

Risk and reflexion

***Findings from the
United Kingdom
Gay Men's Sex
Survey 2004***

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Original Research Report

Acknowledgments

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- 1806 / WISH Project (Warrington Initiative for Sexual Health)
- No 18 Sauna (Edinburgh)
- Action for Men (St. Margaret's Hospital, Epping) <www.action4men.org>
- Adur and Worthing PCT
- Armistead Project (North Sefton & West Lancashire Community NHS Trust) <www.armistead-project.com>
- Body Positive Cheshire & North Wales
- Body Positive Mid-Sussex DIVA Centre
- Bolton Gay and Bisexual Group (Bolton PCT)
- Bradford Friend
- Bristol Lesbian and Gay Switchboard
- Bromley PCT Health Development Department
- Buckinghamshire Lesbian & Gay LINK (Qspace)
- Cambridge DHIVerse
- CASH (Cheshire Action for Sexual Health)
- Chariots Sauna (Waterloo)
- Colchester Gay Switchboard <www.gayessex.org.uk>
- Communicable Disease Control South & East Wales Region
- Cornwall and Isles of Scilly Health Community / Health Promotion Service <www.gaycornwall.org.uk>
- Crickets Lane Health Centre (Tameside & Glossop PCT)
- Daisy Hill Hospital GUM Department (Newry & Mourne Health & Social Services NHS Trust)
- Derbyshire Friend SHAG Project
- Dorset Gay Men's Health (Weymouth Community Hospital)
- Dudley HIV and AIDS Support Group
- Durham and Chester-Le-Street PCT Specialist Health Promotion Service
- Ealing, Hammersmith & Hounslow Gay Men's Project <www.vk84.dial.pipex.com>
- East Elmridge & Mid Surrey PCT
- East Kent Health Promotion (East Kent Coastal PCT)
- The Eddie Surman Trust
- Eddystone Trust <www.eddystone.org.uk>
- ELOP (East London Out Project)
- Fife Flags <www.fifeflags.org.uk>
- Freestyle London (London LGBT Youth Work forum)
- Fylde and Preston PCT
- www.gaydar.co.uk
- <http://uk.gay.com/>
- GAI Project, The Health Shop (Nottingham)
- www.gaire.com
- Garden Clinic Upton Hospital (Slough)
- Gay Advice Darlington (GAD)
- Gay Community Health Service Southampton
- www.gayhealthproject.com
- www.gaymenshealthproject.ie

- Gay Men's Health Promotion Service INSCAPE (Portsmouth City PCT)
- Gay Men's Health (Edinburgh)
- Gay Men's Health Tayside <www.gaymenshealthtayside.com>
- Gay Men's Health Wiltshire & Swindon <www.gmhpdemon.co.uk>
- GALYIC Gay and Lesbian Youth in Calderdale
- Gay Oxford
- George House Trust <www.gh.org.uk>
- Globe Centre (London)
- GMFA <www.metromate.org.uk>
- www.harinGAY.com
- Greenwich PCT
- Hart Gables (Hartlepool)
- Health Education Board for Scotland Information Services
- Health Promotion Service (Croydon PCT)
- Health Promotion Service (Maidstone)
- Health Promotion (Stoke-on-Trent)
- Healthy Gay Life (Eastern Birmingham PCT)
- Herefordshire PCT Sexual Health Services
- www.homofusion.co.uk
- Jarman Centre (Blackburn Community NHS Trust)
- Jigsaw Centre (Birkenhead) <www.gaywirral.com>
- LADS @ Terrence Higgins Trust (London)
- www.lancashirefriend.org.uk
- LEAN (London East AIDS Network) - Romford Road <www.gaymenswellbeing.com>
- LEAN (London East AIDS Network) - Walthamstow
- Leeds Gay Community Group
- Leicestershire AIDS Support Service
- The Lesbian & Gay Foundation (LGF) <www.lgf.org.uk>
- LGBT Youth Scotland
- London Friend
- Lothian Gay & Lesbian Switchboard
- Male-out Shrewsbury (Shropshire Buddies and Body Positive)
- Men 4 Men, The Lodge (Luton PCT) <www.gaybedfordshire.co.uk>
- MESMAC North-East (Middlesbrough)
- MESMAC North-East (Newcastle-upon-tyne)
- MESMAC North Wales
- Metro Centre Ltd
- Mosaic LGBT Youth Project (Brent Youth Service)
- MSM Project, The Brunswick Centre (Halifax)
- The NAZ Project, London <www.naz.org.uk>
- NHS Lanarkshire - Health Promotion Department (Motherwell)
- North & Mid Hants. Gay Men's Health Project (Mid Hants PCT)
- North Kent Gay and Bisexual Men's Health Project (Medway & Swale PCT)
- Northumberland NHS Care Trust
- Nottingham Lesbian & Gay Switchboard
- NLGBA Northampton
- Ormskirk & District General Hospital GUM Department (Southport & Ormskirk Acute NHS Trust)
- www.outhouse.ie
- Outreach Cumbria
- PACE
- Parkhouse Project (North Tyneside Council Youth Service)
- PHACE Scotland (Aberdeen)
- www.posh-uk.org.uk
- Powys & Ceredigion Health Promotion Unit (Powys Health Care NHS Trust)

- Project Oscar (Chorley & South Ribble PCT)
- www.queerid.com
- The Rainbow project <www.rainbow-project.com>
- Reach Out Highland
- Renton Clinic, Darent Valley Hospital (Dartford, Gravesham & Swanley PCT)
- ROAM (Lothian PCT)
- Rotherham PCT Department of Health Promotion
- < www.sceneout.com >
- Sheffield Centre for HIV & Sexual Health (South-East Sheffield PCT)
- Sheffield Gayphone
- Solihull PCT
- South Staffordshire Mesmen Project
- St. Ann's Sexual Health Centre (Haringey PCT)
- St. Helens & Knowsley Pride Project
- <www.st-marys.nhs.org.uk>
- Staffordshire Buddies <www.staffordshirebuddies.co.uk>
- Steve Retson Project (Glasgow)
- Stockport PCT services, Centre for Health Promotion
- Strathclyde Gay & Lesbian Switchboard
- Suffolk MESMAC (Ipswich) <www.suffolkmesmac.net >
- SW5 (formerly Steetwise Youth, now part of Terrence Higgins Trust)
- Teeside Positive Action (Middlesbrough)
- Telford & Wrekin PCT
- TEN (Norfolk NHS HIV/AIDS & Sexual Health Unit)
- Terrence Higgins Trust Counselling Services
- Terrence Higgins Trust Lighthouse West (London)
- Terrence Higgins Trust Lighthouse South (London)
- Terrence Higgins Trust Cymru (Cardiff)
- Terrence Higgins Trust Cymru (Swansea)
- Terrence Higgins Trust Midlands (Birmingham)
- Terrence Higgins Trust Midlands (Coventry)
- Terrence Higgins Trust Midlands (Wolverhampton)
- Terrence Higgins Trust National Gay Men's Health Promotion Team <www.tht.org.uk>
- Terrence Higgins Trust Oxfordshire
- Terrence Higgins Trust South
- Terrence Higgins Trust West (Bath)
- Terrence Higgins Trust West (Bristol)
- Terrence Higgins Trust Yorkshire
- TRADE - Men's Sexual Health Project <www.gaymenstrade.com>
- Tropics Sauna (Portsmouth)
- Tynedale LGB Youth Group
- <www.ukblackout.com>
- Walsall Men's Health Project (Walsall Hospitals NHS Trust)
- Warrington PCT
- West Midlands Lesbian and Gay Switchboard
- West Norfolk PCT Health Promotion
- West Surrey Health Promotion Service
- WightOUT Helpline (Ryde) <www.wightout.org.uk>
- Worcestershire Gay Men's Health Project (South Worcestershire PCT)
- Yorkshire MESMAC <www.mesmac.co.uk>
- Ysbyty Glan Clwyd - GU Department (Glan Clwyd District Hospital NHS Trust)

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1 Introduction and methods

1.1 CONTENT OF THE REPORT

This research report outlines the main findings of Vital Statistics 2004 - which was the eighth annual *Gay Men's Sex Survey* (henceforth GMSS). The survey was carried out during the summer of 2004 by Sigma Research in partnership with 130 health promotion agencies across the United Kingdom (see *Acknowledgements*).

The information in this report is about HIV infection, sex between men and HIV prevention needs. The intended audience includes people involved in planning and delivering programmes to address the HIV prevention needs of homosexually active men. It complements our annual reports from GMSS in 1997 to 2003 (Hickson *et al.* 1998; Hickson *et al.* 1999; Weatherburn *et al.* 2000; Hickson *et al.* 2001; Reid *et al.* 2002; Hickson *et al.* 2003a; Reid *et al.* 2004).

This chapter provides the background to the survey and explains how the sample was recruited. It also shows what exclusion criteria were applied to the data collected, prior to the analysis in the rest of the report.

Chapter 2 describes the final sample of 16,002 men living in England, Wales, Scotland or Northern Ireland who either had sex with another man in the last year and / or identified as *Gay*, *Bisexual* or another sexual identity related to homosexual desire. We describe the sample using a range of variables that have been reported in previous years. These include: where they live; their ages; sexual identities and the gender of their sexual partners in the last year; their ethnicities and countries of birth; formal educational history and qualifications (including a new question on how many years they have spent in full-time education since the age of 16); whether they had a current regular male sexual partner; how many male sexual partners they had in the last year; and whether they have a long-term illness, health problem or disability. We then introduce two new clusters of demographic variables neither of which have featured in our surveys before. The first concerns organised religion including religious background and current practice. The second concerns experience of commercial sex with men in the previous year, both selling and buying. For both these new sets of variables we consider variation by the prior demographic variables.

Chapter 3 is concerned with men's HIV testing history and their current perceptions of their HIV status. For those who have tested negative in the past the period of time since their last negative HIV test is reported. For these variables we also consider variation by the demographic groups reported in Chapter 2.

In a departure from our usual description of population level sexual behaviours, Chapter 4 looks at what characteristics of sexual sessions men think of as constituting HIV risk. Rather than information about what men actually do, this discursive chapter contains a description of what "risky sex" means to men who have previously tested for HIV.

Chapter 5 reports on six needs relating to sexual control and assertiveness, loneliness, control of alcohol and recreational drug use and satisfaction with HIV knowledge. These indicators of need are also presented for the population groups outlined in Chapters 2 and 3. The findings support a targeting of interventions to specific unmet needs as well as on the basis of likelihood of involvement in HIV exposure.

Chapter 6 considers the use of sexual health interventions including the location of last HIV test, recency and site of STI check-ups, and preferred interventions for learning more about sexual health and HIV. This section also explores what characteristics men value in information givers. These measures and values are also presented for the population groups outlined in Chapters 2 and 3.

1.2 BACKGROUND AND DEVELOPMENT OF THE EIGHTH GAY MEN'S SEX SURVEY

The *Gay Men's Sex Survey* uses a self-completion questionnaire to collect a limited amount of information from a substantial number of men. Sigma Research first carried out GMSS at the London Lesbian & Gay Pride festivals in 1993, 1994 and 1995. No survey was undertaken in 1996. Since 1997, the survey has been undertaken annually eight times, with funding from Terrence Higgins Trust as part of the CHAPS programme. During this time it has expanded across England: from 2000 GMSS has included Wales; since 2001 it has also occurred in Scotland; and since 2002 in Northern Ireland. In 2003 and 2004, the survey occurred across the United Kingdom.

The 2004 questionnaire was designed in collaboration with health promoters that participate in recruitment. In March 2004 we wrote to all agencies who had recruited men to the survey in 2003 and invited them to suggest questions for inclusion. We had requests from five agencies including: to describe religious beliefs; to describe preferred languages for the survey; to measure the frequency of buying and selling sex; and to focus on HIV prevention needs concerning choice and control. In mid-April a long draft of the questionnaire was sent out to 21 CHAPS partners and other key collaborators, who were asked to prioritise questions and areas of interest and to suggest other areas they would like explored. Comments were received from 7 agencies prior to a final draft being pre-tested in two Gay bars in South London. Bar patrons were asked to complete the survey in front of the interviewer and then were interviewed for approximately 30 minutes to gauge how they read and understood each question and its instructions. The final questionnaire was developed from pre-testing interviews and further comments from 5 agencies.

1.3 RECRUITMENT METHODS

Historically, the survey has used a short (2 sides of A4) questionnaire on clipboards for recruitment at Pride-type events and festivals. In 2004 (and 2003) this method was not used. Recruitment at Pride events was suspended to examine the impact on the overall survey size and the profile of participants. It was also a consequence of the increasing commercialisation of Gay pride-type events, many of which have begun to charge admission.

Since 1999 the questionnaire has been produced as a small (A6) booklet which is self-sealing for Freepost return. In each of the six years since, more than 30,000 copies of the booklet have been directly distributed to Gay men and Bisexual men by a range of Gay and HIV health promotion agencies. In 2004 the booklet was made available to all HIV health promoters who work with Gay men, Bisexual men or other homosexually active men across England, Wales and Scotland. Over 200 health promotion agencies were invited to distribute booklets to the men they served. This included all those agencies listed in *Nambase*[®] (NAM 2003) as undertaking health promotion with Gay men and Bisexual men, and all agencies that distributed booklets in previous years.

