

Targeting HIV prevention by age: priorities for MSM programmes in the UK

This briefing is for people with the power to change the way HIV prevention interventions are delivered in the UK: this includes health promoters, managers with planning responsibilities and service commissioners. The briefing uses data from the *Gay Men's Sex Survey* collected over the last ten years to examine HIV infection, risk behaviours and prevention needs across the age range.

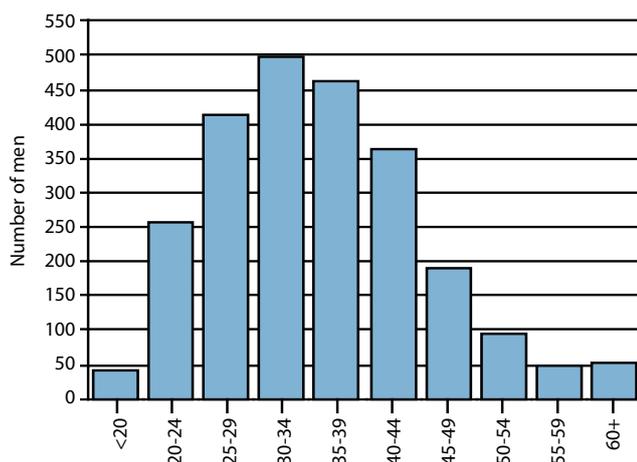
Where square brackets include a date, followed by a colon and another number this signifies the GMSS report and page number where further details of the finding can be found. For example [2004:52] means GMSS 2004 main report, page 52.

WHO WILL BE INVOLVED IN HIV TRANSMISSION?

All men who will have sex with another man in the future have a chance of being involved in HIV transmission. Although the risk of acquiring HIV when having sex with other men is not zero for any man, the probability of acquiring HIV in the future is not the same for all men. It is not possible to say which individuals will, and will not acquire HIV in the future but it is possible to say how much more likely some groups of men are to acquire and pass on HIV, compared to others.

The Census tells us how many males there are in the UK and this is our starting point to describe the age profile of all men that have sex with men (MSM). The National Survey of Sexual Attitudes and Lifestyles (NSSAL) tells us the proportion of all men that are homosexually active. We estimate that right now in the UK, there are 500,000 men who will have sex with another man in the next five years, and that of these 35,000 already have HIV. Among the 465,00 MSM who do not have HIV, some will acquire HIV in the next week, a larger proportion will acquire it in the next month, the next year, and so on.

Figure 1: Age of MSM diagnosed with HIV in 2006

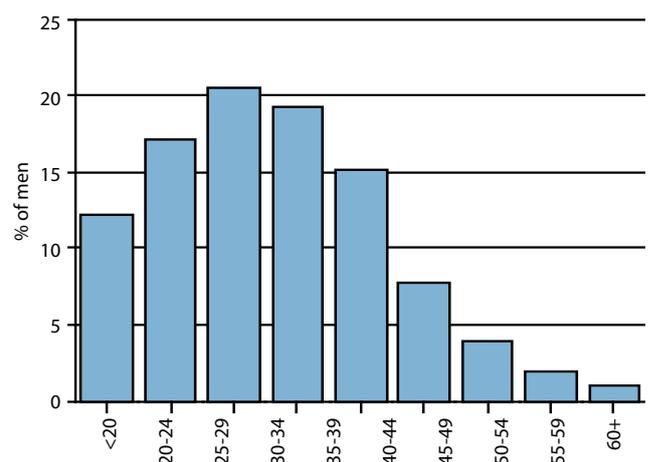


AGE AT WHICH MSM ARE ACQUIRING HIV

We have a good picture of the age at which men are diagnosed with HIV. Figure 1 shows the age profile of the 2417 men diagnosed with homosexually acquired HIV in the UK in 2006. Exactly half the men were aged 34 or less at diagnosis.

Diagnoses obviously occur after the infection events themselves. What is less clear is how long after infection these diagnoses occurred. The HPA's best estimate for the average length of time between infection and diagnosis for MSM in the UK is 4.7 years. This time will, on average, be shorter for men diagnosed at a younger age and longer for those diagnosed at older age (late diagnosis being more common in older MSM). Figure 2 is the age profile at HIV diagnosis less five years and shown as a percentage. This is our best estimate of the age profile at infection of MSM diagnosed in 2006.

Figure 2: Age profile at HIV infection among MSM in UK



AGE DIFFERENCE BETWEEN THE MALE POPULATION AND MSM ACQUIRING HIV

The younger a man is, the more life years he has ahead of him in which to come to harm, including getting HIV. So the probability of younger men sero-converting at any point in the future is always higher than that for older men.

