

MIDDLE EAST AND NORTH AFRICA

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	510 000 [230 000–1.4 million]	220 000 [83 000–660 000]	67 000 [35 000–200 000]	0.2 [0.1–0.7]	58 000 [25 000–145 000]
2003	500 000 [200 000–1.4 million]	230 000 [78 000–700 000]	62 000 [31 000–200 000]	0.2 [0.1–0.7]	55 000 [22 000–140 000]

The advance of AIDS in the Middle East and North Africa has continued with latest estimates showing that 67 000 [35 000–200 000] people became infected with HIV in 2005. Approximately 510 000 [230 000–1.4 million] people are living with HIV in this region. An estimated 58 000 [25 000–145 000] adults and children in 2005 died of AIDS-related conditions.

Although HIV surveillance remains weak in this region, more comprehensive information is available in some countries (including Algeria, Libya, Morocco, Somalia, and Sudan). Available evidence reveals trends of increasing HIV infections (especially in younger age groups) in such countries as **Algeria**, **Libya**, **Morocco** and **Somalia**. The main mode of HIV transmission in this region is unprotected sexual contact, although injecting drug use is becoming an increasingly important factor (and is the predominant mode of infection in at least two countries, Iran and Libya). Infections as a result of contaminated blood products, blood transfusions or a lack of infection control measures in health care settings are generally on the decline, but remain problems in some countries. The percentage of total reported AIDS cases attributed to contaminated blood decreased from 12% in 1993 to 0.4% in 2003 (WHO/EMRO, 2005).

Except for **Sudan**, national HIV prevalence levels are low in all countries of this region. However, most of the epidemics are concentrated geographically and among particular at-risk populations, including sex workers and their clients, drug injectors, and men who have sex with men.

By far the worst-affected country in this region is **Sudan**, where the highest infection levels found in the south. There are recent signs that HIV may be acquiring a stronger presence in the north. Among the minority of women agreeing to be tested for HIV in Khartoum as part of a pilot project to prevent the transmission of the virus from mother to child, just under 1% (0.8%) tested positive. Among women attending sexually transmitted infection clinics in the capital, over 2% tested positive in 2004, while HIV prevalence of 1% has been found also among university students and internally displaced persons in states in both the north and south of the country (Ministry of Health Sudan, 2005; Sudan National AIDS Control Program, 2004c and 2004d). In a country with a long history of civil conflict and forced displacement, internally displaced persons sometimes face higher rates of HIV infection. For instance, among displaced pregnant women seeking antenatal care in Khartoum in 2004,

HIV prevalence of 1.6% was found, compared to under 0.3% for other pregnant women (Ministry of Health Sudan, 2005).

While Sudan's prevention efforts have been intensified in recent years, only three quarters of pregnant women have ever heard of AIDS, according to a recent behavioural study, and one fifth of the surveyed women believed they could acquire HIV by sharing a meal with an HIV-positive person. Only 5% knew that condom use could prevent HIV infection, and more than two thirds of the women had never seen or heard of a condom. (Sudan National AIDS Control Program, 2004a). Even among people at special risk of infection (such as sex workers), HIV knowledge is poor and preventive behaviour is rare. When surveyed, more than half (55%) of sex workers said they had never seen or heard of a condom and fewer than 20% (17%) knew condoms could prevent HIV transmission. HIV prevalence among the women was 4.4% (Sudan National AIDS Control Program, 2004b). Similar gaps in HIV knowledge and behaviour have been found among internally displaced people (Sudan National AIDS Control Program, 2004c).

HIV surveillance data remain insufficient for most other countries in the region, though the situation appears to be improving in some countries. **Saudi Arabia** is an example. Research conducted in the capital Riyadh indicates that about half of HIV infections have been occurring during heterosexual intercourse. Most women infected with HIV were married and had acquired the virus from their husbands, while most men had been infected during paid sex (Abdulrahman et al., 2004). Sex between men and injecting drug use accounted for a small minority of infections, but a large proportion (26%) of infections found in this study were attributed to the transfusion of contaminated blood or blood products early in the epidemic. The overall scale of the epidemic here remains unknown, however, with estimates of the number of people living with HIV ranging from just over 1000 to more than 8000.

Official data from **Egypt** indicate an epidemic that is driven mainly by unprotected sex—with heterosexual intercourse accounting for about one half of HIV cases where the mode of transmission was noted, and sex between men for a further

one fifth. Injecting drug use was the mode of transmission in just 2% of HIV cases. Yet, researchers have encountered high levels of risky behaviour among injecting drug users in Cairo, for instance, with more than half the surveyed injectors saying they used non-sterile injecting equipment in the previous month (Elshimi, Warner-Smith and Aon, 2004).

Although still very low, HIV prevalence in women attending antenatal clinics in **Morocco** doubled between 1999 and 2003, when it reached 0.13%. Among sex workers and prisoners, prevalence was considerably higher, at 2.3% and 0.8%, respectively (Ministère de la santé Morocco, 2003/2004). Unprotected sexual intercourse—mostly heterosexual—is the driving factor in the epidemic, with a small proportion of detected HIV cases linked to sex between men and injecting drug use. The national health authorities estimate that between 13 000 and 16 000 people were living with HIV in 2003, more than half of them in the greater Casablanca, Souss Massa Draa and Marrackech Tensift El Haouz areas of the country.

