES WITHIN THE AMERICAS

Within the Americas the highest numbers of AIDS cases are reported from the United States although higher rates of AIDS have been reported from the Bahamas and several of the Caribbean nations. Sexual transmission accounts for 80% of HIV transmission within the region, ranging from 64 percent in Brazil to as high as 93% in the Andean subregion (Bolivia, Colombia, Ecuador, Peru and Venezuela). Foci of transmission through sharing of equipment by injection drug users (IDUs), however, have been reported in several urban areas of the United States and Brazil. Levels of under-reporting of AIDS cases are estimated to range from 10% to 70% within the region, making accurate comparisons between countries difficult.

The annual incidence of AIDS continues to rise in the
Figure 1. Annual incidence of AIDS cases. By region of the who. By year. 1979-94/95.

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The incidence and prevalence of HIV-infected individuals is very difficult to obtain or to estimate. Few of the countries, including the United States, have sentinel surveillance programs in place. In some countries, such as Haiti, the prevalence of HIV infection among sexually active adults is estimated to be as high as 10% in urban areas and 5% in rural areas. The ratio of HIV-infected individuals to AIDS cases is estimated to be about 2:3:1 in the United States, but is probably considerably higher in most of the other countries of the region where the epidemic is in the earlier stages and prevention efforts and education messages have been less intense.

MODES OF HIV TRANSMISSION

There are many patterns of HIV transmission in the Americas, necessitating different approaches to control and prevention. In the United States and Canada the major modes of transmission are through men who have sex with men and sharing of drug equipment among intravenous drug users. For unknown reasons transmission rates are high among drug users in the eastern part of the United States and relatively low in the western part. Although the rates of AIDS have been declining overall in the United States and Canada, primarily due to decreases among men who have sex with men and intravenous drug users, the incidence of HIV in these two countries is, unfortunately, increasing among heterosexuals, particularly women, and, of course, their offspring.

In the Caribbean countries the major mode of spread is through heterosexual intercourse, with low levels of transmission occurring through other activities. In the "southern cone" of South America the major risk groups are similar to those in Canada and the U.S.: homosexuals and IDUs, although the rates are now equally high in both groups in this area. In the Andean region the major risk group is men who have sex with men followed closely by promiscuous heterosexuals. Similar to the United States, Brazil has several epidemics. Rates among drug users are high in the Sao Paulo/Santos region, but relatively low in other urban areas. Brazil is somewhat unique in that high rates of HIV infection have been documented in bisexuals who, in addition to IDUs, may act as a bridge for infection between the homosexual and heterosexual populations.

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There has been a significant improvement in knowledge and attitudes towards HIV/AIDS in recent years. Behavior changes have been noted in some risk groups such as men who have sex with men, drug users, and commercial sex workers, but a high level of high-risk activity persists, particularly among heterosexuals who are inclined to underestimate the levels of risk associated with promiscuous behavior. Thus, as in other regions of the world, it is clear that knowledge alone is insufficient to promote change in behavior, particularly intimate behavior.
RISK REDUCTION AND PREVENTION EFFORTS

In the absence of an effective vaccine, and limited access of people outside of the United States and Canada to treatment (even for HIV-infected pregnant women), risk reduction and prevention is limited to behavior modification, including efforts to reduce promiscuous behavior, high risk sexual activities, injection drug use and sharing of equipment, and to promotion of condom use, needle exchanges, and use of bleach for sterilizing equipment among individuals who will not or cannot modify their high risk behavior.

A major barrier to risk reduction and prevention efforts has been the conservative nature of the societies in the region of the Americas. The United States and other governments have been reluctant to implement explicit public service messages to promote condom usage, to implement effective sex and HIV/AIDS education programs in schools, and to permit development of needle exchange programs. Prejudice, especially in the Latin countries, has hindered organization of homosexuals to educate their colleagues and to promote safer sex, as has been demonstrated to be effective in the United States. Conservative attitudes have also made many individuals at risk for HIV infection reluctant to seek testing. Provision of anonymous testing sites helps to overcome this reluctance, but not completely. The availability of home testing, especially at a reduced cost, may increase the number of individuals willing to learn their HIV status and to take appropriate action to prevent spreading infection to others or to take greater precautions to protect themselves, if they are not yet infected.

Successful prevention and risk reduction in the Americas will depend on better knowledge of the extent of HIV infection in the countries of the region, including knowledge of the risk groups involved and the sexual and drug use behavior of their populations. Attitudes towards risk groups and infected individuals will need to change. The countries will need to implement effective education programs in the schools before sexual exploration begins, to reach out to groups traditionally shunned by society, and to promote and support programs that reduce risk activities and/or reduce risk of HIV transmission. Because treatment will remain beyond the financial reach of most individuals in the region, the emphasis on HIV/AIDS control programs must be on prevention.

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