North America, Western and Central Europe

HIV and AIDS statistics and features, in 2003 and 2005

	Adults and children living with HIV	Number of women living with HIV	Adults and children newly infected with HIV	Adult prevalence (%)*	Adult and child deaths due to AIDS
2005	1.9 million [1.3–2.6 million]	490 000 [340 000–670 000]	65 000 [35 000–140 000]	0.5 [0.3–0.7]	30 000 [19 000–42 000]
2003	1.8 million [1.3–2.5 million]	450 000 [320 000–620 000]	63 000 [34 000–140 000]	0.4 [0.3–0.6]	30 000 [19 000–42 000]

The number of people living with HIV in North America, Western and Central Europe rose to 1.9 million [1.3–2.6 million] in 2005, with approximately 65 000 people having acquired HIV in the past year. Wide availability of antiretroviral therapy has helped keep AIDS deaths comparatively low, at about 30 000.

Overall, prevention efforts are lagging behind changing epidemics in several countries where the main patterns of HIV transmission have been shifting. Although sex between men and, in a minority of countries, injecting drug use remain important routes for HIV transmission, increasing numbers of people are being infected through unprotected heterosexual intercourse.

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The estimated number of people living with HIV in the **United States of America** (USA) at the end of 2003 exceeded one million for the first time, up from the corresponding figure of 850 000–950 000 for 2002 (US Centers for Disease Control and Prevention, 2004a). There were an estimated 1.04 million–1.2 million HIV cases in the USA at the end of 2003. The increase reflects the fact that people with HIV are living longer due to antiretroviral treatment, as well as the failure to adapt and sustain the prevention successes achieved during the epidemic's first 10–15 years. Approximately 32 000 new HIV cases were recorded in 2003 in the 33 states with confidential, name-based reporting, a number that has stayed relatively stable since the late 1990s. (Those 33 reporting states do not include California and New York, which have the highest number of persons living with HIV.)

The majority of people living with HIV in the USA are men who have sex with men, and sex between men remains the dominant mode of transmission, accounting for 63% of newly-diagnosed HIV infections in 2003, according to the latest available data (US Centers for Disease Control and Prevention, 2004a). Reports of increased risky behaviour have increased in recent years, some of it apparently associated

with recreational drug use. A new five-city study, however, has revealed a variety of trends (the cities were Baltimore, Los Angeles, Miami, New York City and San Francisco).

HIV *incidence* among men who have sex with men in San Francisco, for example, now appears to be lower than previously estimated (1.2% in the 2004-2005 study compared with earlier, official estimates of 2.2%). But in Baltimore, HIV *incidence* of 8% has been found in men who have sex with men. Forty percent of the men participating in the study tested HIV-positive, and 62% of them had been unaware of their infection (US Centers for Disease Control and Prevention, 2005). Overall, one quarter of people living with HIV in the USA are believed to be unaware that they are infected. This lack of knowledge about one's HIV status is particularly evident among African American men who have sex with men: the five-city study found that about two thirds of HIV-positive African Americans who have sex with other men had been unaware of their serostatus.

Injecting drug use remains a prominent channel for HIV transmission, also among women. About 20% of Americans living with HIV in 2003 were infected in this manner, as were about 25% of women who were newly diagnosed with HIV in 2003. Among American Indian and Alaskan Native women, that proportion was 33% in 2003 (US Centers for Disease Control and Prevention, 2004a).

However, for women living with HIV, unsafe heterosexual intercourse is the main mode of transmission—an estimated 73% acquired the virus in that manner in 2003. Having increased in the late 1990s, the proportion of women among new annual infections has stabilized, at approximately 25% (US Centers for Disease Control and Prevention, 2004a). For many women with HIV, the main risk factor for acquiring the virus remains the often-undisclosed risk behaviour of male partners, such as injecting drug use and sex with other men (McMahon et al., 2004; Valleroy et al., 2004; Montgomery et al., 2003).

As in other countries, the epidemic in the USA often exploits social fault-lines. A recent study in North Carolina, for example, found that HIV-positive women were considerably more likely to be unemployed, requiring public assistance and exchanging sex for money and gifts (Leone et al., 2005).

One of the striking facets of the epidemic in the United States is the concentration of HIV infections among African Americans. Despite constituting only 12.5% of the country's population, African Americans accounted for 48% of new HIV cases in 2003 (US Centers for Disease Control and Prevention, 2004a). While men comprise the majority of African Americans living with HIV, African American women, too, are disproportionately affected. By some estimates, African American women are more than a dozen times as likely to be infected with HIV than are their white counterparts. Among young men (aged 23–29 years) who have sex with men, HIV prevalence among African Americans (at 32%) is more than four times that among white counterparts (7%) and more than twice that among Latino counterparts (14%). One half of the people who died of AIDS in 2003 were African Americans (US Centers for Disease Control and Prevention, 2004a).

