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Middle East and North Africa

AIDS epidemic update

Regional Summary



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MIDDLE EAST AND NORTH AFRICA

Although overall numbers of reported HIV cases remain small (except in **Sudan**), they have been increasing in several countries, partly due to expanded HIV testing efforts. **Algeria**, where reported HIV and AIDS cases doubled between 2001 and 2006, is one such example (Ministry of Health Algeria, 2007). Across the region, most HIV infections are occurring in men and in urban areas—except in **Sudan**, where a more extensive epidemic is under way. In some countries, the proportion of HIV-positive women is growing as HIV spreads from (mostly male) injecting drug users and the clients of sex workers to their wives and girlfriends. In **Morocco**, for example, one third (33%) of women diagnosed with AIDS were married (Ministère de la Santé Maroc, 2007).

With national adult HIV prevalence estimated at 1.6% [0.8%–2.7%] in 2005 (UNAIDS, 2006), **Sudan** continues to have the largest epidemic in this region. Unsafe heterosexual intercourse is the most important factor in this epidemic. Among pregnant women using antenatal services, HIV prevalence of 2.2% has been found in White Nile State (Ministry of Health Sudan, 2006), and in Khartoum, the capital, it ranged from 0.3% to 0.5% (Ministry of Health Sudan, 2006). In a conflict-affected part of southern **Sudan**, recorded HIV prevalence among women attending antenatal clinics varied along the Ugandan border, from 0.8% in Rumbek town to 3% in Yei town (Kaiser, Kedamo & Lane, 2006). In other studies, more than 9% of men who have

sex with men were found to be HIV-positive in Khartoum State (Elrashied, 2006).

Most HIV infections in the Middle East and North Africa are occurring in men and in urban areas—except in Sudan, where a more extensive epidemic is under way.

Unprotected paid sex appears to be an important factor in the HIV epidemics throughout the Middle East and North Africa. HIV prevalence well above the estimated adult national HIV prevalence have been found among female sex workers in **Algeria** (9% in Tamanrasset in 2004), and **Morocco** (2%–3% since 2001) (Fares et al., 2004; Ministère de la Santé Maroc, 2007).

As in many other regions, sex between men is officially forbidden, socially stigmatized, and under-researched. Nevertheless, the limited information available suggests that unprotected sex between men is a key factor in at least some of the epidemics in this region. For example, a recent study in **Egypt** found that 6% of men who have sex with men were HIV-positive (Ministry of Health Egypt et al., 2006), as were 9% of their counterparts in a **Sudanese** study (Elrashied, 2006). Almost half (42%) of the Egyptian men and more than half (56%) of the Sudanese men in those studies said that they had engaged in commercial sex. Yet condom use during paid sex was infrequent: about one in

10 (9%) men in the Egyptian study and fewer than half of those in the Sudanese study said that they had used a condom the last time they bought sex (Ministry of Health Egypt et al., 2006; Elrashied, 2006). Alert to the implications of such risky behaviour, a number of other countries (including **Algeria, Lebanon, Morocco** and **Tunisia**) are now providing outreach services to prevent HIV transmission among men who have sex with men.

Elsewhere, exposure to contaminated drug injecting equipment is the main documented route of HIV transmission in both the **Islamic Republic of Iran** and the **Libyan Arab Jamahiriya** (Ministry of Health and Medical Education Iran, 2005). Contaminated equipment is probably also the primary route of transmission in Tunisia, where more than 80% of the 186 HIV-positive patients who enrolled in a study at a Tunis hospital were injecting drug users (Kilani et al., 2003). There is a potential for injecting drug-related HIV outbreaks in the **West Bank and Gaza Strip**, where an estimated 40% of heroin users now inject the drug (UNODC, 2007).

An HIV outbreak linked to injecting drug use has been reported in Kabul, **Afghanistan**, where 3% of 463 injecting drug users surveyed tested HIV-positive in a 2006 study (Todd et al., 2007). This is of concern, given the country's status as the world's largest supplier of opium (UNODC, 2006). Injecting drug use appears to be a relatively new phenomenon in **Afghanistan**, where opium was traditionally either inhaled or taken orally (UNODC, 2005a). The fact that more than one in three (37%) of the participants in the Kabul study were also infected with hepatitis C suggests that non-sterile injecting equipment is used widely enough to be a key factor in HIV transmission among injecting drug users (Sanders-Buell et al., 2007; Todd et al., 2007). One in two (50%) injecting drugs users surveyed reported using non-sterile needles or syringes and almost one in three (30%) said that they had injected drugs while in prison (Todd et al., 2007). At the same time, risky sexual behaviours among injecting drug users (almost all of whom are male) could herald HIV transmission to other at-risk population groups. For example, over three quarters (76%) of the male injecting drug users in the Kabul study said that they had paid women for sex, and more than one quarter (28%) reported having had sex with men or boys (Todd et al., 2007).

Exposure to contaminated drug injecting equipment is the main route of HIV transmission in Afghanistan, the Islamic Republic of Iran and the Libyan Arab Jamahiriya, and features in the epidemics of Algeria, Morocco, the Syrian Arab Republic and Tunisia.

Exposure to non-sterile drug injecting equipment is common in several other countries. Surveys suggest that 40%–50% of injecting drug users in Algeria (Mimouni & Remaoun, 2006) and the Syrian Arab Republic (Ministry of Health Syria, UNODC & UNAIDS, 2007) have used non-sterile equipment, and a study in Marvdasht, the Islamic Republic of Iran, found that two in three (67%) injecting drug users had used non-sterile needles, and one in five (19%) had done so in prison (Day et al., 2005). In **Morocco**, almost three quarters (73%) of surveyed injecting drug users said that they had used non-sterile injecting equipment (Ministère de la Santé Maroc, 2007).