In total, 32,216 booklets were requested by and sent out to 113 agencies many of which had distributed booklets in previous years. Recruitment was open for a four month period (July to October 2004). The numbers of booklets actually distributed by agencies was not monitored this year. Booklets were returned to Sigma Research marked as distributed by 87 different agencies. The average (median) number of booklets returned per agency was 14 (range 1 to 464). We received twenty or more marked booklets from 36 different agencies. In March 2005, these 36 agencies received a targeted data report on the men they had recruited. Overall, 4,269 booklets were returned via Freepost, giving a return rate of 13.3% of those booklets distributed to agencies.

Since 2001, we have used the internet as a setting for the questionnaire and as a method of recruitment to the survey. Previous online versions of GMSS (Reid *et al.* 2002, Hickson *et al.* 2003a; Reid *et al.* 2004) have demonstrated that the internet method recruited larger numbers of men in demographic groups to which smaller numbers were recruited using Pride events, especially

behaviourally bisexual men, men under 20 years or over 50 years of age, and men from minority ethnic groups.

In 2004 the survey was available for completion online via specific websites in English <www.sigmasurvey.org.uk> and in Spanish <www.sigmaspanish.org.uk>. The questionnaire contained the same 38 questions as the booklet version with 12 others added. The additional questions concerned the ethnicity of men's last male sexual partner and whether respondents had seen a number of HIV prevention and 'safer sex' interventions. These additional questions will be reported elsewhere.

In 2004 the questionnaire was prepared and hosted using www.demographix.com an online internet survey instrument. The design of the online surveys allowed data to be captured and viewed as soon as the respondent pressed 'submit' at the end of the survey. The online version was available for completion for four months (July to October 2004). It was substantially promoted by two of the most popular Gay commercial websites in the UK - www.gay.com/uk and www.gaydar.co.uk - and 35 Gay community and health promotion websites (see acknowledgements). Overall, we received 14,757 responses.

In 2004 we piloted two new methods of recruitment, neither of which proved to be efficient.

GMFA, a provider of HIV prevention and health promotion material for Gay men included the questionnaire in the middle four pages of the Summer 2004 edition of F:S, a Gay men's health magazine distributed across London. Seventeen thousand copies of F:S were distributed on the commercial Gay scene in London. The centre 4 pages formed a pullout which could be put in an envelope and sent to our Freepost address. Overall 134 men returned the F:S version of the survey. All but two lived in England.

Conversations with Naz Project London also resulted in an experimental online version of the survey in Spanish. It was hoped to encourage more UK-resident men for whom their first language was Spanish to complete the survey (particularly Latin American men). The Spanish-language version was then advertised through leaflets and posters distributed by Naz wherever they worked with Spanish-speaking men. It was also promoted through links and articles on other websites and was offered as an option in the introduction to the English-language version. In total 50 men completed the survey in Spanish.

In the analyses and tables that follow, men recruited through F:S are grouped with the booklet-recruited men, and men completing the survey online in Spanish are grouped with the men completing online in English.

1.4 EXCLUSIONS

The proportion of booklet returns excluded from analysis had fallen every year that the method had been used up to 2003 (13.4% were excluded in 1999; 11.8% in 2000; 9.5% in 2001; 7.6% in 2002; and 4.1% in 2003). There was an increase in 2004 with 7.1% of returns excluded.

Similarly, the proportion of web-recruited men excluded had fallen every year the method had been used (30.9% were excluded in 2001; 21.3% in 2002; and 15.1% in 2003) with an increase in 2004 to 19.5%. The number of men completing the Spanish language version of the internet survey was small and a high proportion were excluded for living outside the UK (26%) or having completed the survey already (8%). Among returns from F:S magazine only two men were excluded, one of which did not live in the UK and one who had previously completed the survey.

The table below gives the number of questionnaires returned during recruitment and a summary of the reasons for exclusions from the final sample.

All questionnaires returned (n=19,210)	Booklet	F:S insert	Web Spanish	Web English	TOTAL
Total returns	4,269	134	50	14,757	19,210
No evidence of residence in England, Wales, Scotland or Northern Ireland	81 (1.9%)	1 (<1%)	13 (26%)	2,281 (15.5%)	2,376 (12.4%)
No evidence of sex with men in the previous year or no Gay, Bisexual or queer identity.	99 (2.3%)	0	0	284 (1.9%)	383 (2.0%)
Already completed the survey	101 (2.4%)	1 (<1%)	4 (8%)	313 (2.1%)	419 (2.2%)
Respondent aged under 14	2 (<0.1%)	0	0	2 (<0.1%)	4 (<0.1%)
Not completed sufficient questions (demographics)	10 (0.2%)	0	0	0	10 (<0.1%)
Spoiled and / or completed by a female	12 (0.3%)	0	1 (2%)	3 (<0.1%)	16 (<0.1%)
Sample size: Men with homosexual experience in the last year or a Gay, Bisexual or similar identity	3,964 (92.9%)	132 (98.5%)	32 (64%)	11,874 (80.5%)	16,002 (83.3%)

Men were excluded from the analysis if they were not UK-resident or if they gave no details of their area of residence. Using a question on country of residence combined with the usual question on local authority of residence, 15.5% of the online sample were excluded for non-UK residence (compared to 13.2% in 2003) and 1.9% of booklet-recruited men (compared to 0.5% in 2003). While the majority of those excluded for this reason lived outside the UK (n=2067), the remainder (n=309) were excluded on the basis that no answer was given to either residence question.

Since the 2001 survey, exclusions relating to no homosexual activity had decreased because of the criteria which allows men that had no sex with a man in the last year to remain in the sample if they *intended* to have sex with men in the future. In 2004 men remained in the sample if there was evidence they had sex with a man in the last year or if they identified as Gay, Bisexual or another sexual identity associated with homosexual desire. These two criteria resulted in a higher proportion of men recruited online being excluded (1.9% compared to 0.2% in 2002 and 0.4% in 2003). There was little change in the proportion of booklet-recruited men that were excluded on this criteria (2.3% compared to 2.0% in 2002 and 2.5% in 2003).

In previous years the number of men completing multiple versions of the questionnaire had fallen dramatically. This year 2.4% of booklet-recruited respondents had completed the survey already compared to 1.8% in 2002 and 5.4% in 2001 (this question was not asked in 2003 for booklet completers). The proportion excluded from the online sample for this reason was 2.1% for those completing the English-language version, slightly higher than in the two previous years at (1.4% in 2003, 1.8% in 2002 and 4.1% in 2001). A higher proportion (8%) of those completing the Spanish-language version of the online survey had completed it already. They may have completed it in English and subsequently discovered it could be done in Spanish and their desire to see the Spanish version resulted in them doing the survey twice.

2 Sample description

This chapter describes some characteristics of the sample of 16,002 men using both variables we have asked in previous surveys and some new ones. As the inter-relationships between many of these variables have been explored in previous reports (Hickson *et al.* 1998; Hickson *et al.* 1999; Weatherburn *et al.* 2000; Hickson *et al.* 2001; Reid *et al.* 2002; Hickson *et al.* 2003a; Reid *et al.* 2004) we simply report their frequencies. The exceptions are the two new sets of variables on religion and experience of sex work, which are explored in some detail.

2.1 COUNTRY AND REGION OF RESIDENCE

Men were asked *Which Local Authority do you live in? (who sends your household the Council Tax bill?)* and were asked to supply their postcode or town or city they lived in if they did not know their Local Authority. Respondents lived in all areas of United Kingdom. The following table shows how the total population was distributed between the four countries of the UK compared to the total population, as estimated by the Office for National Statistics (2005).

Country of residence All men (N=16002)	% Booklet responses (n=4096)	% Web responses (n=11906)	% ALL responses (n=16002)	% total UK population (mid 2003)
England	92.7	86.0	87.8	83.7
Wales	3.4	4.0	3.9	4.9
Scotland	3.7	7.7	6.6	8.5
Northern Ireland	0.1	2.3	1.7	2.9

Compared to the total population of adult males in the UK our sample was more concentrated in England than the other three countries, especially among booklet-recruited men. The distribution of the booklet samples was related to where our collaborators were based and so was more concentrated in England, where there were the highest volume of collaborators (booklet recruitment was not funded in Northern Ireland in 2004). The web sample was not determined by the location of collaborators and corresponds much more closely to the total population of the UK.

For regional comparisons in this report we use the English Health and Social Service Directorates (North, Midlands & Eastern, South and London), Wales, Scotland and Northern Ireland. Our website contains down-loadable data reports that give findings for smaller geographic units.

Area of residence (n=16002)	Number of men	% total	% for comparisons
All England	14,042	87.8	86.9
Region unknown (England)	1010	6.3	excluded
North (England)	3233	20.2	21.6
Midlands & Eastern (England)	2981	18.6	19.9
South (England)	2835	17.7	18.9
London	3983	24.9	26.6
Wales	621	3.9	4.1
Scotland	1064	6.6	7.1
Northern Ireland	275	1.7	1.8

Because 1010 men (6.3% of the total sample) told us they lived in England but gave no further detail of where, they are included in the second column as *region unknown (England)*. When we make comparison on residence these men are excluded (see column 3).

2.2 AGE

The mean age of the entire sample was 33.9 years (standard deviation (sd) 11.9 years, median 32 years, range 14-85). Age was missing for 582 men (3.6%).

As in previous surveys the web sample (n=11877) was significantly younger (mean 33.2 years, sd 11.6, median 32, range 14-84) than the booklet sample (n=3411, mean 35.9 years, sd 12.6, median 35, range 14-85). The Spanish language sample was the youngest with a mean age of 31.0 years (standard deviation 8.2, median 31, range 19-59) and the F:S sample was the eldest at 41.5 years (sd 12.5, median 40, range 21 - 82).

In the remainder of this report we group men into the following age groups to make comparisons across other variables.

Age groups (N=15420, missing=582)	% Web responses (n=11877)	% Booklet responses (n=3543)	% ALL responses (n=15420)
14 - 19 years (n=1395)	9.7	6.8	9.0
20 - 24 years (n=2706)	18.5	14.5	17.5
25 - 29 years (n=2267)	15.2	13.1	14.7
30 - 34 years (n=2340)	15.3	14.6	15.2
35 - 39 years (n=2215)	14.1	15.1	14.4
40 - 49 years (n=2781)	17.2	20.7	18.0
50 years or over (n=1716)	9.9	15.1	11.1

2.3 SEXUAL IDENTITY AND GENDER OF SEXUAL PARTNERS

All men were asked *What term do you usually use to describe yourself sexually?* And offered four responses: *Gay, Bisexual, I don't usually use a term* and *other*. Men who ticked *other* were asked to *say what?* Overall 81.6% (n=13030) considered themselves *Gay* and 12.3% (n=1961) considered themselves *Bisexual*. Of the remainder, the majority (5.6%, n=893) stated that they *did not usually use a term*.

Of the 92 men (0.6%) who ticked *other* and remained in the sample, 18 identified as 'queer' and one as 'queer as fuck'. Eight identified as homosexual alongside one who considered himself a 'homosexualist'. Five men identified as 'bi-curious'. Another five were 'curious' including one that was 'curious, not hetro but not gay' and one that was 'still curious'. Five men identified as 'open minded', one simply 'open' and one 'open to offers'. Two identified as 'confused' including one that was 'confused and experimenting'. Four men identified as 'straight' and three as 'heterosexual' or 'hetero'. Two men identified as transgendered and three as transexual (two male-to-female and one unspecified). One man identified as a 'transvestite'. One man each said: 'anything - whatever you want I got it'; 'batty boy'; 'batty'; 'bent'; 'bloke who likes having sex with men'; 'discreet'; 'dilemma'; 'experimental'; 'free spirit'; 'goth'; 'happy'; 'I am me - no pigeon holes'; 'I like both, but very picky'; 'lad who only fancies lads'; 'non-heterosexual'; 'not sure'; 'man who has sex with men'; 'proficient'; 'raving old poof'; 'sexually active'; 'trysexual - I'll try anything sexual'; 'unique'; 'wish to try other sex'; 'women alluring, men re-assuring'.

All men were also asked *In the last year have you had sex with .. ?* and offered the answers: *No one; women only; men only* and *both men and women*. Overall 84.7% (n=13553) had sex with *men only*

in the last year, and 9.6% (n=1531) had sex with *both men and women*. The remainder who had sex with *women only* (1.0%, n=157) or *no one* (4.7%, n=757) remain in the sample on the basis of identifying as Gay or Bisexual or having some other identity related to homosexual desire. In the table below we examine the relationship between sexual identity and the gender of men's sexual partners in the last year.

Gender of partners last year and sexual identity % of total (number)	% men only (n=13530)	% both men & women (n=1528)	% women only (n=157)	% no one (n=757)	% Totals (n=15972)
Gay (n=13027)	76.3 (n=12189)	1.5 (n=242)	0.1 (n=13)	3.7 (n=583)	81.6
Bisexual (n=1960)	3.9 (n=627)	6.5 (n=1031)	0.8 (n=132)	1.1 (n=170)	12.3
Don't usually use a term (n=893)	4.1 (n=652)	1.5 (n=241)	0	0	5.6
Other term (n=92)	0.4 (n=62)	0.1 (n=14)	0.1 (n=12)	<0.1 (n=4)	0.6
Totals (n=15972)	84.7	9.6	1.0	4.7	100.0

Over three quarters (76.3%) of the sample were Gay identified and only had sex with men in the last year. The next largest group (6.5% of the total) identified as Bisexual and had sex with both men and women in the last year. Note that men who indicated that they did not use a term for their sexuality and who had not had sex with another man in the last year were excluded from the sample.