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The estimated annual number of new HIV cases has remained roughly stable at 40 000 since 2000 in the USA (US Centers for Disease Control and Prevention, 2005). However, more efforts are needed to reach the target set by the United States Government four years ago of halving the rate of new infections. The steep drop in AIDS-related deaths after the introduction of antiretroviral therapy in the USA began levelling off in the late 1990s and has averaged at 17 500–18 500 annually since 2000 (see Figure 20) (US Centers for Disease Control and Prevention, 2004a). Although AIDS therapy has saved nearly two million years of life, according to a recent calculation, African-Americans appear not to be benefiting equally from such life-prolonging treatment

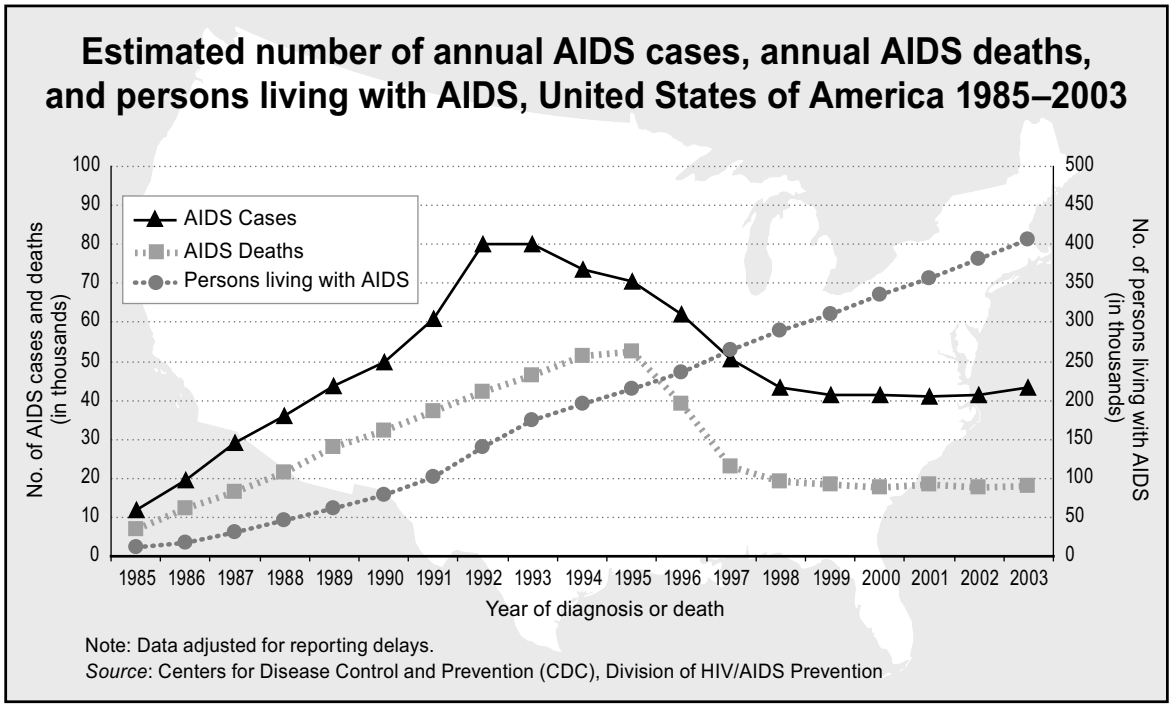

Figure 20

(Walensky et al., 2005). African Americans, for example, are half as likely to be receiving antiretroviral treatment, compared with other population groups, according to another recent study (McQuillan et al., 2004). In 2003, almost twice as many African Americans died of AIDS as white Americans (US Centers for Disease Control and Prevention, 2004a). AIDS has become one of the top three causes of death for African American men aged 25–54, and for African American women aged 25–34 years it is the number one cause of death (US Centers for Disease Control and Prevention, 2004b).

heterogeneity and maturity of the country's epidemic. Among new diagnoses due to heterosexual transmission, one quarter have been among persons from high-prevalence countries in sub-Saharan Africa and the Caribbean (Public Health Canada, 2003). At the same time, injecting drug use remains a major cause of HIV infections among women, and accounted for 32% of new diagnoses among them in 2004. Overall, sex between men remains the single-most important driver of Canada's epidemic, and was responsible for 45% of new HIV diagnoses last year. Although the annual number of AIDS diagnoses has dropped