Algeria recorded twice as many new HIV cases in 2004 (266 diagnoses) compared with the year before. This might herald a surge in the country's hitherto small epidemic, which is still inadequately surveyed. Modes of transmission are unknown for almost three quarters of the 1721 official HIV diagnoses made by end-2004, making it difficult to pinpoint the routes of transmission (Ministère de la santé Algeria, 2005). However, most infections appear to be occurring during heterosexual intercourse, with commercial sex a prominent factor, especially in the south, where HIV prevalence is much higher than elsewhere in the country. The highest infection levels recorded to date have been among sex workers: 1.7% in Oran, in the north, and as high as 9% in Tamanrasset, in the south, where it has risen sharply from the 2% found in 2000 (Institut de Formation Paramédicale de Parnet, 2004; Fares et al., 2004). In addition to sex workers, military personnel and migrants appear to be particularly vulnerable to HIV in Tamanrasset.

Tunisia's epidemic appears to be relatively stable, though an observed increase in risk situations could cause this to change. Sex work

is believed to be on the rise, while injecting drug use, though still very limited, appears also to be gaining ground. Since young people in particular have poor HIV knowledge and limited access to condoms, such trends could put them at risk of acquiring HIV.

In **Libya**, by contrast, injecting drug use is the main driver of an epidemic that has sent HIV infections surging among young men in recent years. After the 1998 outbreak of nosocomial infections at Benghazi Children's Hospital, Libya reported an almost tenfold increase in infections in young men in the early 2000s. As many as 80% of the almost 10 000 HIV cases officially-

and looks set to spread further (Jenkins and Robalino, 2003). One new study among users attending public drug treatment centres in Tehran suggests the close linkages between HIV and drug injecting, incarceration and sexual practices in the country. Most of the users were young (median age was 25 years) and three quarters of them were injecting heroin. About 40% of those who had used non-sterile injecting equipment had done so in prison (Zamani et al., 2005). Indeed, incarceration appeared to be associated with risk behaviours for HIV infection—a troubling finding, given that, by some estimates, almost half Iran's total prison population comprises people detained or convicted on drug-related charges (UNODC,

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reported by end-2004 have been reported since the turn of the century—and the majority of those infections appear to be the result of injecting drug use. The extent of drug injecting in Libya is difficult to gauge, though much of it appears to be concentrated in and around the capital, Tripoli, with heroin the main drug used. The country's National AIDS Programme estimates that more than 23 000 people were living with HIV at the end of 2003, a figure that is likely to continue rising if adequate efforts are not made to reach drug injectors with HIV prevention efforts, which would also protect their sexual partners. Although Libya's National AIDS Programme has increased its efforts to raise awareness and boost knowledge of the epidemic's likely development, huge challenges remain. Stigma and denial is reportedly widespread. There is an urgent need to further develop and expand HIV prevention programmes, ensuring a targeted approach to populations at risk.

Iran, which has faced a similar, though bigger, challenge since the late 1990s, has introduced some aspects of harm reduction policies for its growing population of injecting drug users. HIV is circulating widely among drug injectors, of whom there were an estimated 200 000 in 2003,

2002). The finding underscores the urgent need to broaden proven preventive programmes, especially for incarcerated drug injectors (Zamani et al., 2005). Beyond the prison gates, comprehensive harm reduction programmes must also be expanded if Iran's HIV epidemic is to be curbed. The urgency is underscored by the fact that most of the drug injectors who participated in the Tehran study were sexually active, that many either bought or sold sex and that only 53% of sexually active injecting drug users had ever used a condom (Zamani et al., 2005). An earlier study had found that about half of injecting-drug users were married, and one third had reported extra-marital sex (UNAIDS/WHO, 2004), which suggests a clear possibility of sexual transmission of HIV from infected drug injectors to their sexual partners (Zamani et al., 2005). Although sketchy, the available evidence indicates that low levels of condom use among sex workers also put them and their clients at risk of infection.

Very little is known about the spread of HIV in other countries in this region. About 600–1000 people are believed to be living with HIV in **Jordan**, where adult HIV prevalence appears to be very low (about 0.02%). About half the infections are attributed to unprotected sex; yet,

an extensive survey among young people has found casual sex was relatively rare and condom use moderately high (40%) among those who did have non-marital sex. In **Yemen**, HIV transmission is believed to be related to commercial sex, while injecting drug use appears to be a more prominent mode of transmission in **Bahrain, Kuwait** and **Oman**.

Across the region, there is a clear need for more, better and in-depth information about the patterns of HIV transmission, especially the roles of sex work and of sex between men. On both fronts, scant information has been gathered; this suggests that there is a likelihood that HIV is transmitted through other risky behaviours or in other contexts. For example, in several countries of this region, a combination of inadequate surveillance data and

strong sociocultural taboos against sex between men could be hiding sex between men as a factor in HIV transmission. Little is known about HIV transmission in prisons, although available data point to elevated risk in those settings. HIV prevalence of 18% has been reported in prisons in Tripoli, Libya, 2% in Sudan in 2002 and almost 1% in Morocco in 2003 (Sammud, 2005; Ministry of Health Morocco, 2005).

HIV prevention programmes and services remain sporadic in this region. Knowledge of AIDS is generally poor, and preventive practices are rare, even among populations most at high risk of becoming infected. Substantive efforts are clearly needed to introduce more effective HIV prevention strategies in the Middle East and North Africa.