In the remainder of this report we use an amalgam of these two variables to make comparisons. For the first time in a GMSS survey this allows us to examine the relationship of sexual behaviour and sexual identity with other key variables including needs.

Gender of partners AND sexual identity by recruitment source (N=15956, missing=582)	% Web responses (n=11877)	% Booklet responses (n=4079)	% ALL responses (n=15956)
exclusively homosexually active AND Gay identity	74.6 (n=8889)	80.9 (n=3300)	76.4 (n=12189)
exclusively homosexually active but NOT Gay identity (Bisexual, or prefer not to use a term, or an other term)	8.8 (n=1045)	7.3 (n=296)	8.4 (n=1341)
sex with both men and women AND Bisexual identity	7.3 (n=867)	4.0 (n=164)	6.5 (n=1031)
sex with both men and women but NOT Bisexual identity (Gay, or prefer not to use a term, or an other term)	3.0 (n=360)	3.4 (n=137)	3.1 (n=497)
NO sex with men but Gay or Bisexual identity	6.0 (n=716)	4.5 (n=182)	5.6 (n=898)

As the table above demonstrates sexual identity and the gender of men's sexual partners varied by recruitment method. Compared to booklet-recruited men, those recruited online were less likely to be exclusively homosexually active and less likely to be Gay identified and more likely to be behaviourally bisexual and Bisexually identified.

2.4 ETHNICITY & COUNTRY OF BIRTH

Men were asked *What is your ethnic group?* and were asked to indicate one of the 16 options replicated from the 2001 UK Census (Office of National Statistics 2005). *Other* answers were allocated to categories according to Office of National Statistics instructions. Ethnic group data was missing for just 27 men (0.2% of the sample).

The following table shows the number of respondents from each ethnic group and the proportion of the entire sample they represent. For comparison it includes the figures for GMSS in 2001 and 2003 (the 2002 survey used a different ethnicity question) and figures for adult males in the 2001 UK Census.

Ethnic group		GMSS 2001 (N=15313)	GMSS 2003 (N=14498)	GMSS 2004 (N=15975)	% of UK population 2001	% of non-White	
						GMSS 2004	UK 2001
White	<i>White British</i>	12,800 83.6%	12,177 84.0%	13,124 82.2%	92.1%	–	–
	<i>Irish</i>	425 2.8%	509 3.5%	470 2.9%			
	<i>Other White</i>	1,148 7.5%	997 6.9%	1,275 7.9%			
Black / Black British	<i>Caribbean</i>	130 0.8%	91 0.6%	113 0.7%	1.0%	10.2	12.2
	<i>African</i>	44 0.3%	38 0.3%	78 0.5%	0.8%	7.1	10.5
	<i>Other Black</i>	21 0.1%	17 0.1%	29 0.2%	0.2%	2.6	2.1
Asian / Asian British	<i>Indian</i>	146 1.0%	163 1.1%	171 1.1%	1.8%	15.5	22.7
	<i>Pakistani</i>	44 0.3%	6 <0.1%	82 0.5%	1.3%	7.4	16.1
	<i>Bangladeshi</i>	5 <0.1%	2 <0.1%	10 0.1%	0.5%	0.9	6.1
	<i>Other Asian</i>	93 0.6%	28 0.2%	53 0.3%	0.4%	4.8	5.3
Dual Ethnicity	<i>White & Black Caribbean</i>	101 0.7%	74 0.5%	89 0.6%	1.2%	27.5	14.6
	<i>White & Black African</i>	34 0.2%	19 0.1%	37 0.2%			
	<i>White & Asian</i>	76 0.5%	95 0.7%	89 0.6%			
	<i>Other Mixed</i>	87 0.6%	82 0.6%	89 0.6%			
Chinese	117 0.8%	92 0.6%	131 0.8%	0.4%	11.8	5.3	
All other ethnicities	42 0.3%	108 0.7%	135 0.8%	0.4%	12.2	5.0	

The proportion of the GMSS samples that is White British has been stable over the past four years, varying by only 1.3%. The proportion of the samples that are from ethnicities other than white (6.1%, 5.6% and 6.9%) was also very similar. This proportion was smaller than the Census estimate of 7.9% of people resident in the UK not being White, but as Black and other visible ethnic minorities are disproportionately young compared with UK-resident White ethnicities, we would expect some under-representation in a sample with an average age of almost 34.

However, the relative ratios of each ethnic minority differed in these samples of Gay and Bisexual men compared to the total population of the UK. Considering only ethnicities other than White, and compared with the total population of the UK, a much larger proportion of our 2004 sample of Gay and Bisexual men had dual or mixed ethnicities (27.6% vs. 14.6%), were Chinese (11.8% vs. 5.3%) or were from other ethnic groups (12.2% vs. 5.0%). Conversely our samples had smaller proportions of African, Caribbean, Indian, Pakistani, Bangladeshi and other Asian men.

Whether or not men were born in the UK was missing for only 44 men in the sample (0.3%). Overall, 86.6% of respondents indicated they were born in the UK. The following table shows which countries in the UK and Ireland the sample were born in by which area they live in currently.

Country of birth (N=14956)	% region and country of residence							Totals
	London (n=3966)	South England (n=2829)	Mid & East England (n=2977)	North England (n=3228)	Wales (n=621)	Scotland (n=1060)	North Ireland (n=275)	
England	61.7	82.6	86.1	88.6	26.2	13.5	6.9	70.4
Wales	2.7	2.5	2.8	1.6	66.8	0.8	0.0	4.9
Scotland	3.9	3.5	2.4	2.9	1.1	78.5	1.5	8.4
Northern Ireland	1.7	0.8	0.9	1.0	0.6	0.7	84.0	2.6
Republic of Ireland	2.3	0.5	0.6	0.9	0.6	0.8	4.0	1.2
Elsewhere	27.7	10.0	7.2	5.0	4.5	5.8	3.6	12.4

Of the 2154 men who indicated they were not born in the UK, 123 (5.7%) did not give the name of the country they were born in. Of the men who indicated their country of birth 41.7% (n=847) were born in Europe; 16.0% (n=325) in Africa; 14.9% (n=302) in Asia; 13.6% (n=275) in North America; 9.4% (n=191) in Oceania; and 4.4% (n=89) in South or Central America.

Between them respondents listed 134 different countries of birth outside the UK. The ten most common non-UK countries of birth were: Republic of Ireland (n=181), South Africa (n=160), USA (n=160), Germany (n=157), Australia (n=130), France (n=94), Italy (n=93), Spain (n=68), Malaysia (n=52), New Zealand (n=51). These ten countries account for 56.4% of all the UK-resident men born outside the UK. The proportion of men born abroad (including in the Republic of Ireland) was substantially higher among London residents (at 30.0%) than in the other English regions (5.9% to 10.5%) or in the other countries of the UK.

2.5 EDUCATIONAL QUALIFICATIONS

Two questions were asked about formal education. As in previous years, men were asked to indicate what formal educational qualifications they had and were allocated to one of three groups. Only 83 men (0.5%) did not answer this question. The *low education* group (25.8%, 4106 men) had left school with no qualifications, O-levels or their equivalent (usually leaving school at 16 years of age or earlier). The *high education* group (44.9%, n=7157) had at least a university degree. The *medium* group (29.3% or n=4660) were men with A-levels or equivalent or comparable vocational qualifications.

For the first time in 2004, we also asked *How many years of full-time education have you had since the age of 16?* They were asked to indicate one of the following: *none, 1 year, 2 years, 3 to 5 years, or 6 or more years.* Overall, 126 men (0.8%) did not answer this question. The following table shows men's response to this question by their highest educational qualification allocation.

Highest educational qualification by years in full-time education since the age of 16	% low (n=4049)	% medium (n=4633)	% high (n=7135)	% totals (N=15817)
None	50.0	9.7	1.4	16.3
1 year	19.4	7.9	0.5	7.5
2 years	17.9	35.9	2.3	16.1
3 to 5 years	9.2	40.9	44.0	34.2
6 + years	3.6	5.7	51.8	25.9
Total	100.0	100.0	100.0	100.0

As expected there was a strong association between highest educational qualification and years in full-time education. However, the fit is not as tight as we may expect, with many men saying they had several years of post-16 education but few qualifications. Fewer men indicated they had few years of post-16 education and high education qualifications, probably acquired studying part-time in later life.

When we make comparisons in the remainder of this report we use years of full-time education since the age of 16. However, we collapse the variable to 4 responses: none (16.3%); 1 or 2 years (23.7%); 3 to 5 years (34.1%) and 6 years or more (25.9%).

2.6 REGULAR MALE SEXUAL PARTNERSHIPS

Men were asked *Do you currently have one (or more) regular male sexual partner(s)?* and were asked to indicate one of the following: *no*; *yes, one regular male partner*; and *yes, two or more regular male partners*.

Overall, 101 men (0.6%) did not answer this question. More than half (55.4%) of all men indicated they had one or more regular partners. This compares with 53.1% in GMSS 2003, 58.0% in 2002 and 58.3% in 2000 (not asked in 2001). In 2004, 17.0% (n=2697) of all men had more than one regular partner, 38.4% (n=6106) had just one regular male partner and 44.6% (n=7098) indicated they were single.

2.7 VOLUME OF MALE SEXUAL PARTNERS IN THE LAST YEAR

Men were asked *In the last 12 months how many MEN have you had sex with in total?* and allowed to indicate one of five responses (0.9% did not answer this question). The number of male partners men had in the last year differed slightly by recruitment method. Compared to the men recruited on the internet, the booklet-recruited sample were less likely to have had no male sexual partners and were more likely to have had very high numbers of male partners. This is contrary to the popular impression that men recruited on the internet are, as a group, exceptionally sexually active.

Number of male sexual partners in the last year (n=15852, missing 150)	% Web responses (n=11820)	% Booklet responses (n=4032)	% ALL responses (n=15852)
None	6.1	4.7	5.8
one	16.6	19.8	17.4
2, 3 or 4	29.2	27.3	28.7
5 to 12	25.1	21.9	24.3
13 to 29	12.4	12.5	12.4
30+	10.5	13.8	11.4

2.8 LONG-TERM ILLNESS, HEALTH PROBLEM OR DISABILITY

All respondents were asked the Census 2001 (ONS 2005) question *Do you have any long-term illness, health problem or disability which limits your daily activities or the work you can do?* One-in-ten (10.2%) indicated *yes* overall. Again this varied by recruitment method: 13.6% of booklet recruits (n=543) and 9.0% of website recruits (n= 1062).

The detail of HIV testing practices are given in Chapter 3. Here we can note that those who reported a health problem were considerably more likely to have diagnosed HIV (25.1%) than those who did not (4.4%). Alternately, men who had diagnosed HIV were considerably more likely to report health problems (39.2%), compared to negative (9.9%) and untested men (6.2%).

Approximately 6% of men who reported a health problem did not specify what their problems was. The answers of all the other men were allocated to one of twelve categories or *other* for those we could not categorise.

A third (33.6%) of all those reporting an illness or disability reported a problem relating to the broad category **skeletal / muscular / neurological / mobility** problems. Within this category the most common problems were: back and spinal, arthritis, problems relating to the nervous system (brain, spinal cord, nerves), epilepsy, headache or migraine, developmental disorders, joint and limb problems and ME or Chronic Fatigue Syndrome.

A quarter of men (25.0%) with a health problem reported **mental health or emotional problems**. Most common in this category was depression and anxiety but the category also includes men with motivational problems, eating or sleeping disorders, phobias and drug and alcohol misuse or addiction.

Over a fifth (20.7%) of those with an illness or disability reported a health problem related to **infectious diseases**, most of which reported having HIV or AIDS. A small proportion reported having hepatitis, syphilis, herpes or Epstein-Barr virus.

Other common problems included **diabetes** (8.8%) and **heart problems** (8.5%) such as hypertension and angina. Slightly fewer (7.4%) were categorised as having a **respiratory problem** most commonly asthma but including other lung diseases. Others had **sight or hearing problems** (5.0%) or **gastrointestinal problems** (4.0%). Categories with less than 2% of responses included; **cancers; kidney and liver problems** and **glandular or hormonal problems**. A small proportion (0.6%) could not be allocated to any of these categories.

There were some small differences between the problems men reported and the way in which they were recruited. Web-recruited men were slightly more likely to report *Skeletal / muscular / neurological / mobility problems* (28.8%) compared to booklet-recruited men (25.9%) and also more likely to report an *infectious disease* (21.5% compared to 16.8%). Booklet-recruited men were more likely to report a *mental health or emotional problem* than web-recruited men (24.9% compared to 17.8%).

2.9 RELIGION: BACKGROUND, CURRENT AND PRACTICE

For the first time in the *Gay Men's Sex Survey* we asked a series of questions about both religious background and current faith. Here we compare religious background to current belief and then gauge the proportion of men who currently practice any religion.

