

HIV in the United Kingdom: 2009 Report



Key findings

The number of people living with HIV in the UK continues to rise, with an estimated 83,000 infected at the end of 2008, of whom over a quarter (27%) were unaware of their infection.

During 2008, there were 7,298 new diagnoses of HIV in the UK. This represents a slight decline on previous years, predominantly due to fewer diagnoses among black African women who acquired their infection abroad.

New diagnoses among men who have sex with men remained high in 2008, and four out of every five probably acquired their infection in the UK.

New HIV diagnoses among those who acquired their infection heterosexually within the UK have risen, from an estimated 740 in 2004 to 1,130 in 2008.

Over half of patients were diagnosed with a CD4 cell count <350 per mm^3 within three months of diagnosis in 2008, the threshold at which treatment is recommended to begin.

Preliminary data for the first six months of 2009 indicate that one in five men who have sex with men, and one in ten heterosexuals newly diagnosed with HIV were likely to have acquired their infection within the last six months.

Uptake of HIV testing in antenatal and genitourinary medicine clinics continued to improve in 2008, reaching 95% and 93%, respectively.

Forty-three English Local Authorities (35 Primary Care Trusts) had a prevalence of diagnosed HIV greater than 2 per 1,000 population in 2008, at which threshold it has been recommended to expand HIV testing in the local population.

Preventing the 3,550 HIV infections that were probably acquired in the UK, and subsequently diagnosed in 2008, would have reduced future HIV-related costs by more than £1.1 billion.

Recommendations

Reducing late diagnosis and undiagnosed infections: initiatives to expand HIV testing in clinical and community settings should continue to be promoted. These should be formally evaluated, and results disseminated to inform best practice.

Men who have sex with men and black African heterosexuals remain the groups with the highest HIV prevalence within the UK; efforts are needed to reinforce prevention messages and promote regular HIV testing within these populations.

Access to, and use of, timely and appropriate local HIV data by health commissioners should be encouraged to improve sexual health services and health promotion activities.

Estimated number of people living with HIV in 2008

In 2008, there were an estimated 83,000 people living with HIV (both diagnosed and undiagnosed), equivalent to 1.3 people per 1,000 population in the UK (1.8 per 1,000 men and 0.88 per 1,000 women). Over a quarter (27%, 22,400) of people were estimated to be unaware of their HIV infection (Figure 1). This compares to the 77,000 people estimated to be living with HIV in 2007, of whom 28% were estimated to be unaware of their HIV infection.

New HIV diagnoses reported in the UK, 2008

A total of 7,298 individuals (4,614 men and 2,684 women) were diagnosed with HIV in 2008, a rate of 0.12 per 1,000 population (0.15 diagnoses per 1,000 men and 0.09 per 1,000 women). Although the number remains high, the 7,298 diagnoses in 2008 represent a decline on the peak of diagnoses observed in 2005 (7,975). The decline is largely due to fewer reports of diagnoses among people who acquired their infection heterosexually abroad, particularly black African women.

After adjusting for missing information relating to the cases reported, an estimated 58% (4,220) of people diagnosed in 2008 acquired their infection heterosexually (1,630 men and 2,590 women) and 38% (2,760) through sex between men. The number of HIV diagnoses among people infected heterosexually has declined from a peak of 5,020 in 2004, while new diagnoses among men who have sex with men (MSM) have remained high (Figure 2). The estimated numbers of new diagnoses of HIV infection acquired through injecting drug use (IDU) (170 in 2008) and mother-to-child transmission (110 in 2008) have remained low since the beginning of the epidemic.

An estimated two-thirds (2,790/4,220) of new diagnoses acquired heterosexually were among black Africans, of whom the majority (87%) acquired their infection abroad, mainly in sub-Saharan Africa. In contrast, among the estimated 2,760 HIV-infected MSM diagnosed in 2008, 83% (2,280) probably acquired their infection in the UK. While prevalence rates in the general population remain low, there has been an increase in new HIV diagnoses among people who acquired their infection heterosexually within the UK from an estimated 740 in 2004 to 1,130 in 2008.

Figure 1: Estimated number of adults (15 to 59 years) living with HIV (both diagnosed and undiagnosed) in the UK: 2008