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In **Canada**, where just under 58 000 HIV diagnoses had been reported by the end of 2004, the epidemic is also changing. The number of reported new annual HIV infections has risen by 20% in the past five years (from 2111 in 2000 to 2529 in 2004); women now comprise over one quarter of new diagnoses (compared to less than 10% in 1995). Among women, those aged 15–29 years appear to be most at risk; women in that age group represented 42% of new diagnoses in 2004 (compared with 13% in 1985–1994). These trends correspond to the growing proportion (30% in 2004) of HIV diagnoses attributable to heterosexual transmission—evidence of the sharply (from 1776 in 1994 to 237 in 2004), a growing share of those diagnoses are among Black and Aboriginal Canadians. The proportion of diagnoses among Black Canadians increased from 8.3% to 15.5% and among Aboriginal Canadians from 2.3% to 14.8% in 1994–2004 (Public Health Agency of Canada, 2005).

More than half a million people are living with HIV in Western Europe, and that number continues to grow with signs in several countries of a resurgence of risky sexual behaviour. The biggest change in Western Europe has been the emergence of heterosexual contact as the dominant

cause of new HIV infections in several countries. Of the more than 20 000 newly diagnosed HIV infections in 2004 (excluding Italy, Norway and Spain, where data were not available), more than one third were in women. A substantial proportion of new diagnoses are in people originating from countries with serious epidemics, principally countries in sub-Saharan Africa (Hamers and Downs, 2004).

There are several reasons for the doubling of new diagnoses of HIV in the **United Kingdom** (UK) since 2000 (from 3499 in that year to 7258 in 2004). Increased testing is one of them: clinician-reporting for HIV diagnoses was introduced in 2000 and has boosted the number of officially-recorded infections (EuroHIV, 2005). Most of the increase, however, is due to a steep rise in the number of heterosexually-acquired HIV infections, the bulk of which (approximately 80%) were contracted in high-prevalence countries. Most of the approximately 4000 heterosexually-acquired HIV infections diagnosed in 2004 had occurred in sub-Saharan Africa (EuroHIV, 2005; Dougan et al., 2005). Women are especially affected. Outside London, for example, prevalence of previously undiagnosed HIV infections among women was 11% at genitourinary medicine clinics in 2003 (UK Collaborative Group for HIV and STI Surveillance, 2004). These patterns of newly-diagnosed HIV infections constitute a major challenge.

At the same time, HIV diagnoses among heterosexual persons who acquired the virus in the UK doubled between 1999 and 2003 (from 158 to 341). Diagnoses of other sexually transmitted infections have also been rising. In 2003, syphilis diagnoses in England, Wales and Northern Ireland were 28% higher for men and 32% higher for women, compared with 2002 (UK Collaborative Group for HIV and STI Surveillance, 2004; Dougan et al., 2005).

Once the primary mode of transmission, sex between men still accounts for roughly one quarter of new HIV diagnoses in the UK (1900 in 2004). A 1998–2004 study has found that the proportion of men who had unsafe sex with a casual male partner in London rose sharply in 1998–2001 (6.7% to 15.2%) (Elford et al., 2005a). Another London study has found rising HIV incidence among older men who have sex with men, but not among their younger counterparts (Elford et al., 2005b). In a recent community survey in Brighton, London and Manchester, 9–14% of men who have sex with men were found to be living with HIV, and at least one third of those who tested HIV-positive had been unaware of their serostatus (Dodds et al., 2005). Prevention activities aimed at men who have sex with men need to consider these findings. Specifically they would need to reflect the diverse risk profiles of their target groups, including HIV status, socioeconomic status and sociocultural identities (Elford et al. 2004). In addition, initiatives to diagnose and treat a greater proportion of infected men are needed, given the large percentage (over 20%, according to one recent study) of HIV-infected men who have sex with men and who are unaware of their serostatus (Murphy et al., 2004).

Since 2002, the overall number of annual new HIV diagnoses attributed to sex between men in Western Europe has declined slightly (from 5453 to 5075 in 2004). However, in **Belgium**, **Denmark**, **Portugal** and **Switzerland** there has been a slight, and in **Germany** a significant, rise (EuroHIV, 2005). In **Germany**, new HIV diagnoses in men who have sex with men have almost doubled from 2001 to 2004 (from 530 to 982) and is the main cause of the steady increase overall in new HIV diagnoses, which totalled 2058 in 2004 (44% more than the 1425 cases diagnosed in 2001). This trend almost certainly reflects an actual increase in new infections, since uptake of testing has levelled out after increasing in the late 1990s when antiretroviral testing became widely available. Sex between men now accounts for a larger share of new annual HIV diagnoses than ever before in Germany—49%, compared with 37% in 2001 (Robert Koch Institut, 2005; EuroHIV, 2005).