The majority of organised religions are hostile to sex between men and many contribute to the social taboo of homosexuality and the social exclusion of Gay men in particular. *Making it Count* (Hickson *et al.* 2003b) states that "many Gay and Bisexual men have rejected organised religion, because of their ideology of heterosexual superiority, cutting off a potential source of spiritual development and excluding them from potentially supportive social networks". However, in

recognition of the role religious organisations could have in meeting HIV prevention needs *Making it Count* included a strategic community aim “that religious leaders reduce their verbal abuse of Gay and Bisexual men, including members of their own organisations who come out and increase their active contribution to reducing men’s HIV prevention needs”. It also suggested an appropriate health promotion aim would be that “religious leaders are aware that some members of their organisations are Gay or Bisexual”.

All men were asked *What religion were you brought up in?* They were offered six named religions (*Christianity, Buddhism, Hinduism, Judaism, Islam* and *Sikhism*) plus the option of *no religion* and *other* religion. The most common *other* religion listed was Paganism (and derivatives) and this is included in the table below. An answer to the first question was missing for only 65 men (0.4%). If the respondent indicated any religion they were then offered a blank line for response to the question *What is the branch (denomination or sect) of the religion you were brought up in?* All men were also asked *What is your current religion?* and offered the same options as above followed by the clarification question. The proportions indicating each of the nine options for these questions are shown below.

Religious background and current religion		% brought up in religion (N=15937)	% current religion (N=15720)	% practising that religion (of those with a current religion)	UK Census 2001
No religion		32.2 (n=5134)	61.2 (n=9624)	n/a	16.7%
Christianity	All Christians	63.7 (n=10144)	31.7 (n=4979)	40.6% (n=1905)	77.2%
	Protestant	35.1 (n=5586)	16.0 (n=2513)	44.0 (n=2400)	
	Catholic	14.3 (n=2282)	6.5 (n=1024)	46.7 (n=985)	
	Orthodox	0.5 (n=72)	0.3 (n=53)	56.9 (n=51)	
	Other/ Unspecified	13.8 (n=2204)	8.8 (n=1389)	28.6 (n=1257)	
Islam		1.2 (n=193)	1.0 (n=162)	64.2 (n=151)	2.9%
Judaism		1.0 (n=159)	0.8 (n=125)	52.1 (n=121)	0.5%
Hinduism		0.6 (n=98)	0.5 (n=86)	77.8 (n=81)	1.0%
Buddhism		0.5 (n=81)	1.4 (n=219)	76.8 (n=211)	0.3%
Sikhism		0.2 (n=37)	0.2 (n=37)	62.5 (n=32)	0.6%
Paganism		0.2 (n=40)	1.3 (n=201)	86.2 (n=195)	0.3%
Other religions		0.3 (n=39)	1.7 (n=274)	73.7 (n=251)	
Multiple faiths		0.1 (n=12)	0.1 (n=13)	91.7 (n=12)	–

Almost two thirds of respondents (63.7%, n=10144) indicated they had been brought up as a Christian. However, less than a third (31.7%, n=4979) indicated their current religion was Christianity. This compares with 77.2% of the adult population of the UK who said they were Christian in the 2001 Census (Office of National Statistics 2005).

For all but two religions, the proportion of men who now espoused the religion was smaller than the proportion that were brought up in it. The two religions that currently had more adherents than were raised in the religion were Buddhism and Paganism. Sikhism had the same proportion of men brought up in it and currently espousing it. However, these were not all exactly the same men, as the following table shows. The following table shows the movement of individual men from the religion they were brought up in to the religion they currently have.

% of men (in each religious background) who espouse each religion currently	% Religion brought up in													
	No religion (n=5018)	Christianity				Islam (n=190)	Judaism (n=157)	Hinduism (n=98)	Buddhism (n=78)	Paganism (n=40)	Sikhism (n=37)	Other religion (n=38)	Multiple faiths (n=12)	
		Protestant (n=5542)	Catholic (n=2243)	Orthodox (n=72)	Other (n=2167)									
No religion	95.2	47.9	48.0	33.0	43.7	15.0	26.0	20	30	10	14	32	25	
Christianity	Protestant	0.9	39.9	2.0	–	9.4	0.5	–	–	1	–	–	5	–
	Catholic	0.1	0.7	40.0	1.0	3.0	–	–	–	3	–	–	3	–
	Orthodox	<0.1	<0.1	–	61.0	0.3	–	–	–	–	–	–	–	–
	Other	0.9	6.5	5.2	–	39.5	1.1	0.6	–	–	–	–	8	–
Islam	0.1	0.1	0.1	–	0.1	80.0	–	–	–	–	–	–	–	–
Judaism	<0.1	0.2	0.1	–	0.1	–	69.0	1	–	–	–	–	–	8
Hinduism	0.1	0.1	<0.1	–	0.1	0.5	–	75	1	–	3	–	–	8
Buddhism	0.5	1.3	1.7	–	1.1	–	2.5	2	64	–	–	3	–	8
Paganism	1	1.2	1.2	–	0.8	–	0.6	–	–	83	–	3	–	17
Sikhism	<0.1	–	<0.1	–	–	0.5	0.6	1	1	–	81	–	–	8
Other religion	1.1	2.0	1.4	4.0	2.0	2.1	0.6	–	–	7	3	47	–	8
Multiple faiths	0.1	0.1	0.1	–	–	–	–	1	–	–	–	–	–	17
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Of men brought up with no religion, the vast majority (95.2%) indicated they had no religion currently. Although there were many cases where men switched religion, the majority of men brought up in each of the religions who did not now espouse that religion espoused no religion rather than another religion.

Of men brought up in each of the religious backgrounds, those most likely to espouse no current religion were brought up as Protestants (47.9% had no current religion) or Catholics (48.0%). Those least likely to now espouse no religion were brought up in Paganism or Sikhism. Men brought up in Islam, Sikhism or Paganism were most likely to still espouse those religions.

2.9.1 Current religion and socio-sexual context

The following table shows the proportion of men in five current religious belief groups by each of the demographic characteristics described earlier. Those men whose religious faith was not Christian (that is men who answered Islam, Judaism, Hinduism, Buddhism, Paganism, Sikhism and other non-Christian religions) are reported here in a single category named *non-Christian religions*. There were insufficient men in each of their actual religious categories to make comparison feasible. Current religious belief and practice significantly differed across each of the demographic characteristics previously described.

		% by current religious belief					
		No Religion (n=9624)	Protestant (n=2513)	Catholic (n=1024)	other Christian (n=1442)	non-Christian religions (n=1117)	
Area of residence (n=14744)	London	61.0	13.3	8.4	7.7	9.5	
	South England	61.9	17.6	5.2	8.8	6.4	
	Midlands & Eastern England	61.0	19.1	4.7	8.6	6.7	
	North England	61.3	16.9	6.8	8.6	6.3	
	Wales	62.4	15.9	4.7	11.1	5.9	
	Scotland	65.2	16.4	6.0	8.3	4.1	
	Northern Ireland	44.4	18.7	21.3	11.6	4.1	
Age (n=15177)	under 20	70.5	8.3	5.8	8.4	7.0	
	20 - 24	69.5	9.3	6.7	6.6	7.9	
	25 - 29	62.9	13.8	6.5	8.5	8.2	
	30 - 34	65.4	11.5	7.3	7.9	7.9	
	35 - 39	61.2	16.1	6.2	9.9	6.5	
	40s	56.6	20.6	6.7	10.2	5.9	
	50 +	42.0	35.7	6.5	10.3	5.5	
Gender of male partners in the last year and sexuality (n=15678)	Sex with men only	AND Gay	63.2	15.2	6.4	8.6	6.6
		NOT Gay	49.4	21.4	8.4	11.4	9.5
	Sex with men & women	AND Bisexual	55.1	19.3	6.6	11.6	7.4
		NOT Bisexual	61.6	14.0	6.0	9.5	8.9
	No sex with men	but GAY or Bisexual	59.2	16.8	5.5	10.4	8.0
Ethnicity (n=15695)	Asian / Asian British	22.7	1.6	3.2	1.9	70.5	
	Black / Black British	41.5	21.2	9.7	19.8	7.8	
	Mixed	55.3	8.5	12.3	11.6	12.3	
	White British	63.9	17.6	4.6	9.1	4.8	
	Other White	53.8	8.7	18.7	9.8	9.0	
	Any other	46.0	7.6	17.1	4.9	24.3	
Years in full-time education (n=15613)	None	63.3	17.0	4.2	11.2	4.3	
	1 - 2 years	64.4	14.4	5.7	9.4	6.0	
	3 - 5 years	62.0	15.6	6.4	8.6	7.4	
	6 + years	56.2	17.4	8.8	8.3	9.2	
Relationship status (n=15638)	Single	61.2	15.7	6.3	9.3	7.4	
	1 regular male partner	62.6	16.2	6.5	8.7	6.0	
	2+ regular male partners	58.5	16.3	7.0	9.7	8.6	
No. of male partners last year (n=15585)	None	59.7	16.5	5.4	10.2	8.1	
	one	61.5	16.8	6.9	9.0	5.7	
	2,3 or 4	60.7	15.9	6.4	10.0	6.9	
	5 to 12	62.1	16.4	6.4	8.3	6.8	
	13 to 29	61.5	15.6	7.0	8.3	7.6	
	30+	62.0	13.9	6.5	8.2	9.3	
Disability (n=15540)	No	62.0	15.7	6.4	9.1	6.8	
	Yes	54.9	18.9	7.4	8.5	10.3	

The majority of men in all areas of Britain espoused no religion, except in Northern Ireland. Men living in Northern Ireland were least likely to say they had no current religious belief and

substantially more likely to report being Catholic. Men living in London were least likely to report being Protestant and most likely to report religions other than Christianity. Men in the Midlands were most likely to report being of Protestant belief.

Exclusively homosexually active men with a Gay identity were least likely to report any current religious belief, as were White British men. Asian men were most likely to report any current religious belief, although they were least likely to report a Christian religion. Asian men were most likely to report Buddhism (22.7% of Asian men), Islam (33.4%) or Sikhism (10.1%). Men in the *White other* and *any other* ethnic category were most likely to report being Catholic. Black men were most likely to report currently being Protestant or another non-Catholic Christian religion.

The majority of men at all ages espoused no religion, except those over 50 years. Men espousing Protestantism in particular were older. The median age of the men espousing no religion was 31 years, Catholicism was 32 years, Protestantism was 39 years, and other Christian denominations was 35 years. Men espousing other minority religions were the youngest group with a median age of 30 years. Only 8.3% of men under 20 reported being Protestant compared to 35.7% of those aged 50 or over. There was far less variation by age in the proportion of Catholic men, *other* Christians or those with other religious beliefs.

Current religious belief varied by the number of years men had spent in full-time education after the age of 16. Those who spent 6 or more years in full-time education were more likely than others to report a current religion, particularly Catholic or a non-Christian religion.

2.10 SEX WORK (COMMERCIAL SEX)

In 2004 we asked a set of questions concerning buying and selling sex to all men who had been homosexually active in the previous year. Questions included *Have you paid money for sex with a man in the last year?*; *How many times have you paid money for sex with a man in the last year?*; and *Where or how did you find the men you paid money for sex in the last year?* The same questions were asked about being paid for sex with a man.

In total, 10.4% of all homosexually active men had engaged in some form of commercial sex in the last year. Some 5.8% of homosexually active men had paid for sex in the last year and a similar proportion (5.4%) had been paid for sex. Fewer than 1% had both paid for and been paid for sex. The table below shows the overlap between those who had paid for and been paid for sex.

All homosexually active men (n=14704, missing 380)	% commercial sex		
	Not paid a man for sex	Paid a man for sex	Total
Not been paid for sex by a man	89.6 Not paid for sex or been paid for sex	5.0 Paid for sex only	94.6
Been paid for sex by a man	4.5 Been paid for sex only	0.9 Both paid for sex and been paid for sex	5.4
Total	94.2	5.8	100.0

Men who had engaged in any form of commercial sex were asked how many times and where or how they had met the men they had paid, or who had paid them for sex. They were given a range of options and the opportunity to report *other* venues or methods.

The table below demonstrates that, on average, those buying sex did so fewer times than those selling sex. While similar proportions did so only once (35.2% compared to 32.2%) or between 5 and 12 times (14.6% compared to 12.2%) a higher proportion of those selling sex did so between 13 and 29 times (3.7% compared to 7.2%) and a much higher proportion did so 30 or more times (2.0% compared to 14.7%).

Commercial sex in the last year (All homosexually active men)	Paid for sex (missing =146)		Been paid for sex (missing = 352)	
	N	%	N	%
		14938	5.8	14732
Number of times in the last year				
Once	301	35.2	254	32.2
2, 3 or 4 times	379	44.4	266	33.7
5 to 12 times	125	14.6	96	12.2
13 to 29 times	32	3.7	57	7.2
30 + times	17	2.0	116	14.7
Where or how did you find the men who [you paid / paid you] money for sex?				
Gay websites (personals / profiles / chat)	857	41.1	793	46.0
Gay press adverts / classifieds		25.8		11.6
Escort / masseur websites		23.3		15.1
Public spaces (streets / cruising grounds etc.)		19.4		20.6
Gay bars and clubs		12.6		23.8
Saunas		9.6		11.7
Escort agencies, brothels		9.2		8.2
Phone boxes / graffiti / shop windows		2.3		4.3
Local newspaper / magazine classifieds		6.8		5.5
Personal recommendations		7.6		17.4
Telephone chat-lines		4.8		7.4
Other		4.7		6.6

Overall the most popular place to meet partners for commercial sex was through Gay websites which were used by 41.1% of those that bought sex and 46.0% of those sold it. The popularity of other meeting places varied between partners who were paid and those who did the paying. Men who paid for sex were next most likely to have found partners through the Gay press (25.8%); escort / masseur websites (23.3%) and public spaces (19.4%). Those who chose *other* ways reported meeting partners they paid while on holiday; that they had already known or were a friend; in another country; or in an unspecified bar or club. Men who were paid for sex were also likely to have found partners through Gay bars and pubs (23.8%), public spaces (20.6%), personal recommendations (16.5%) and escort / masseur websites (15.1%). Those who reported *other* ways of meeting partners that paid them included men they knew or a friend; an unspecified bar or club; an unspecified website; through nude modelling or pornographic work; through work; and on holiday.