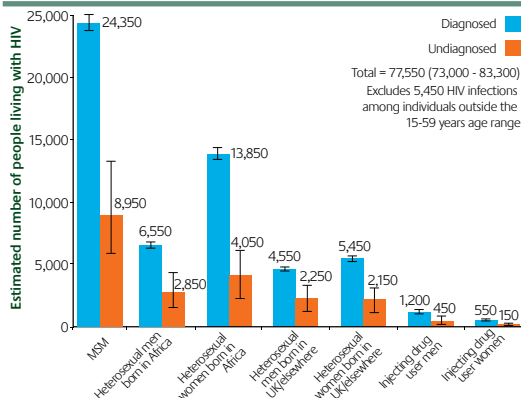
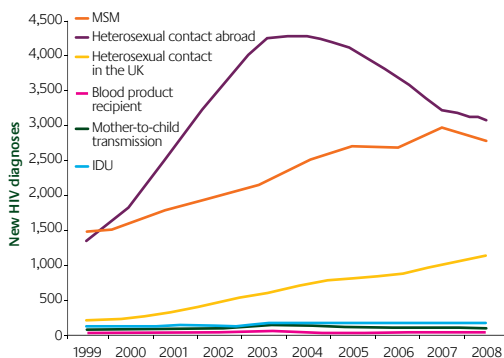


Figure 2: Number of new HIV diagnoses by prevention group, adjusted for missing information, UK: 1999-2008



Late diagnoses, AIDS and deaths among HIV-infected individuals

In 2008, an estimated 32% (2,310/7,218) of adults aged over 15 years were diagnosed with a CD4 cell count <200 per mm³ within three months of diagnosis. This proportion was lower among MSM (20%) compared with heterosexual women (36%) and heterosexual men (44%) (Figure 3). Furthermore, the proportions diagnosed with CD4 cell counts <350 per mm³ (the threshold at which treatment should be considered according to 2008 British HIV Association guidelines) were 43%, 61% and 66% for these groups respectively, and the overall proportion was 55% (3,970/7,218).

The number of deaths among HIV-infected people has remained stable over the past decade, and the number of AIDS diagnoses has continued to decline (Figure 4). A total of 525 people (387 men and 138 women) infected with HIV were reported to have died in 2008. Of these, 57% and 73% had been diagnosed with a CD4 cell count <200 and <350 per mm³ within three months of diagnosis, respectively. These data highlight the importance of promoting testing to ensure earlier diagnosis and treatment.

People living with diagnosed HIV and accessing care

There were 61,213 people living with diagnosed HIV infection (40,146 men and 21,067 women) accessing care in the UK in 2008, representing an 8% (4,780) increase on the number seen in 2007 (56,433) and more than a three-fold increase since 1999 (20,009) (Figure 4). There was substantial geographical variation in the prevalence of diagnosed HIV infection across the country (Map), but 44% (26,906) of people accessing HIV care in 2008 were resident in London. The proportion of diagnosed individuals aged over 50 accessing HIV care has increased over the past decade, from one in ten in 1999 to one in six in 2008.

Overall, half (50%, 30,502) of HIV-diagnosed individuals accessing HIV care in 2008 were infected via heterosexual sex (11,199 men and 19,303 women); where ethnicity was reported, 67% (20,393) were black African and 20% (6,104) were white. MSM made up 42% (25,569) of HIV-diagnosed individuals attending care; of these 87% (22,336) were white.

Figure 3: Estimated late diagnosis of HIV infection by prevention group among adults aged ≥15 years, UK: 2008

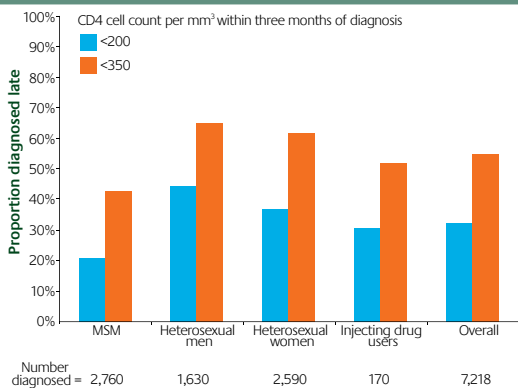
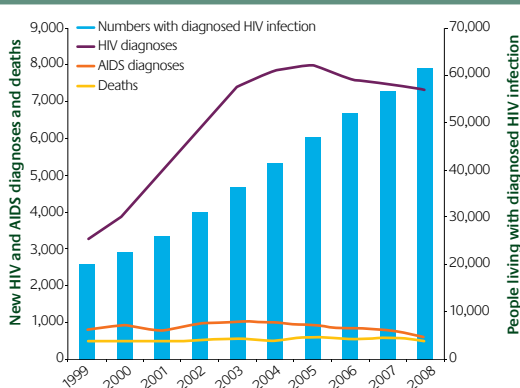


Figure 4: Number of new HIV and AIDS diagnoses, people living with diagnosed HIV, and deaths, UK: 1999-2008



A small proportion of individuals were infected through injecting drug use (2%, 1,489) or mother-to-child transmission (2%, 1,390).

Between 2000 and 2007, approximately 70% of diagnosed HIV-infected individuals received anti-retroviral therapy. In 2008, this proportion increased to 75%. This rise may reflect the revised 2008 British HIV Association guidelines which recommend that treatment should be considered when CD4 counts reach between 200-350 per mm³ (previous guidelines recommended treatment start at under 200 per mm³). The proportion of individuals with a CD4 cell count <350 per mm³ on treatment was 79% in 2008, compared to 72% in 2007.