Similar, though more localized, trends are visible elsewhere, with the continued epidemics of sexually transmitted infections in several large Western Europe cities reflecting a revival of risky sexual behaviour. For example, a longitudinal study at a sexually transmitted infection clinic in Rome, **Italy**, found a dramatic rise in new HIV infections. Cumulative incidence in 2000–2003 was twice as high as for 1984–1995 and much higher than for 1996–1999 (Giuliani et al., 2005). In Barcelona,

Spain, a resurgence of syphilis and other sexually transmitted infections (STI) has been attributed to increasing risk behaviour in men who have sex with men. One outpatient sexually transmitted infection clinic recorded a fivefold increase in the number of infectious syphilis diagnoses in 2002-2003, compared with 1993–1997 (Vall Mayans et al., 2004). Sex between men remains an important factor in the epidemics in **Denmark**, **France** and the **Netherlands**. In France, in 2003 and 2004, about 20% of new HIV diagnoses were in men who have sex with men, and 58% of those were recent infections (Lot et al., 2004; EuroHIV, 2005). In the Netherlands, unprotected sex between men accounted for more than 40% of newly-diagnosed HIV infections in 2003 and in 2004. Surveillance data point to a revival of unprotected intercourse since 2000. Moreover, one fifth of diagnoses of gonorrhoea, chlamydial infection and syphilis in men who have sex with men in 2003 were in men who were already HIV-infected (Van de Laar and Op de Coul, 2004; EuroHIV, 2005). The urgent need to enhance safer sex programmes for men who have sex with men remains unmet in several countries.

HIV diagnoses among drug injectors dropped steeply in the 1990s in **Spain** after methadone treatment and needle-exchange projects had been introduced. However, high HIV prevalence was found among injecting drug users in Catalonia in 2001, and the practice remains especially prevalent in the north-east of the country and on the Balearic Islands (De la Fuente, 2003). New HIV cases among drug injectors have also dropped sharply in **Portugal** (1000 in 2004, compared with 2400 in 2000), and they comprised just over one third of new HIV diagnoses in 2004 (compared with almost one half as recently as 2002) (EuroHIV, 2005). In addition to sustaining the successes achieved with programmes targeting injecting drug users, the challenge in countries where drug injecting is a significant part of their epidemics is to limit HIV transmission from infected injectors to their sexual partners (EuroHIV, 2005).

As in the **United Kingdom**, the most prominent recent trends in the rest of Western Europe are the steadily growing proportion of newly diagnosed HIV infections that are due to unsafe heterosexual intercourse, and the increasing proportion of women among new HIV cases. In **Belgium**, **Denmark**, **France**, **Germany** and **Sweden**, at least one third of HIV infections attributable to heterosexual contact were probably acquired abroad, mostly in sub-Saharan Africa. Most HIV-infected migrants are unaware of their serostatus, and many of them are women. For example, among HIV diagnoses attributed to heterosexual contact in **France** during 2003, 69% were migrants, almost two thirds (65%) of who were women (Lot et al., 2004). In the 18 western European countries with HIV data for 2004, women comprised 35% of all new diagnoses, up from 29% in 2000 (EuroHIV, 2005). Prevention, treatment and care strategies in Western Europe have to be adapted in order to reach migrant populations and women more effectively.

In central Europe, the epidemics have remained contained and small, with **Poland** and **Turkey** accounting for more than one half of annual new HIV diagnoses. In Poland, new infections have been increasing gradually each year since 2001, reaching 656 in 2004 (EuroHIV, 2005). Long the dominant factor in Poland's epidemic, injecting drug use now accounts for under one third of new infections and has been overtaken by unprotected sex—heterosexual and between men—as the main route of HIV transmission. Women now comprise more than 20% of people living with HIV in Poland (National AIDS Centre, 2005). Overall in central Europe, about half the cases in which a mode of transmission was identified in 2004 were due to unprotected heterosexual intercourse. Only in a handful of countries—including the **Czech Republic**, **Hungary**, **Slovenia**, and the **Slovak Republic**—sex between men appears to be the main mode of HIV transmission.

Western Europe and North America remain the only regions in the world where most people in need of antiretroviral treatment are able to receive it. As a result, the number of AIDS deaths plummeted in the late 1990s. In Western Europe, that trend has persisted, with deaths among AIDS cases decreasing steeply from 3905 in 2000 to 2252 in 2004—a 42% drop (EuroHIV, 2005). (In contrast, in Eastern Europe, where antiretroviral treatment coverage is limited, the number of AIDS deaths has tripled since 2000; EuroHIV, 2005.)

The main challenge in this region is to intensify prevention efforts and adapt them to the changing patterns of the epidemic.