The ways in which commercial sex partners were found differed by how men were recruited to the survey, particularly among those paying for sex. Men recruited online were considerably more likely to report meeting men through Gay websites and escort or masseur websites. Booklet-recruited men were more likely to have found partners who they paid for sex through public spaces, Gay bars and clubs (reflecting some of the venues that the booklet was distributed in).

2.10.1 Sex work and socio-sexual context

The following table shows how the proportion of men in each of the four commercial sex categories varied across the demographic characteristics described earlier. Engagement in commercial sex work significantly varied across each of the demographic characteristics previously described, except ethnicity where no significant relationship was observed.

All homosexually active men		% by sex work in the last year				
		Neither paid or been paid (n=13177)	PAID for sex only (n=729)	Both paid & been paid for sex (n=129)	BEEN paid for sex only (n=669)	
Area of residence (n=13844)	London	87.9	6.6	1.0	4.2	
	South England	89.9	5.3	0.6	4.2	
	Midlands & Eastern England	90.2	4.4	0.8	4.6	
	North England	91.1	3.4	0.9	4.6	
	Wales	89.2	4.4	0.2	6.2	
	Scotland	89.6	5.9	0.6	3.9	
	Northern Ireland	89.5	3.6	1.2	5.6	
Age (n=14183)	under 20	86.1	1.2	1.5	11.2	
	20 - 24	89.1	1.3	1.0	8.5	
	25 - 29	90.6	3.1	1.0	5.3	
	30 - 34	91.5	4.4	0.8	3.4	
	35 - 39	91.7	5.1	0.6	2.6	
	40s	89.2	8.3	0.8	1.7	
	50 +	86.9	11.4	0.5	1.2	
Gender of male partners in the last year and sexuality (n=14679)	Sex with men only	AND Gay	90.7	4.6	0.6	4.1
		NOT Gay	88.4	6.6	0.9	4.1
	Sex with men & women	AND Bisexual	83.8	5.8	2.4	8.0
		NOT Bisexual	77.7	8.2	4.2	9.9
Ethnicity (n=15695)	Asian / Asian British	87.5	5.3	1.4	5.7	
	Black / Black British	89.9	5.0	1.0	4.0	
	Mixed	86.3	4.4	0.7	8.5	
	White British	89.7	5.0	0.9	4.4	
	Other White	89.2	5.0	0.8	5.0	
	Any other	92.4	2.1	0.8	4.7	
Years in full-time education (n=14958)	None	88.9	4.9	1.2	5.0	
	1 - 2 years	90.0	3.9	1.0	5.1	
	3 - 5 years	89.5	5.0	0.7	4.8	
	6 + years	90.0	5.9	0.8	3.3	
Relationship status (n=14623)	Single	90.3	5.3	0.5	3.9	
	1 regular male partner	93.6	3.3	0.4	2.7	
	2+ regular male partners	79.2	7.8	2.8	10.2	
No. of male partners last year (n=14665)	one	98.5	0.8	0.1	0.6	
	2,3 or 4	94.0	3.7	0.4	1.9	
	5 to 12	88.2	6.7	0.7	4.4	
	13 to 29	81.9	8.1	1.3	8.6	
	30+	76.5	7.2	3.1	13.2	
Disability (n=14541)	No	89.9	4.8	0.8	4.4	
	Yes	86.7	6.2	1.1	6.0	
Current religious belief (n=14471)	NO religion	90.1	4.3	0.8	4.9	
	Protestant	90.4	6.4	0.5	2.7	
	Catholic	88.1	6.5	1.3	4.2	
	other Christian	88.9	6.0	1.1	4.0	
	non-Christian religions	86.7	4.9	1.6	6.9	

Involvement in commercial sex was very strongly associated with age. The median age of those who had paid for sex was 40 years (mean 40.2, sd=12.4) while the median age of those selling sex was 25 years (mean 27.5, sd=9.5).

In this sample the majority of men paying for sex identified as Gay (75.9%), but men paying for sex were more likely than men not paying for sex to identify as Bisexual (15.0% versus 10.7%) or to not usually use a term for their sexuality (8.6% versus 5.8%). Similarly, the majority of men selling sex identified as Gay (75.5%), but men selling sex were more likely than the men not selling sex to identify as Bisexual (16.6% versus 10.7%) or to use some other term (1.4% versus 0.4%). These differences were reflected in men's gender of sexual partners where 9.5% of behaviourally bisexual men had paid for sex compared with 5.3% of exclusively homosexually active men, and 11.6% of behaviourally bisexual men had sold sex compared with 4.7% of exclusively homosexually men.

Men who paid for sex tended to be more highly educated than those who did not, while conversely those who sold sex tended to be less well educated. However, there was a wide range of educational experience in both groups.

Compared to men who had not paid for sex, those who had paid were much more likely to have higher numbers of partners (42.9% had 13 or more partners compared to 24.2% of those that had not paid for sex). As a group, men who pay for sex are very sexually active. Less surprising is the observation that men who sold sex also had larger numbers of partners (60.5% had 13 or more).

3 HIV testing and having HIV

In the 2004 survey men were asked the standard series of questions about HIV testing including their testing history, how recently they tested and what they thought their current HIV status was. We also asked about the location of their last HIV test and STI screening, details of which are included in Chapter 6.

3.1 HIV TESTING HISTORY

Men were asked *Have you ever received an HIV test result?* and given the responses: *no never, yes, my last test was negative;* and *yes, I've tested positive.* Those who had tested negative were asked how long ago their most recent test was (*within the last year, between one and five years ago, or more than five years ago*). The number of men indicating each answer and the proportions they represent are shown below.

HIV testing history and recency of negative tests by recruitment method (N=15899, missing 103)		% Web responses (n=11877)	% Booklet responses (n=4022)	% Total responses (n=15899)
never tested		46.3 (5495)	34.4 (1385)	43.3 (6880)
last tested negative	within last year	27.0 (3207)	32.7 (1316)	28.4 (4523)
	1 to 5 years ago	15.9 (1893)	18.4 (742)	16.6 (2635)
	more than 5 years ago	4.6 (547)	6.3 (255)	5.0 (802)
	recency missing	<0.1 (10)	0.3 (11)	0.1 (21)
	total, last test negative	47.6 (5657)	57.8 (2324)	50.2 (7981)
tested positive		6.1 (725)	7.8 (313)	6.5 (1038)

Overall, 56.7% of men had received an HIV test result. Never having tested was more common among web-recruited men (at 46.3%) than among booklet-recruited men (at 34.4%). Among those that had ever tested for HIV, 11.5% had tested positive (or 6.5% of all respondents) and 88.5% (or 49.8% of all respondents) had tested negative. The relationship between test outcomes and recruitment method was not substantial, with 11.9% of booklet-recruited men and 11.4% of web-recruited men, who had ever tested having tested positive.

This data suggests that among those that have tested negative for HIV, the majority have done so relatively recently. Among men that had tested negative, the majority (56.8%) had done so in the last year, with another third (33.1%) having done so in the last five years, but not in the last year. This leaves 10.1% of negative testers whose HIV tested result occurred more than five years previously. The relationship between recency of negative testing and recruitment method was not substantial - similar proportions had tested negative in the last year (56.9% of booklet-recruits compared to 56.8% of web-recruits), but slightly more of the booklet-recruited men (11.0% compared to 9.7% of web-recruits) had a negative test more than five years ago.

3.2 SEXUAL HIV RISK SINCE LAST TEST

Men who had tested HIV negative were asked *Have you had sex with a risk of HIV transmission since your last HIV test?* and were given the options *yes, no and don't know*. The following table shows the proportion giving each response by the time since their last negative HIV test.

Men who had tested HIV negative (n=7960, missing 23)		% time since last negative HIV test			
		In last year (n=4523)	1 to 5 years ago (n=2635)	5 + years ago (n=802)	Total (n=7960)
Sex with a risk of HIV transmission since last HIV test	No	67.9	59.5	53.9	63.7
	Yes	23.8	30.7	33.2	27.0
	Don't know	8.1	9.4	12.7	9.0
	missing	0.2	0.4	0.2	0.3

Overall, a quarter (27.0%) of men whose last test was negative had engaged in sex with a risk of HIV transmission since their last test, and a further 9.0% did not know whether they had done so (see chapter 4 for further details of what constitutes sexual risk in this context). The proportion who had engaged in risky sex since their last negative test (and the proportion who did not know) increased with increasing time since that test - almost a quarter (23.8%) of men who had tested negative in the last year had sex with a risk of transmission since that test, compared with a third (33.2%) of those who had tested negative more than 5 years previously.

3.3 CURRENT HIV STATUS BELIEF

All men were asked *What do you believe your HIV status is currently?* They were offered a five point scale from *definitely positive* to *definitely negative*. The proportion of men giving each answer in each of the testing history groups is shown below.

All men (N=16002)		% (number) HIV testing history							
		never tested	last test negative				tested positive	testing history missing	total
			within last year	1 to 5 years ago	5 + years ago	recency missing			
% current HIV status belief	definitely positive	2.4 (165)	3.0 (137)	3.1 (82)	1.7 (14)	9.5 (2)	95.1 (987)	7.8 (8)	8.7 (1395)
	probably positive	1.8 (123)	1.6 (74)	2.3 (61)	2.1 (17)	0 (0)	1.3 (14)	1.0 (1)	1.8 (290)
	couldn't say / DK	14.1 (971)	4.6 (210)	8.5 (225)	12.0 (96)	9.5 (2)	0.8 (8)	10.7 (11)	9.5 (1523)
	probably negative	30.7 (2111)	33.8 (1529)	41.5 (1093)	44.3 (355)	38.1 (8)	0.3 (3)	12.6 (13)	31.9 (5112)
	definitely negative	49.8 (3424)	56.3 (2546)	44.1 (1163)	39.3 (315)	23.8 (5)	1.1 (11)	38.8 (40)	46.9 (7504)
	missing status belief	1.3 (86)	0.6 (27)	0.4 (11)	0.6 (5)	19.0 (4)	1.4 (15)	29.1 (30)	1.1 (178)
	total	100 (6880)	100 (4523)	100 (2635)	100 (802)	100 (21)	100 (1038)	100 (103)	100 (16002)

Of the men who had received a positive HIV test result, the vast majority (97.8%) thought they had currently got HIV. A small number of men with a positive diagnosis indicated they thought they did not have HIV (1.4% of men tested positive, n=14) or *couldn't say* whether or not they had HIV (0.8% of men tested positive, n=8).

Of the men who had not received a positive HIV test result, 4.6% indicated they thought they currently had HIV: 2.7% (n=400) thought they were *definitely positive* and 1.9% (n=275) thought they were *probably positive*. A much larger proportion of men who had not tested positive, (10.2%, n=1504) indicated they *could not say* or were *unsure* whether they had HIV or not.

Men who had tested HIV negative were not significantly more or less likely to think they had HIV than men who had never tested: 4.2% (n=288) of men who had never tested thought they had HIV and 3.0% (n=387) of men whose last test was negative thought they had HIV. As having tested negative at some point in the past was more common than never having tested, more than half the men who thought they currently had undiagnosed HIV infection had previously received a negative HIV test result. At the population level, the validity of the observation that the majority of men with undiagnosed HIV infection have previously tested HIV negative appears to be born out by recent research among Gay men in London (see text box). However, the same research shows that at the individual level, men are very poor at predicting what an HIV test would show.

The following table illustrates how the proportion of men who are confident about being HIV negative varies with both time since their last negative test and their sexual risk behaviour since that test.

% of men with a negative HIV test who think they are definitely negative		% in the last year	% 1 to 5 years ago	% 5 + years ago	% totals by risk since last test
Sexual risk since last test	No	73.5 (2244/3051)	65.6 (1024/1560)	65.0 (278/428)	64.8 (3581/5527)
	Don't know	28.8 (105/364)	19.0 (47/248)	13.7 (14/102)	21.9 (172/786)
	Yes	18.0 (193/1075)	11.0 (89/808)	8.6 (23/266)	11.7 (311/2666)
Totals by time since test		56.6 (2546/4496)	44.3 (1163/2624)	39.5 (315/797)	50.8 (4029/7934)

Both the passage of time and engagement in risk behaviours reduced the proportion of tested negative men who were confident they were still HIV negative. However, risk had a much greater impact on confidence than did the passage of time. Among men who had not taken a risk since their last test, when that test was within the last year three quarters (73.5%) thought they were *definitely negative*. This dropped to two thirds (65.6%) among men whose last negative test was between one and five years ago but did not drop further for tests more than five years ago. However, when a risk had been taken since a recent negative test, confidence in still being negative dropped sharply, with only 18.0% thinking they were still *definitely negative* even when they had tested negative in the last year. Of the men who had taken risks since a negative test that was over five years ago, only 8.6% thought they were still *definitely negative*.

