

# SITUATION OF HIV INFECTIONS AND STIs IN THE UNITED KINGDOM IN 2007

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In the United Kingdom (UK) in 2007, an estimated 77,400 persons were living with human immunodeficiency virus (HIV) of whom 28% are unaware of their infection. A total of 7,734 persons were newly diagnosed with HIV infection in 2007, of which 31% were diagnosed late. This highlights the need for wider HIV testing, especially in those areas with a high diagnosed prevalence, as recommended in recent national guidelines. Among newly diagnosed cases of HIV in 2007, 41% acquired their infection through sex between men (four in five of whom acquired their infection in the UK) and 55% through heterosexual contact (four in five of whom acquired their infection abroad, mainly in sub-Saharan Africa). Young persons aged 16 to 24 years are disproportionately affected by sexually transmitted diseases (STIs) accounting for 65% of genital chlamydia infections, 50% of cases of genital warts and 50% of cases of gonorrhoea that were diagnosed in 2007.

### Human immunodeficiency virus infections

The Health Protection Agency's Centre for Infections, in the United Kingdom (UK) has recently released a series of four reports on HIV and STIs. The most recent ones provide an overview of HIV in the UK [1] and a focus on the continuing HIV and STIs epidemics among men who have sex with men (MSM) [2]. Two earlier reports describe the epidemiology of HIV and STIs among black African and black Caribbean communities in the UK [3] and among young people aged 16-24 years [4].

The number of people living with HIV continued to rise in 2007 with an estimated 77,400 persons living with both diagnosed and undiagnosed HIV infections, representing a rate of 127 persons living with HIV per 100,000 population (170 per 100,000 men and 84 per 100,000 women) [1]. Among the 73,300 (range 68,800-78,500) persons aged 15-59 years living with HIV, 28% (24%-33%) were unaware of their infection.

In 2007 there were 7,734 persons newly diagnosed with HIV in the UK. Importantly, almost one third (31%, 2,345/7,649) of adults were diagnosed late (defined as a CD4 cell count <200 per mm within three months of diagnosis), beyond the point at which treatment should have begun. The proportion diagnosed late was lowest among MSM (19%) and higher among heterosexual women (36%) and heterosexual men (42%).

### HIV testing policy in the UK

The high proportions of individuals unaware of their HIV infection and being diagnosed late highlight the need for wider HIV testing to benefit both the individual, with access to earlier treatment and thus improved prognosis, and the community with reduced onward transmission.

The recently released new national HIV testing guidelines in the UK aim to promote HIV testing in a wide range of healthcare settings [5]. The guidelines recommend the routine offer of HIV testing to all those attending hospital services (e.g. genitourinary medicine, antenatal services, tuberculosis clinics etc) as well as wider HIV testing in those areas where the local diagnosed HIV prevalence exceeds two in 1,000 among the population aged 15-59 years. In these areas, HIV testing should be offered to all men and women registering in general practice and to all those who are admitted to general medical wards. With an estimated one undiagnosed HIV infection for every two diagnosed, these areas are likely to have an undiagnosed prevalence of one in 1,000, the threshold at which routine testing is assumed to be cost effective [6]. In 2007, the prevalence of HIV exceeded this threshold in 42 of the 152 primary care organisations in England, the majority in London, which serve nearly half of the UK population.

### HIV testing in 2007

In 2007, approximately 800,000 HIV tests were carried out in genitourinary medicine (GUM) clinics in the UK. Data from unlinked anonymous serosurveillance in a network of 16 GUM clinics throughout the UK showed that the proportion of attendees accepting the offer of a HIV test has increased in recent years among all populations at risk. Overall among heterosexuals, the rate of uptake has increased from 66% in 2003 to 75% in 2007. Among black Africans and MSM in 2007 HIV test uptake was higher (85% and 86%, respectively). However, uptake of HIV testing varied with HIV status, with 65% of HIV positive MSM accepting an HIV test compared to 87% among HIV negative MSM. Among black Africans the uptake was 61% and 86% for HIV positive and negative individuals, respectively.

Unlinked anonymous testing also highlighted that among GUM attendees in 2007, 3.4% of MSM and 0.4% of heterosexuals had a previously undiagnosed HIV infection. The prevalence of undiagnosed HIV infection was higher among heterosexuals born

in sub-Saharan Africa (2.4%) than in those born in the UK (0.2%) and those born elsewhere (0.4%). Among HIV infected attendees, 30% left the clinic without an HIV test result either because they were not offered, or had declined testing.