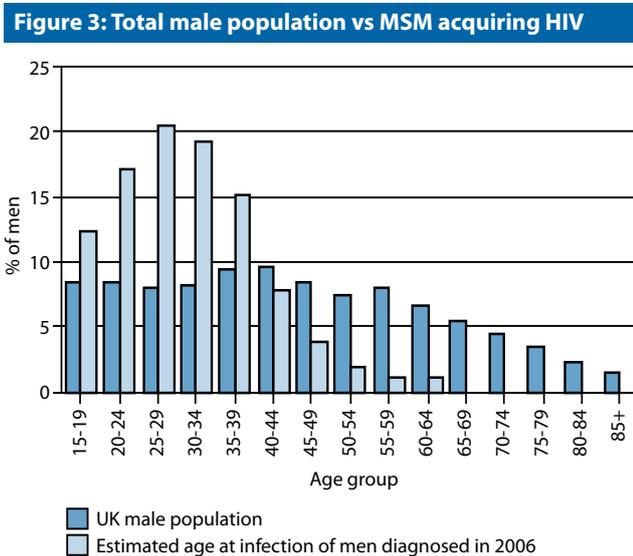


Figure 3 shows the relative size of each five year age group in terms of all the men that age and the MSM acquiring HIV at that age. We can see that all age groups under 40 years are over-represented among men getting HIV and that the probability of men acquiring HIV through sex with another man peaks in the 25-29 age group.

Over the last ten years, GMSS samples have got older on average, mainly through changes in the methods of data collection. In the first national GMSS in 1997 (recruited at six Pride events) the average (median) age was 32 years. It remained at this level until we began booklet distribution in 2000, when it rose to 33. In 2001 we added internet recruitment to the survey. The median age of men who took part online was lower at 29 but as risen since as use of the internet became normalised. In GMSS 2007 the average age of all participants was 33.

HIV TESTING AND DIAGNOSIS ACROSS THE AGE RANGE

Younger men (<20) are least likely to have visited a GUM clinic in the last year [2005:59] or to have tested for STIs in the last year [2004:52].

- Men under 20 are least likely to have ever tested for HIV, and least likely to have tested in the last year [2006:13; 2004:52].
- Younger men (<20) are least likely to have diagnosed HIV, to think they have (undiagnosed) HIV or to have a partner with diagnosed HIV [2004:24; 2003:20]. They are also least likely to know anyone with diagnosed HIV [2003:20].
- In GMSS 1997 the prevalence of diagnosed HIV was highest among men in their 30s or 40s and lower among those under 30 or over 50. This pattern has not significantly changed in the last decade.
- In GMSS 1998 the proportion men with a first HIV positive diagnosis in the last year was 1.5% among men in their 20s, 2.4% among men in their 30s, dropping to below 1.0% after age 40 [1998:23].

In the UK, the number of young MSM (aged 16-24) diagnosed with gonorrhoea increased from 339 in 1998 to 1001 in 2007. In the same time period the number of new HIV diagnoses among young men increased from 128 to 281. However, the prevalence of undiagnosed HIV infection seems to have decreased among young MSM in London (from 4.0% in 2002 to 2.5% in 2006), while increasing in the rest of the UK (from 0.8% in 2002 to 1.8% in 2006).

Source: Health Protection Agency (2008) Sexually transmitted infections and young people in the United Kingdom: 2008 report. London, Health Protection Agency.

HOW DO RISK BEHAVIOURS VARY ACROSS THE AGE RANGE?

- Having just one, or having many male partners in any given year, does not vary greatly by age. However, men under 20 are most likely to have one partner and least likely to have 13+ or 30+ male partners in the last year [2006:22].
- Among all homosexually active men, those under 20 years of age are significantly more likely to have both male and female partners (11.3%) in the last year, compared to men in other age groups (6.4%-7.9%). Men under 20 are least likely to report only having sex with men [2002:17].
- Men under 20 are most likely to have had a man ejaculate in their mouth in the last year [2002:37].
- As gay men age their sexual repertoire expands. Esoteric sexual practices are more common among men in their 30s and 40s than those in their teens and 20s (which is not to say that they are not present for some younger men) [2006:27].
- Engagement in anal intercourse declines with age - men under 40 are more likely to have anal intercourse (AI) than older men [2006:27]. Having anal intercourse becomes less common with increasing age, so anal intercourse is more commonly a part of any sexual session for younger than older men. Insertive anal intercourse declines with age more quickly than receptive intercourse does.
- More anal intercourse is not compensated for by more condom use in men under 40. So in most contexts (one-night-stand, boyfriend *etc.*) unprotected anal intercourse (UAI) is also more common for younger than older men [2000:27].
- Condom failure is a problem across the age range but is most common among the under 20s, as are many of the behaviours thought to contribute to condom failure [2005:31; 2001:32].
- Among men who believe themselves negative, UAI with men known to be positive is relatively uncommon in all age groups (less than 5% of men in any year). More common is UAI with men known to not have HIV ('negotiated safety'). This is more common among older rather than younger men [1998:36].
- Men under 20 are most likely to report any unprotected anal intercourse with a man whose HIV status is not known [2005:27].
- Among men not tested HIV positive, those under 20 are most likely to report receptive unprotected anal intercourse (UAI) in the last year, and among men who have receptive UAI, younger men do so with more partners. Younger men are also most likely to say they might have been involved in receptive sero-discordant UAI, but it is men in their 30s who are most likely to say they probably or definitely had engaged in receptive sdUAI. This suggests younger men are more likely to engage in 'naive' risk (with partners of unknown HIV status) while men their 30s and 40s are most likely to engage in 'cognizant' risk (with a partner known to be HIV positive) [2003:29].
- Among men not tested HIV positive, those under 20 are most likely to report insertive unprotected anal intercourse (UAI) in the last year. Also having done so with more than one partner is most common among this age group, and declines with age. However, men in their 30s are most likely to say they probably or definitely had insertive UAI with an HIV positive man, and are also most likely to indicate they may have done so also [2003:29].
- HIV negative men using poppers during receptive UAI with a man not known to be HIV negative is apparent across the age range but is most common among men in their 30s. Men in their 30s are 1.62 times (OR 95%CI 1.11-2.37) more likely to have used poppers during receptive UAI with a potentially HIV positive partner, than men under 20 and 1.55 times (OR 95%CI 1.15-2.08) more likely to have done so than men over 50 [2006:32].