The following table looks at the proportion of men who were either unsure or who thought they were HIV positive, despite a prior negative HIV test.

% men with a negative HIV test who think they are HIV positive or are unsure		% in the last year	% 1 to 5 years ago	% 5+ years ago	% totals by risk since last test
Sexual risk since last test	No	6.0 (184/3051)	7.6 (118/1560)	7.2 (31/428)	6.6 (335/5047)
	Don't know	13.5 (49/364)	16.9 (42/248)	16.7 (17/102)	15.2 (109/716)
	Yes	17.4 (187/1075)	25.7 (208/808)	29.7 (79/266)	22.0 (474/2151)
Total by time since last test		9.4 (421/4496)	14.0 (368/2624)	15.9 (127/797)	11.6 (920/7934)

A relatively small proportion of the men (6.6%) who had not taken a sexual HIV risk since their last negative HIV test were unsure about their status or believed themselves positive. Anxiety about HIV infection remains an everyday experience for some men, irrespective of their (safer) sexual behaviour and irrespective of having received a negative HIV test result.

More than a fifth of men (22.0%) who had taken a sexual HIV risk since their last negative HIV test were unsure about their status or believed themselves to be positive. Among men who had taken a HIV risk since their last negative test, the proportion that were unsure or thought themselves to be positive increased as the time since their last negative test increased.

Comparison with the Sexual Health Survey of Gay Men in London

In 2004 the *Sexual Health Survey of Gay Men in London* (Dodds & Mercey 2005) recruited 1382 Gay and Bisexual men in community settings in London to self-complete a survey and provide an oral mucosal transudate (OMT) sample which was tested for HIV antibodies. Although not all respondents lived in London, we can compare these men to the 3949 London residents in GMSS 2004 (80% of whom were recruited online, 20% through the booklet). The following table shows key HIV testing history and current status belief variables.

	2004 Sexual Health Survey of Gay Men in London (N=1382)	2004 GMSS London residents (N=3949)
% ever received an HIV test result	78.2% (1069 / 1367) missing n=15, 1.1%	72.4% (2851 / 3938) missing n=11, 0.3%
% ever received a positive test result (of men who have tested)	10.3% (108 / 1052) missing n=17, 1.6%	18.1% (514 / 2840) missing n=11, 0.4%
% of never tested men who thought they were positive or were unsure	27.9% (83 / 298) missing n=0	20.4% (219 / 1076) missing n=11, 1.0%
% of men who had tested negative who thought they were positive or were unsure	8.9% (84 / 944) missing n=0	12.8% (297 / 2316) missing n=10, 0.4%

Compared to the *Sexual Health Survey of Gay Men in London*, men living in London taking part in GMSS were more likely to have either never tested or to have tested HIV positive, and were less likely to have tested negative.

The *Sexual Health Survey* found 12.9% of men providing an OMT sample to be HIV antibody positive. This suggests the extent of diagnosis is around 63% (that is about two thirds of the men with HIV have had it diagnosed).

One-in-twenty (4.4%, n=13/298) of the men who had never tested were positive for HIV on their OMT test. Of these men, 69% (n=9) thought they were HIV negative and 31% (n=4) were unsure of their status. There were 5 men who had never tested for HIV who thought they had HIV, but on their OMT test none did. So among never tested men the majority with undiagnosed HIV thought they were negative, and all the men who thought they were positive were wrong.

Of the men whose last test result was negative, 6.3% (n=59/944) had HIV according to their OMT sample. Of these 73% (n=43) thought they were negative, 25% (n=15) were unsure of their status and only one man thought he was positive.

- The population of men with undiagnosed HIV are not the same as men who have never tested. More than half of men with undiagnosed HIV had previously had a negative HIV test
- The majority of men who had undiagnosed HIV thought they were HIV negative; they were not seeking an HIV test because they did not think they had HIV.

3.4 HIV CONCORDANCY IN REGULAR RELATIONSHIPS

Men who had a current regular male sexual partner (see section 2.6) were asked *Do you and your regular partner have the same HIV status?* and were allowed to indicate one of:

- *Yes, we have the same HIV status (either both HIV positive or both negative);*
- *No, one of us is positive and the other is negative; or*
- *Don't know whether we have the same status or not.*

Overall 1.4% of men with a regular partner declined to answer this question. Of those who did answer 7.1% indicated they were in sero-discordant relationships, 63.0% in concordant relationships and the remaining 29.9% did not know whether they had the same or different HIV status to their regular partner. The table below includes only those men who currently have a regular partner. It shows the total distribution of HIV concordancy of men in a current relationship and their HIV testing history.

HIV concordancy of current relationship	% of those with a current regular male partner (n=8696)	% by HIV testing history		
		never tested (n=3131)	tested negative (n=4881)	tested positive (n=662)
Concordant	63.0	54.3	71.9	40.2
Don't know	29.9	43.8	22.5	17.7
Discordant	7.1	1.9	5.6	42.1

Men who had been diagnosed with HIV were much more likely to be in a sero-discordant relationship than men who had not, with similar proportions of positive men in sero-concordant (40.2% in positive-positive relationship) and sero-discordant (42.1% in positive-negative) relationships.

Among men who had never tested, more than half (56.2%) reported that they knew the sero-concordancy of their relationship and the majority of these stated they were in a concordant relationship (54.3%). Untested men were least likely to report being in a current sero-discordant relationship (1.9%).

Among men who had tested negative the majority reported their current relationship was HIV concordant (71.9%), though just over a fifth (22.5%) were in a relationship where they did not know or were unsure of the sero-concordance, and one-in-eighteen (5.6%) were in a current sero-discordant relationship.

3.5 VARIATION ACROSS DEMOGRAPHIC GROUPS IN PROXIMITY TO HIV

Using the measures reported in this chapter, we constructed a four category grouping to represent men's proximity to the HIV epidemic.

All men are categorised as:

- having been diagnosed HIV positive;
- not having tested positive but believing they were infected;
- not having tested positive nor believing themselves to be positive but having a HIV positive partner;
- none of the above.

The overall proportions in each of these groups are as follows.

Proximity to the HIV epidemic (N=15636, missing 366)	% of all men
Diagnosed HIV positive	6.6
Thinks he is HIV positive but not diagnosed	4.3
Not tested positive AND does not think that he is positive BUT is in an HIV sero-discordant relationship	1.9
None of the above	87.1

Because the variable has been constructed using a number of questions (not all of which every respondent answered) the denominators and proportions of men who had tested positive vary slightly from those given previously. The following sections show how this new composite variable differed across the demographic groups.

3.5.1 Area of residence and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by area of residence in the UK.

All men (N=14676, missing 1326)	% by area of residence group						
	London (n=3915)	South England (n=2781)	Midlands & Eastern England (n=2898)	North England (n=3152)	Wales (n=608)	Scotland (n=1054)	Northern Ireland (n=268)
Diagnosed HIV positive	13.2	4.3	4.1	5.6	5.8	3.0	4.1
Thinks HIV positive	4.3	4.5	3.9	3.9	3.9	4.3	6.0
Has positive partner	3.1	1.3	1.9	1.6	1.3	0.9	1.1
None of the above	79.4	89.9	90.1	88.9	89.0	91.7	88.8

London-resident men were most likely to have had an HIV diagnosis (13.2%) and to have a positive partner (3.1%) if not. Men resident in Scotland were least likely to an HIV diagnosis (3.0%) and least likely to have a positive partner (0.9%) if they did not. However, men resident in Northern Ireland were most likely to think they had HIV when they had not tested positive.

Excluding London, variation across English regions and the other UK countries was not substantial: 3-6% of men have diagnosed HIV, another 4-6% think they may have HIV but have not been diagnosed, and 1-2% have a positive regular male partner.

3.5.2 Age and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by age.

All men (N=15106, missing 896)	% by age group						
	under 20 (n=1364)	20 - 24 (n=2651)	25 - 29 (n=2222)	30 - 34 (n=2303)	35 - 39 (n=2179)	40s (n=2727)	50+ (n=1660)
Diagnosed HIV positive	0.6	1.4	4.1	7.7	11.6	11.8	6.9
Thinks HIV positive	2.6	4.1	4.4	5.1	4.7	4.0	4.0
Has positive partner	0.8	1.2	2.0	1.8	2.6	2.3	1.7
None of the above	96.0	93.3	89.4	85.3	81.1	81.8	87.3

Proximity to HIV varied considerably by age. Proximity to HIV increased with age, peaking from 35 to 49 and declining again in men over 50 years old. Men between 35 and 49 were most likely to have diagnosed HIV infection or to have a partner with HIV. Men between 30 and 35 were most likely to believe they had HIV. Those in their early 20s and younger were the least likely to have diagnosed HIV, to believe themselves to have undiagnosed HIV or to have a partner with HIV.

3.5.3 Sexuality & gender of partners and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by sexual identity and the gender of men's sexual partners in the last year.

All men (N=15596, missing 406)	% by gender of male partners in the last year and sexuality				
	sex with men only		sex with men & women		NO sex with men
	AND Gay (n=11931)	NOT Gay (n=1299)	AND Bisexual (n=1000)	NOT Bisexual (n=484)	BUT Gay or Bisexual (n=882)
Diagnosed HIV positive	7.8	3.1	1.6	3.3	3.7
Thinks HIV positive	4.7	3.1	3.3	5.2	2.3
Has positive partner	2.3	1.0	0.9	0.8	0.0
None of the above	85.2	92.8	94.2	90.7	94.0

Proximity to HIV varied by the gender of sexual partners and sexual identity of respondents. The relationship was complex but those men most proximal to HIV had both a Gay identity and were exclusively homosexually active. Gay identified exclusively homosexually active men were most likely to have diagnosed HIV infection or a positive partner. Bisexually identified, behaviourally bisexual men were least likely to have diagnosed HIV infection.

Some Gay or Bisexual men who had no sex with men in the last year had diagnosed HIV (3.7%). A proportion of men with diagnosed HIV infection will not have had sex with men in the last year as a result of their infection. Those Gay or Bisexual men that had no sex with men in the last year, and did not have diagnosed HIV, were least likely to think they were HIV positive and none had a positive partner.

3.5.4 Ethnicity and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by ethnicity.

All men (N=15612, missing 1326)	% by ethnic group					
	Asian / Asian British (n=299)	Black / Black British (n=208)	Mixed (n=291)	White British (n=12846)	White other (n=1708)	All others (n=260)
Diagnosed positive	3.0	11.1	8.2	6.4	8.6	6.9
Thinks HIV positive	3.0	4.3	2.7	4.4	4.2	5.8
Has positive partner	1.0	2.9	3.4	1.8	2.8	1.9
None of the above	93.0	81.7	85.6	87.5	84.5	85.4

Proximity to HIV varied by ethnic group. Black men were most likely to have diagnosed HIV (11.1%) and had the greatest proximity to HIV overall: almost 1-in-5 Black men had diagnosed HIV, or thought they had HIV or had a male partner with HIV. Proximity to HIV was next most common among White *other* and mixed ethnicities. Asian men had the least proximity to HIV.

3.5.5 Years of education and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by years spent in full-time education since the age of 16.

All men (N=15533, missing 469)	% by years in full-time education			
	None (n=2489)	1 - 2 years (n=3677)	3 - 5 years (n=5320)	6 + years (n=4047)
Diagnosed positive	7.8	5.9	6.8	6.4
Thinks HIV positive	4.0	4.7	4.3	4.1
Has positive partner	2.2	2.0	1.8	1.8
None of the above	86.1	87.4	87.0	87.7

At the national level proximity to HIV did not significantly vary by years in full-time education. However, within some regions there was a strong relationship between education and having tested positive. In London 19.6% of the men with no full-time education after 16 (n=383) had tested positive compared with 10.9% of those with 6 years or more education (n=1492). Similarly, in the North of England, 11.2% of men with no post-16 education (n=321) had tested positive compared with 6.8% of those with 6 or more years (n=353). At the national level, men living in London were both more likely to have higher levels of education and more likely to have tested HIV positive.

3.5.6 Relationship status and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by current relationship status with men.

All men (N=15618, missing 384)	% by CURRENT relationship status		
	Single (n=6980)	1 regular male partner (n=6002)	2 + regular male partners (n=2636)
Diagnosed HIV positive	5.3	6.6	10.2
Thinks HIV positive	4.0	4.3	4.9
Has positive partner	–	3.6	3.3
None of the above	90.7	85.5	81.6

The category *has a positive partner* (men who were not diagnosed HIV positive, did not think they were HIV positive but who had a partner who was HIV infected) is constructed from a number of questions. Because *concordancy of partner* was only asked of men with partners this cell must be blank. If this category is excluded, there was variation between current relationship status and the remaining proximity to HIV measures.

Men with two or more regular partners were most likely to have been diagnosed with HIV and to think they had HIV if it had not been diagnosed. Those with no regular male partners were least likely to have diagnosed HIV or to think they had HIV. Men with diagnosed HIV were most likely to be maintaining multiple regular sexual relationships (26.0% were) compared to men not diagnosed with HIV (16.4%).