The **Islamic Republic of Iran** harbours the highest HIV prevalence in injecting drug users in the region. Almost one in four (23%) male injecting drug users tested at a Tehran drop-in centre were HIV-positive, as were 15% of those who accessed three drug treatment centres in the same city. The key factors for HIV infection were the use of contaminated injecting equipment in prison and repeated periods of incarceration (Zamani et al., 2005; 2006). It is estimated that almost half (45%) of the Iranian prison population is incarcerated for drug-related offences (Parviz, 2005; Zamani et al., 2005). HIV prevalence in prisons was estimated at 950 per 100 000 population in 2005. Since 2002, clinics providing prevention, treatment and harm-reduction services have been set up in most of the largest prisons of the country, and by 2005, an estimated 50 000 prisoners had undergone detoxification treatment (Parviz, 2005). Elsewhere, services such as needle and syringe-exchange projects, and methadone treatment programmes, are being implemented (Vazirian et al., 2005).

Study findings from the **Islamic Republic of Iran** also highlight the risks of HIV transmission from injecting drug users to their sexual partners. Most injecting drug users receiving treatment at a Tehran clinic said that they were sexually active,

and many reported having paid for sex, yet almost half of them had never used a condom (Zamani et al., 2005). Consequently, among HIV-positive patients at a private Tehran clinic, the key factor for HIV infection among men was the use of contaminated injecting equipment, whereas for women it was sexual intercourse with their HIV-positive husbands (Ramezani, Mohraz & Gachkar, 2006).

Unsafe sex and injecting drug use, which may overlap substantially, appear to be significant factors in HIV transmission in several other countries. In various surveys, more than 40% of injecting drug users in **Algeria**, 36% in **Egypt** and 33% in **Lebanon** said that they had either bought or sold sex in the previous month (Ministère de l'Enseignement Supérieure et de la Recherche Algeria, UNAIDS & UNODC, 2006; Elshimi, Warner-Smith & Aon, 2004; Khoury & Aaraj, 2005). In most cases, condom use was infrequent. For example, only 14% of injecting drug users in **Egypt** and 6% of those in the **Libyan Arab Jamahiriya** said that they had used a condom in the previous 12 months. Similarly, in **Morocco**, 50% of surveyed male and 70% of surveyed female injecting drug users said that they had multiple sexual partners, yet only one in 10 of the men and one in five of the women said that they had consistently used condoms (Elshimi, Warner-Smith & Aon, 2004; UNODC, 2005b; Ministère de la Santé Maroc, 2007). Risky sexual behaviours were also prevalent in the **Syrian Arab Republic**, with 53% of injecting drug users interviewed having engaged in sex work. Among those, 40% had

Improved screening of blood supplies has helped reduce HIV infections in medical settings, but in Afghanistan in 2006, only about 30% of blood donations were screened for HIV.

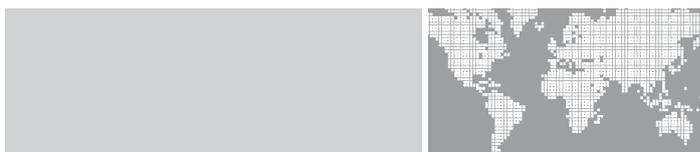
never used a condom, and only 20% had done so consistently (Ministry of Health Syria, UNODC & UNAIDS 2007). Conversely, one in 10 female sex workers surveyed in the **Syrian Arab Republic** also reported injecting drugs (Ministry of Health Syria, 2004). Data such as these suggest that in this region, high-risk sex and high-risk drug injecting practices are behaviours that often occur hand in hand.

Across the Middle East and North Africa, improved screening of blood supplies and other blood safety measures have helped reduce the proportion of HIV infections acquired in medical settings. However, those improvements are not ubiquitous; for example, in **Afghanistan** only an estimated 30% of blood donations were screened for HIV in 2006 (Global Fund to Fight AIDS, Tuberculosis and Malaria, 2006).

Several factors could increase the epidemics in this region; these include possible transmission of HIV from injecting drug users into the wider population and the apparent increase in unprotected extramarital sex (reflected in high levels of other sexually transmitted infections in some countries). In the **Islamic Republic of Iran**, more than one in four (28%) male adolescents (aged 15–18 years) said that they were sexually active, yet more than half of them had never seen a condom (Mohammadi et al., 2006).

At the same time, widespread male circumcision could act as a protective factor against HIV, although not to the extent of meriting complacency (Obermeyer, 2006). Although female and male average ages of marriage are increasing in several countries, sexual health education and health services for young people are limited (DeJong et al., 2005). HIV-related stigma and discrimination remains vigorous in some countries and is hindering AIDS responses. Several other factors also exacerbate women's vulnerability to HIV, including marriage patterns and age differences between spouses, and socio-cultural norms that complicate women's access to sexual health and HIV information (Obermeyer, 2006).

Urgently needed throughout the Middle East and North Africa are improved HIV surveillance systems and prevention programmes that focus on most-at-risk populations, together with political and institutional adjustments that will enable their effective implementation. Prevention efforts should include promoting and ensuring greater access to condoms, improving the availability and quality of sexual health education and services, and supporting the implementation of harm reduction programmes that can reduce HIV transmission within and beyond drug-using networks. All this presupposes improved HIV surveillance, including sentinel surveys among most-at-risk populations, which are essential for developing effective prevention and treatment strategies.



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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 the Middle East and North Africa.



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