By 2005 at least 90% of men and women aged 15 to 24 have access to the information, education, including peer education and youth specific HIV education, and services necessary to develop life skills required to reduce their vulnerability to HIV infection.

[Source: Declaration of Commitment of the UN General Assembly Special Session on HIV / AIDS, target 53, page 21]

HOW DO UNMET PREVENTION NEEDS VARY ACROSS THE AGE RANGE?

Although knowledge and access to condoms alone are insufficient to ensure safer sexual behaviour, they make it more likely.

Almost all the indicators in GMSS show higher levels of unmet need in younger rather than older men. Compared to older men, those under 20 are more in need of basic information or knowledge about:

- basic facts about HIV transmission [2003:44];
- gonorrhoea [2000:55];
- HIV treatments [1998:67; 1997:43];
- availability of services, including HIV testing [2003:44; 1997:47]; and
- the criminalisation of sexual HIV transmission [2006:40].

Men under 20 are also least likely to feel happy about what they knew about HIV [2004:39], and more than half want to know more about HIV and sexual health [2004:52; 2001:45].

Men under 20 are also most likely to report problems accessing condoms [2003:44; 2000:51; 1998:67] and water-based lubricant [2003:44] and are least likely to access free condoms [2003:58].

Younger men also lack some of the skills necessary to avoid harm arising from sex. Included are

- assertiveness skills [2000:49]; and
- being able to say NO to sex they do not want [2004:39].

However, younger men do not necessarily lack confidence in sex, which appears more often lacking in older men [1997:41]. However, men under 20 are most likely to hold naive expectations of HIV positive disclosure prior to sex [2006:40; 2002:52; 2001:45] and to assume a prospective partner is HIV negative in the absence of positive disclosure [2001:45].

Men in their 20s are most likely to feel the sex they have is NOT always as safe as I want it to be [2006:40] and are also most likely to worry about their recreational drug use - although this was common among all men under 35 [2004:39].

Men under 20 are more vulnerable to assault, both from other gay men in the form of sexual assault or rape [2003:44; 1998:67] and from others in the form of physical attack and verbal abuse [2005:53; 2002:52; 1997:48]. They are also most likely to have experienced discrimination because of their sexuality in the last year, from strangers in public, workmates, friends, other family members, when using bars and restaurants, public transport, shopping and using tradespeople and services [2002:52].

Finally, younger men show higher levels of unmet social needs, such as:

- loneliness [2004:39; 2000:58; 1999:64];
- homosexual regret [1999:64];
- wanting other ways to meet other gay men that do not revolve around sex [2006:40].

Younger men also show higher levels of desire for involvement in interventions that meet the needs of other gay and bisexual men [2006:40].

CONCLUSIONS & RECOMMENDATIONS

Younger men have more unmet HIV prevention need and the greatest likelihood of acquiring HIV in the future. As they get older their needs are likely to be met and their probability of acquiring HIV will fall. The impact of interventions on future HIV infections will greatly vary by the age of clients.

We recommend that, where a limited number of interventions can be made, they should disproportionately go to younger men. In practice, this means that:

- no face-to-face or talking intervention should

have an average client age above 30 years, that is at least half of the clients of any face-to-face HIV prevention intervention aimed at MSM should be below the age of 30.

- written interventions and condom distribution should be placed in settings where the maximum proportion of men under 30 will encounter them, regardless of whether this means relatively more men over 30 will also encounter them.

How much lower than 30 the average (median) age should be depends on what prevention needs the intervention is addressing and how long the intervention's impact is expected to last.