3.5.7 Volume of male sexual partners and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by the volume of male sexual partners men had in the last year.

All men (N=15519, missing 483)	% by volume of male sexual partners in last year					
	none (n=898)	one (n=2681)	2,3 or 4 (n=4462)	5 to 12 (n=3778)	13 to 29 (n=1943)	30+ (n=1757)
Diagnosed HIV positive	3.7	4.0	4.2	6.2	8.9	16.6
Thinks he is HIV positive	2.2	3.7	4.1	4.3	5.0	5.7
Has positive partner	–	1.4	1.9	1.9	2.5	3.1
None of the above	94.1	91.0	89.7	87.7	83.6	74.6

Those who had no male partners could not have a positive partner so this cell is blank. Even when having a positive partner was removed from the analysis, those with higher numbers of partners have greater proximity to the epidemic than those with fewer partners. Those with no male partners have the least proximity of all and those with 30 or more have the greatest proximity. Men with diagnosed HIV were most likely to have high numbers of sexual partners. Overall, 28.4% of positive men had 30 or more partners in the last year compared with 10.2% of men not tested positive.

3.5.8 Disability and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by whether men had a current long-term illness, health problem or disability.

All men (N=15506, missing 496)	% by disability	
	NOT Disabled (n=13933)	Disabled (n=1573)
Diagnosed HIV positive	4.5	25.6
Thinks HIV positive	4.4	3.3
Has positive partner	2.0	1.3
None of the above	89.1	69.8

Unsurprisingly, men who reported a long-term illness or disability were much more likely to have diagnosed HIV (25.6%) than men who did not report an illness, health problem or disability (though 4.5% of these men also had diagnosed HIV).

3.5.9 Current religious belief and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by men's current religious belief. Those men whose religious faith was not Christian (that is men who answered Islam, Judaism, Hinduism, Buddhism, Paganism, Sikhism and other non-Christian religions) are reported here in a single category named *non-Christian religion*. There were insufficient men in each separate category to make comparison feasible.

All men (N=15384, missing 618)	% by current religious belief				
	NO religion (n=9456)	Protestant (n=2474)	Catholic (n=999)	Other Christian (n=1366)	non-Christian religion (n=1089)
Diagnosed HIV positive	7.1	5.2	6.4	5.3	8.0
Thinks HIV positive	4.3	3.7	3.4	5.5	5.2
Has positive partner	2.2	1.3	1.8	2.0	1.5
None of the above	86.5	89.8	88.4	87.2	85.3

Men with current religious beliefs that were not Christian (Islam, Judaism, Hinduism, Buddhism, Paganism, Sikhism and other religions) reported the greatest proximity to HIV overall. They were most likely to have been diagnosed with HIV (8.0%) or to think they were positive (5.2%) if they had not been diagnosed. This relationship was partly a function of geography, since non-Christian religions are much more common among London-resident men. In terms of proximity to HIV non-Christian men were closely followed by those men with no current religious beliefs. Protestants were least likely to have diagnosed HIV and had the lowest overall proximity.

3.5.10 Sex work and proximity to HIV

The following table shows how HIV diagnosis, perceptions of HIV status and having a partner with HIV varied by men's relationship to paid sex in the last year.

All men (N=14409, missing 1593)	% by sex work in the last year			
	Neither paid or been paid (n=12924)	PAID for sex only (n=709)	BOTH paid & been paid for sex (n=125)	BEEN paid for sex only (n=651)
Diagnosed HIV positive	6.5	7.9	12.0	10.9
Thinks HIV positive	4.2	4.9	8.0	5.2
Has positive partner	2.0	1.6	4.8	2.6
None of the above	87.3	85.6	75.2	81.3

Those men that had both bought and sold sex in the last year had the greatest overall proximity to HIV, with almost a quarter having diagnosed HIV (12.0%), or thinking they had HIV (8.0%), or having a regular male partner with HIV (4.8%). Men who had sold sex, but had not bought it in the last year were similarly likely to have diagnosed HIV (10.9%).

Compared to men who had not tested positive, those who had were both more likely to have paid for sex (7.2% compared with 5.7%) and to have sold sex (8.7% compared with 5.2%).

3.6 SUMMARY AND CONCLUSIONS

One-in-eight (12.9%) of all these Gay men and Bisexual men had diagnosed HIV, thought they had HIV or had a current regular partner with HIV. Although they are the population most affected by HIV, experience of HIV is very unevenly distributed among Gay and Bisexual men resident in the UK. Health promotion interventions must work with this diversity and recognise that men who have sex with men are a varied group with diverse experiences and needs.

Experience of HIV is more common in London than elsewhere; among Gay rather than Bisexual men and among men in their 30s and 40s rather than in their 20s or over 50s. While 6.5% of the entire sample had tested positive, the figure was 23.4% among the men in their 40s living in London (n=778). HIV is also more common among men with lower rather than higher levels of education.

Men with experience of HIV also had greater numbers of male sexual partners. To increase their impact on the incidence of HIV, prevention interventions should over-serve those groups more likely to be living with and around HIV. The men who will soon acquire HIV look, demographically, most like the men currently living with HIV.

The UK Collaborative Group for HIV and STI Surveillance (2005)

Mapping the issues. HIV and other sexually transmitted infections in the United Kingdom: 2005.
London, Health Protection Agency Centre for Infections.

This is the third annual compendium of data from several on-going research projects which keep track of HIV and STIs in the UK. In addition to chapters on each of the main sexually transmitted infections, there are separate chapters on groups requiring targeted prevention, including men who have sex with men (MSM).

In 2004 the estimated number of MSM living with HIV in the UK was 26,500, of whom 66% (17,400 men) have had their HIV infection diagnosed and 34% (9,100 men) have not. The number of new diagnoses of HIV rose again in 2004 - over 2,000 MSM in the UK were first diagnosed with HIV in the year. Diagnoses of most other STIs (gonorrhoea, syphilis, chlamydia and LGV) also continued to increase among MSM in 2004.

The report also estimates that among MSM attending GUM services (ie. men at higher risk of HIV infection) 3.5% have *undiagnosed* HIV infection. Among those MSM attending GUM services, annual HIV incidence (the proportion of men without HIV who acquire it over a 12 month period) was estimated at 3.0%.

The increases in diagnoses of HIV among MSM in the last five years have been among men with recently acquired infection rather than men with longer-term infection. The first strategic aim of *Making it Count* (Hickson *et al.* 2003b) is to reduce the length of time between HIV infection and diagnosis. This report suggests that among MSM the length of time between HIV infection and diagnosis is getting shorter (page 68).

4 Constructions of sexual HIV risk

One of the routine aims of the *Gay Men's Sex Survey* is to estimate the levels and distributions of behaviours related to HIV transmission. In particular, we usually try to describe those behaviours which health promotion programmes are trying to change. These include reducing sexual exposures (specifically HIV sero-discordant unprotected anal intercourse), the introduction of HIV-infected body fluids into the mouths and anuses of uninfected men, condom failure during protected sero-discordant anal intercourse, and the length of time that men who acquire STIs and HIV have their infection undiagnosed. They also include increasing the proportion of uninfected men exposed to HIV who take post-exposure prophylaxis within 72 hours of their exposure.

The 2004 survey hardly asked any questions related to HIV transmission-related behaviours and the one that is reported here was not intended to measure how common the behaviours were but to get an idea of what men thought constituted risk during sex. In the English-language online survey only, men who indicated *yes* to the question *Have you had sex with a risk of HIV transmission since your last HIV test?* were then asked *What was it about the sex you've had that makes you think there was a risk of HIV transmission?* Responses to this question tell us what sexual behaviours men who have previously tested for HIV think are risky. Men who had never tested were not asked the question.

Answers to the question are useful in understanding the risks that men take. By describing the characteristics of sex men consider to be risky for HIV transmission we may identify factors which are actually important in transmission but which are absent from men's descriptions of perceived risk. This may highlight risk factors which are not being given sufficient attention by men in their risk reduction strategies.

4.1 CONTENT RESPONSES

Overall, 1,997 web-recruited men indicated that they had engaged in sex with a risk of HIV transmission since their last HIV test. All were asked what it was about the sex that was risky. Of these, 4.7% (n=93) gave no answer and were excluded from the following.

Some descriptions (1.5%, n=30) were definitional in that they only said the sex had been "unsafe". Others were vague or allusive. Some men read the question as *have you had anal intercourse without a condom?* Although the question was asking men about sex with a risk of HIV, some men described unprotected anal intercourse (UAI) where they argued there was no risk and went into detail about why this was the case. This suggests that many men feel that it is necessary to justify any UAI and that condom use remains a strong norm among many Gay men.

Unprotected sex with my boyfriend, but we both definitely clean from everything! So, I believe there isn't any risk taken place between both of us. And both of us are the only sex partner of our own.

This type of response makes interpreting the answers difficult. These men are acknowledging engaging in a "risky act" (usually UAI) but feel it was not risky in that context because of some mitigating factor (some marker for the absence of HIV in that sexual dyad). They were describing the features of sexual encounters that made them less risky, precisely the opposite of what the question required.

The behaviours identified ranged from sex that definitely could have resulted in HIV infection (eg. "had unprotected anal intercourse (both giving and receiving) with guys who were HIV+") to sex

that could not transmit HIV to the respondent (eg. an HIV negative respondent wrote “received oral from man of unknown status”).

Broadly speaking, responses consisted of one or more of the following two categories of information. The first set are related to risky acts (those which may transmit HIV), the second set are about risky partners (those that could have been sero-discordant to the respondent).

- **sexual act**
- modality of act
- condom or not
- body fluid
- **HIV status of partner**
- relationship to partner
- characteristics of partner
- location of sex

Some responses included only an indication that their partner was HIV sero-discordant (or might have been), some included only a description of sexual act that might have transmitted HIV, while others included both of these types of information.

4.2 RISKY BEHAVIOURS

More than half (52.4%) the answers to the question included mention of a specific sexual act (a few mentioned more than one sexual act). Several different sexual acts were included in the descriptions but by far the most common was anal intercourse (n=843, 44.3% of responses). Far fewer men mentioned oral intercourse (n=169, 8.9%) and a small proportion included both anal and oral intercourse (1.5%). Very small numbers of men referred to “penetrative” sex, vaginal intercourse, fisting, kissing, rimming and anal frottage. So anal intercourse and oral intercourse are overwhelmingly the sexual acts perceived as risky for HIV transmission.

Men whose last test was negative were more likely to cite oral intercourse (9.7%) compared to men who had tested positive (4.8% did) and this accords with previous findings that negative men are more likely to want further information about the risk of oral sex compared to diagnosed positive men (Reid *et al.* 2001, p.44). A few negative men who cited (receptive) oral intercourse qualified it by saying they had ulcers, or had bitten their cheek or had bleeding gums. A positive man qualified insertive oral intercourse saying his partner had cut his penis causing it to bleed. All of the rarely mentioned acts were cited by men whose last test was negative.

Of the men who cited anal intercourse, 3.3% (n=28) qualified it by saying it the act was brief (for example “very momentary”; “only for about 5 seconds”) or insubstantial (for example “partially penetrated”).

Men occasionally added other information that helped to account for the sexual acts they had described, although the question did not ask for this. For example: “he was gorgeous”; “without my consent”; “rape”; “I was drunk”. The response “one-off sex with a partner that only has bareback sex” may also be an explanation for the risky sex (I did it because it was the only kind of sex the partner has). One HIV positive man excused his engagement in transmission-related behaviours by placing agency for his behaviour with his sexual partners:

Sex with others who willingly engage in unsafe sex and have no knowledge of their own HIV status and have no intention of being tested, despite knowing my status. It happens sometimes.

Sexual acts were often qualified by three different types of information: the modality of the act (receptive or insertive); the absence or presence of condoms (and their failure); the presence or absence of body fluids (particularly semen).

4.2.1 Risky behaviours: modality

Of all the responses to this question, one-in-seven (14.5%) referred to the modality of the sexual act. Modality was usually mentioned in the context of specific sexual acts (ie. few men just said “receptive”). Modality was more commonly specified when the act mentioned was oral intercourse (38.8% mentioned modality) than when it was anal intercourse (24.6% mentioned modality).

The language of modality is problematic in open-ended questions. For example, “condom burst when fucking” could refer to the respondent having had either receptive or insertive intercourse. When insertive is meant, the word “fucking” is usually used. However when receptive is meant, sometimes “fucking” is used, sometimes “being fucked” is used. Treating all cases of “fucking” as undifferentiated, while treating “being fucked” as receptive and (for example) “active fucking” as insertive will result in an under-representation of insertive intercourse in these accounts.

Generally “he fucked me” is taken to mean the speaker was receptive in anal intercourse, however, this is not always the case either, as the following illustrates.

Someone fucked me while I had my cock through a glory hole. I wasn't wearing a condom and withdrew as soon as I realised what was happening. It's not the first time and I know many guys who've been put in the same situation.

Similarly, “unprotected oral intercourse” cannot be assumed to be receptive, as demonstrated by the respondent who wrote:

Unprotected oral sex (HIV+ partner sucking me off). Should be OK, but obviously very small risk.