Genitourinary Medicine (GUM) clinic attendees

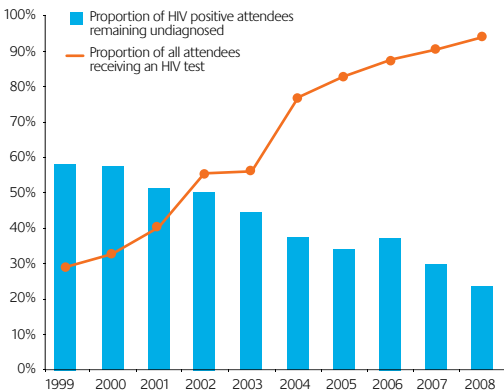
Unlinked anonymous HIV testing of residual syphilis blood samples from attendees at 16 GUM clinics across the UK indicate that, in 2008, 31 per 1,000 MSM and 3.5 per 1,000 heterosexuals had a previously undiagnosed HIV infection (i.e. undiagnosed on arrival at the clinic; patients were either diagnosed during the clinic attendance or left the clinic remaining unaware of their HIV infection). There has been an increase in the prevalence of previously undiagnosed HIV amongst UK-born heterosexuals attending GUM clinics, from 1.2 per 1,000 in 2000 to 1.8 per 1,000 in 2008. However, in 2008, prevalence was higher among heterosexuals born in sub-Saharan Africa (21 per 1,000) or born elsewhere outside the UK (4.2 per 1,000). The prevalence in London was higher in all prevention groups except for heterosexuals born in sub-Saharan Africa.

Pregnant women and children

Among women giving birth in England and Scotland, 64% (471,337/733,234) lived in areas covered by unlinked anonymous serosurveillance. In 2008, 2.1 per 1,000 women in the survey areas were infected with HIV, that is around one in every 486 women giving birth (this includes women diagnosed before and during antenatal care, as well as those who remained undiagnosed during pregnancy). HIV prevalence among women giving birth remained highest in London (3.7 per 1,000) and has been stable since 2004. The prevalence in the rest of England has increased five-fold over the past decade but remains relatively

low (1.5 per 1,000) in 2008. Among UK-born women giving birth in 2008, HIV prevalence was 0.53 per 1,000; while this remains relatively low, a gradual increase in prevalence has been observed since 2000, when the prevalence was 0.16 per 1,000.

Figure 5: HIV testing in GUM clinics: proportion of all attendees receiving an HIV test and proportion of HIV positive attendees remaining undiagnosed, UK: 1999-2008



Overall, by the end of June 2009, 9,874 children (including individuals now aged 16 years or older, but diagnosed

before their 16th birthday) were reported as having been born in the UK to HIV-infected mothers since the beginning of the epidemic. Of these children, 9% (847/9,874) acquired HIV infection from their mothers. The estimated proportion of exposed infants (born to both diagnosed and undiagnosed HIV-infected women) who became infected has decreased from 12% in 1999 to approximately 2% in 2007. Almost all children diagnosed with HIV in the UK in 2008 were reported to have been infected through mother-to-child transmission, and 60% of them were born abroad.

HIV testing

There were ongoing improvements in HIV testing offer and uptake in the GUM and antenatal clinic settings in 2008. Approximately 950,000 HIV tests were carried out in GUM clinics in the UK, compared with around 850,000 in 2007. The proportion of attendees at GUM clinics who received an HIV test increased to 93%, compared with 77% in 2004 (Figure 5). Correspondingly, the proportion of HIV-infected GUM attendees who left the clinic unaware of their infection because they were either not offered, or had refused an HIV test, declined from 37% to 23% over this period. Improvements in antenatal screening resulted in 95% of pregnant women accepting a routine antenatal HIV test in 2008. Consequently, at least 90% of HIV-infected pregnant women had their infection diagnosed before giving birth; this estimate will increase as further reports are received.

In addition to recommending routine HIV testing in GUM and antenatal settings, 2008 national guidelines for HIV testing also advocate that tests should be offered to all adults registering in general practice and to all general medical admissions patients in areas where diagnosed HIV prevalence is greater than 2 per 1,000 among 15 to 59 year olds; 43 English Local Authorities (35 Primary Care Trusts) had a prevalence at this threshold in 2008 (Map).