HIV prevalence in the unlinked serosurveillance of women giving birth in the UK in 2007 was 0.21%, equivalent to one in every 468 women giving birth. Prevalence was highest among pregnant women born in sub-Saharan Africa (2.5%) and in Central America and the Caribbean (0.53%). The prevalence of HIV among UK-born women remained low (0.05%). HIV testing among pregnant women remained high in 2007, with 94% of women in antenatal care accepting a routine HIV test in 2007. As a result the estimated proportion of HIV-exposed infants who become infected has decreased from 17% in 1998 to less than 5% in 2007.

Among the 7,734 persons newly diagnosed with HIV in the UK in 2007, 41% acquired their infection through sex between men (four in five of whom acquired their infection in the UK) and 55% through heterosexual contact (four in five of whom acquired their infection abroad, mainly in sub-Saharan Africa). Although the majority of persons infected heterosexually acquired their infection abroad, the estimated proportion who acquired their infection within the UK has doubled since 2003, from 11% (540/4800) to 23% (960/4250).

MSM, however, remain the group at greatest risk of acquiring HIV infection in the UK [2]. An estimated 30,800 (range 28,700-33,700) MSM aged between 15 and 59 in the UK were living with HIV in 2007, of whom 25% (range 20%-32%) were unaware of their positive status. In 2007, there were 2,679 new HIV diagnoses among MSM (increasing to 3,160 if adjusted for missing data), a similarly high number as previous years, and the highest ever reported. With the exception of non-specific urethritis and gonorrhoea, which both declined in 2007, diagnoses of STIs among MSM have closely mirrored increases in HIV diagnoses. Of particular concern are the increasing proportions of MSM diagnosed with STIs who are already diagnosed with HIV, accounting for 32% of gonorrhoea, 40% of syphilis, and 78% lymphogranuloma venereum cases reported through enhanced surveillance systems

Black Africans accounted for 35% (2,691) of new HIV diagnoses in 2007, the majority of which were probably heterosexually acquired (94%), and in Africa (88%) [3]. It was estimated that in 2007 there were 25,900 (range 22,900-29,600) heterosexuals born in Africa aged between 15 and 59 who were living with HIV in the UK, of whom 24% (range 14%-34%) were undiagnosed with HIV. Of all new HIV diagnoses in 2007, 31% were made late, but among black Africans this figure was much higher at 42%. The estimated prevalence of diagnosed HIV among black Africans is 3.7% and among black Caribbeans 0.4% whereas, among the white population it is much lower at 0.09%.

### Sexually transmitted infections

Young people (aged 16-24) in the UK, are disproportionately affected by STIs, with the exception of HIV [4]. Although young people represent 12% of the UK population, they accounted for 65% of genital chlamydia cases, 50% of cases of genital warts, and 50% of gonorrhoea cases seen in 2007. Black Caribbean communities are also a key prevention group for STIs as they are disproportionately affected by bacterial STIs. In a GUM clinic sample

in 2007, black Caribbeans represented 26% of all heterosexually acquired gonorrhoea cases.

In 2007, more than a million sexual health screens (which include a test for both gonorrhoea and chlamydia) were performed in GUM clinics in the UK, representing a 61% increase since 2003. The National Chlamydia Screening Program (NCSP) offers sexually active young people in England screening for chlamydia infection and other sexual health promotion activities, mainly in community settings. In 2007, over 270,000 screenings for chlamydia were performed among young people through the NCSP among which 9.5% of women and 8.4% of men tested positive, with an overall positivity rate of 9%.

### Conclusion

The recent increases in reported diagnoses of HIV and STIs in the UK have continued in 2007. The control of STIs requires easy access to sexual health services that can provide advice, screening and their treatment. HIV testing should be promoted extensively among prevention groups as well as in the general population living in high prevalence areas. Interventions to promote sexual health should be strengthened and expanded to meet better the needs of those at high risk of acquiring and STI, including HIV.

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This article was published on 4 December 2008.

Citation style for this article: Lattimore S, Yin Z, Logan L, Rice B, Thornton A, Molinar D, Leong G, Presanis A, De Angelis D, Gill N, Delpech V. Situation of HIV infections and STIs in the United Kingdom in 2007. *Euro Surveill*. 2008;13(49):pii=19059. Available online: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19059>