Recently-acquired HIV infection

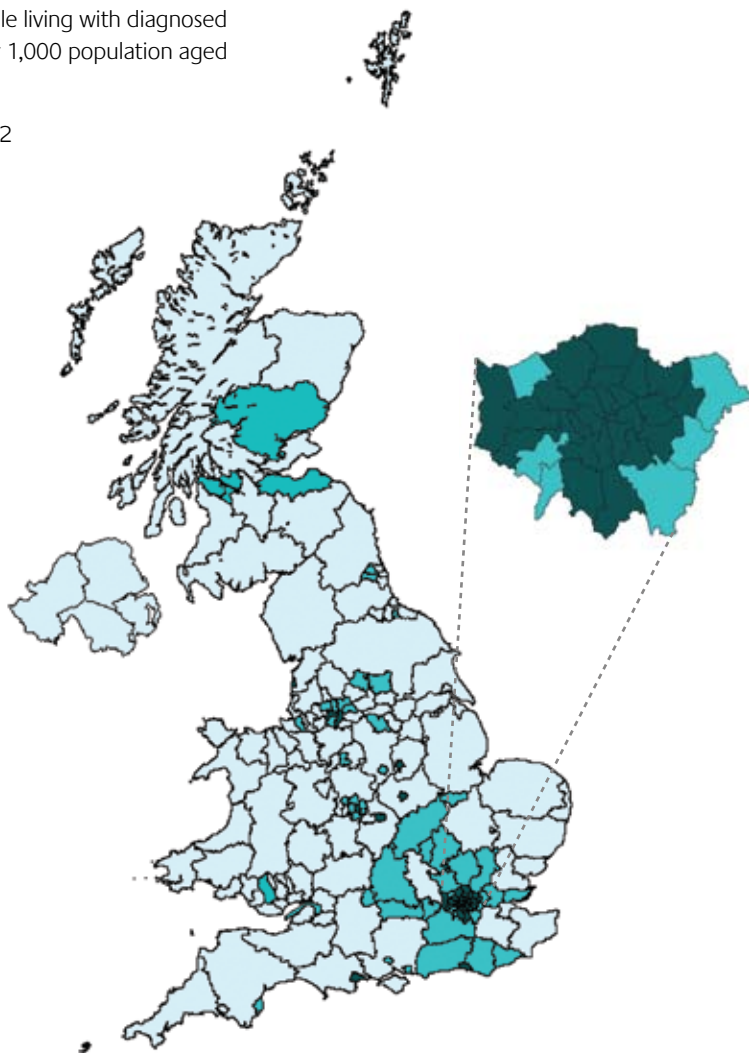
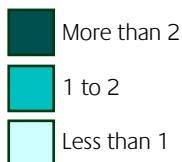
The Recent Infection Testing Algorithm (RITA, formerly called STARHS) testing is now a routine component of public health surveillance of HIV. These tests allow the identification of individuals who have probably been diagnosed within six months of infection, highlighting those groups currently at greatest risk of infection in the UK. At present, around half of all newly diagnosed HIV infections are being RITA tested, with national coverage planned by the end of 2010. Preliminary results for 2009 indicate that around one in five of MSM newly diagnosed with HIV infection were likely to have acquired their infection within the last six months. This compares with one in ten among heterosexuals.

Cost benefit of HIV prevention

Of persons newly diagnosed with HIV in 2008, an estimated 49% (3,550) acquired their infection within the UK either during, or prior to, 2008. The HPA and the National AIDS Trust working with a group of stakeholders, recently conducted a study of the economic implications of a new HIV infection. Preliminary estimates of the HIV-related life-time costs for diagnosed individuals range between £280,000 and £360,000 in the UK. Preventing the infections acquired in the UK, and subsequently diagnosed during 2008, would therefore have reduced future HIV-related costs by £1.1 billion.

Map: Prevalence of diagnosed HIV infection, UK: 2008

Number of people living with diagnosed HIV infection per 1,000 population aged 15-59 years



There were 35 Primary Care Trusts in England where the prevalence of diagnosed HIV-infected people was over 2 per 1,000 population. Twenty-five of these were in London. According to 2008 testing guidelines, these Primary Care Trusts should offer HIV tests to all adults registering in general practice, and to all general medical admissions patients.

Links to data

HIV home page, Health Protection Agency
Centre for Infections www.hpa.org.uk/hiv

Local level HIV and STI data: Sexual Health
Profiles www.hpa.org.uk/sexualhealthprofiles

National Study of HIV in Pregnancy and
Childhood, University College London,
Institute of Child Health www.nshpc.ucl.ac.uk/

Health Protection Scotland
www.hps.scot.nhs.uk/

Department of Health, Social Services and
Public Safety, Northern Ireland
www.dhsspsni.gov.uk/

National Public Health Service for Wales
www.nphs.wales.nhs.uk/

Other useful links

UK National Guidelines for HIV Testing, 2008
www.bhiva.org/cms1222621.asp

BHIVA Guidelines for HIV treatment
www.bhiva.org/cms1222226.asp

BHIVA Guidelines for management of HIV
infection in pregnant women
www.bhiva.org/cms1221368.asp

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