Among the men whose last test was negative, insertive anal intercourse was frequently mentioned but insertive oral intercourse much less so. So, among the negative men who cited anal intercourse as their risky sex (n=655), 11.5% cited insertive anal intercourse, 10.7% cited receptive anal and 3.7% cited both insertive and receptive. In contrast, of those citing oral intercourse as their risky act (n=131), 3.8% cited insertive, 32.8% cited receptive and 1.5% cited both insertive and receptive oral intercourse. Alongside the finding that modality was more commonly specified when the act was oral intercourse than when it was anal intercourse this suggests that negative men considered anal intercourse risky irrespective of modality, whereas oral intercourse was usually considered risky only when it was done to another man.

4.2.2 Risky behaviours: condoms

The presence or absence of condoms was one of the most common features of the descriptions of risky sex. If we take the terms “protected” and “unprotected” to mean with and without condoms, 83.2% of all descriptions mentioned condoms, including 78.8% mentioning their absence, 1.1% mentioning their presence and 3.4% mentioning their failure.

A common response was to not mention a sexual act but simply to indicate that it was unprotected. Of the cases where men did not specify a sexual act (n=906), 71.3% simply stated “unprotected”. The single most common understanding of risky sex then was “unprotected (anal) sex”. Almost three quarters of all responses indicated either “unprotected anal intercourse” (39.3%) or simply “unprotected” (33.9%).

When the act cited was anal intercourse, that it was unprotected was specified in the majority (92.3%) of cases. Only 4.4% of the men who cited anal intercourse did not mention condoms. In contrast, when the act cited was oral intercourse, half (47.5%) specified that it was unprotected.

Overall, 3.4% of all responses included mention of condom failure. Other men were unsure of the efficacy of protection and a few cited an occurrence of protected sex where condom failure was not apparent.

Not sure. Just haven't been tested recently and protection may not have worked.

4.2.3 Risky behaviours: body fluids

A body fluid was mentioned in 6.1% (n=116) of the descriptions of sex with a risk of HIV transmission. The majority of these descriptions (3.4%) mentioned that ejaculation had occurred or that semen was present. Another 1.8% of cases mentioned that ejaculation had not occurred.

Mentioning that ejaculation occurred was far more common when the act cited was oral intercourse (22.3% specified ejaculation occurring) than when the act was anal intercourse (2.5% mentioned ejaculation). This suggests that while unprotected anal intercourse was always seen as risky, oral intercourse was more often seen as risky when ejaculation in the mouth occurred. Similarly, ejaculation was mentioned far more often when the respondent was receptive in the sexual act than when he was insertive. The presence of ejaculation increases the perception of the riskiness of receptive sex to a far greater extent than insertive sex.

4.3 RISKY PARTNERS: HIV SERO-DISCORDANCY

Overall, 8.6% of descriptions of HIV risk included explicit mention of a partners' HIV status. The nature of these responses depended crucially on the HIV status of respondent. Most responses concerning partners (n=107, 5.6% of all) mentioned a man who was known or believed to be HIV positive, or a partner whose HIV status they did not know. A few positive men (n=18, 0.9% of responses) mentioned a man who was known or believed to be HIV negative.

Citing the HIV status of partners was associated with the sexual act being described. Status was mentioned more frequently when the act was oral intercourse (11.5% of oral intercourse citations mentioned status) than when the act was anal intercourse (6.7% of these mentioned status). This suggests that what constitutes risky sex is an interaction between the sexual act and the HIV status of the partner - some acts were almost always risky (UAI) whereas others were only risky with particular partners. More specifically, among men whose last test was negative, those mentioning oral sex as their risky act (n=131) were much more likely to specify it having been with a positive partner (9.9% did so) than were those citing anal intercourse (only 2.1% did so).

The result of men's last HIV test (positive or negative) was associated with whether or not they mentioned the HIV status of their sexual partner in their description of risky sex only when the act specified was oral sex. When the act cited was anal intercourse, men who had tested negative mentioned the HIV status of their sexual partner as often as did men who had tested positive.

HIV prevention with Gay men has traditionally stressed sexual acts rather than sexual partners. Men have been discouraged from partner selection strategies and encouraged instead to "always use a condom" (that is, avoid unprotected anal intercourse). However, it is clear that what Gay men consider risky in sex depends on what they know of their partners HIV status as well as the sex they had. For some men any kind of sex with a man they knew was positive carried a risk, simply because that partner was positive.

I had a blow-job off a HIV+ person, I kissed a HIV+ person, I wanked off a HIV+ person.

In some cases men were concerned that the sex was "a risk" because something could have gone wrong that resulted in HIV exposure and transmission. For example "partner was positive - had protected receptive anal sex" could imply ".. and the condom could have failed".

For others it was the combination of knowledge of partners status and the sexual act combined that signaled risk. One man indicated the dual nature of risk by describing his risky sex as composed of:

Safe sex with someone known to be positive, unsafe sex with someone probably negative.

4.3.1 *Risky partners: regular relationships and casual sex*

Overall, 7.7% of descriptions of HIV risky sex included some information about the sexual partner other than their HIV status. Most commonly (n=55) men described sex with a regular partner. This was sometimes qualified by what was known (or assumed) about the risk behaviours of that regular partner.

My partner and I have unprotected sex. There is always a risk that he may not have been totally honest with me.

Unsafe sex with an unfaithful partner.

Here the additional information usually suggested reasons to believe the regular partner could have HIV, so the information was about the potential positive HIV status of the regular partner. Sometimes men were implying the HIV status of a sex partner simply through their relationship to them.

After regular partners, the most common named characteristic of partners was casual (n=14), non-regular (n=4) or anonymous (n=2). Sometimes the risk was an unsafe sexual act with such a partner. For example, "unprotected anal with a stranger" suggests this was risky because the stranger could have had HIV. The process of identifying a partner's sexual risk as the source of one's own sexual risk was not uncommon. Here men projected their own riskiness on to others. The following respondent had noted he had sex that was "not careful" but rather than see himself as a danger to others he externalised risk to his partners:

It was unprotected! Old boyfriend, I know he's not always careful so you never know ...

There was also a general tendency to not factor the current risk behaviour into any overall assessment of risk. For example:

I fucked a guy without a condom. I don't know his status but have no particular reason to think he was positive.

The fact that both the respondent and his sexual partner were taking a risk (the current one) should be enough to suggest one or the other might be positive, however the current act was not taken into account when the respondent was making a risk calculation. This was the case where some men judged the sex they had to be risky because of what they knew about the previous sexual behaviour of the man they had sex with - the sex was risky because the man I had sex with, has risky sex.

Respondents also identified a wide range of characteristics of (casual) sexual partners which signaled sexual risk. These were characteristics which men associated with a partner potentially having HIV, for example: "a guy who travels a lot"; "an American"; "a man from London"; "a man with an STI"; "a man who had multiple partners"; "who gets around a bit" or was a "drug user".

While imperfect surrogate markers for having HIV, most of these characteristics are more common in men with HIV than men without HIV. This diverse set of responses confirms that many (negative) men would not want to have sex with a prospective sexual partner who had HIV because they see any sex with such a man as a risk for themselves acquiring HIV.

4.3.2 *Risky partners: location of sex*

Finally, a few descriptions of risky sex included a description of where the sex took place. Some of these could be taken as a surrogate for an anonymous partner which itself is a surrogate for a sero-discordant partner. Correspondingly, the locations cited were those which feature in the demonology of HIV prevention research: darkrooms, cottages, saunas and cruising grounds.

4.4 SUMMARY AND CONCLUSIONS

Very few of the answers had no basis in potential HIV transmission - men were not making outlandish judgements as to what risky sexual behaviour was. However, the range of answers was very wide, so the range of meanings of "sex with a risk of HIV transmission" remained very wide.

Overall, 89% of descriptions of risky sex featured information about sexual acts or condoms, whereas only 15% mentioned the status of the partner or alluded to their potential sero-discordancy. This suggests that when men are thinking about sexual HIV risk, and when they are thinking about what is safe, they are usually considering risky acts rather than risky partners.

The things that constitute risky sex give an insight into where men go wrong when they have sex they consider secure but which results in HIV transmission. The problems seem to be more with misreading the presence of HIV infection (exposure) than underestimating the potential for transmission when it is present.

No respondent mentioned anti-HIV treatments, viral load or post-exposure prophylaxis (PEP) suggesting these do not feature in men's perceptions of sexual risk and safety.

5 Indicators of need

The HIV prevention needs defined and described in *Making it Count* (Hickson *et al.* 2003b) include autonomy, control, knowledge, awareness, skills and resources. Each year this survey asks a number of questions that attempt to measure the extent to which HIV prevention needs are met in the sample, and to look at how unmet need is distributed across the sample in terms of demographic characteristics.

5.1 THE INDICATORS OF NEED

The 2004 survey included six indicators of need, four of which were being re-run from GMSS in 1999 or in 2000 (both of which had been recruited with the booklet and at Pride events, but not via the internet). The six questions all took the form of statements with which respondents were asked to agree or disagree on a five point scale:

- *The sex I have is always as safe as I want it to be.*
- *I find it easy to say 'no' to sex I don't want.*
- *I sometimes feel lonely.*
- *I sometimes worry about how much I drink.*
- *I sometimes worry about my recreational drug use.*
- *I'm happy with what I know about HIV.*

Men who had no sex in the last year were routed past the needs questions in the questionnaire. Hence this chapter concerns homosexually active men only (N=15,084).

5.1.1 *Not as safe as I want to be*

Men were asked to agree or disagree with the statement *The sex I have is always as safe as I want it to be*. Any disagreement was taken as a general indicator of unmet HIV prevention need, where the respondent had identified an unsatisfactory level of sexual safety. The question does not indicate what precisely could be changed - for example the respondent could not be as safe as they want to be because they want to not have sex with strangers but find themselves often doing so, or they are often drunk when having sex, or they find condoms often fail when they use them.

This question had previously been used in GMSS 1999 where 5.8% (95% confidence intervals (CI) 5.3%–6.3%; N=9207) of all respondents disagreed. In the 2004 survey, 6.2% disagreed (95% CI 5.8%–6.6%; N=14932) including 0.8% who *disagreed strongly* and a further 6.2% indicated the middle of the scale. There was no significant difference in evidence of need by recruitment method. This suggests no significant change in this unmet need in the last five years.

5.1.2 *Sexual assertiveness*

Men were asked to agree or disagree with the statement *I find it easy to say no to sex I don't want*. Any disagreement was taken as an indicator of unmet HIV prevention need, where the respondent had identified an unsatisfactory level of sexual negotiation skills and assertiveness.

When the same question was asked in GMSS 2000, 9.6% disagreed (95% CI 9.0%–10.2%; N=9409). In the 2004 survey 8.4% disagreed (95% CI 8.0%–8.8%; N=14925) including 1.6% who *disagreed strongly* and a further 8.5% indicated the middle of the scale. There was no significant difference in evidence of need by recruitment method. This suggests a very small reduction in this unmet need over the last four years.

5.1.3 Loneliness

Men were asked to agree or disagree with the statement *I sometimes feel lonely*. Any agreement was taken as an indicator of unmet HIV prevention need, where the respondent had identified social isolation. This question was previously asked in 2000 when 58.7% agreed (95% CI 57.7%–59.7%; N=9389). In 2004, 65.7% (95% CI 64.9%–66.5%; N=14911) agreed including 25.9% *agreeing strongly*, and another 7.5% indicated the middle of the scale.

However, in GMSS 2000, men recruited at Pride events were less likely to express loneliness (54.8% did) than men recruited with the booklet (66.6% did, 95% CI 64.9%–68.3%; N=3115). In 2004, there was also significant difference in response by recruitment method. Booklet-recruited men (61.5% agreed, 95% CI 60.0%–63.0%; N=3825) were less likely to express loneliness than were web-recruited men (67.1% agreed). So if we consider only the men recruited using the booklet there was a small but significant drop in this unmet need from 2000 to 2004 (66.6% to 61.5%).

5.1.4 Concern about alcohol consumption

Men were asked to agree or disagree with the statement *I sometimes worry about how much I drink*. Any agreement was taken as an indicator of HIV prevention need. This question was asked in GMSS 1999, when 28.0% agreed (95% CI 27.1%–28.9%; N=8859). In the 2004 survey 30.6% agreed (95% CI 29.9%–31.3%; N=14875) including 8.3% *agreeing strongly* and a further 6.3% indicated the middle of the scale. This suggests an increase in concern about alcohol use over the past five years.

In 1999 there was no difference in evidence of need by recruitment method (Pride or booklet) on this indicator. However, in the 2004 survey booklet-recruited men were more likely to agree (32.8% did so, 95%CI 31.3%–34.3%; N=3805) compared to web-recruited men (29.8% agreed) suggesting this increase in concern about alcohol may be more substantial than the overall figures suggest.

5.1.5 Concern about drug use

In the 1999 survey men were asked to agree-disagree with *I'd like more control over my recreational drug use*, where 13.3% agreed. In 2004, in order to make the drug use question more comparable with the alcohol question we asked men to agree or disagree with the statement *I sometimes worry about my recreational drug use*. Any agreement was taken as an indicator of HIV prevention need. Overall 11.4% agreed with this statement (including 3.2% who *strongly agreed*) and a further 5.1% who indicated the middle of the scale. This is at a similar level to the alternative question asked in 1999. Considerably fewer men express concern over their drug use than over their alcohol use.

There was a significant difference in response by recruitment method. As with concern about alcohol use, booklet-recruited men were more likely to agree that they sometimes worried about their drug use (13.3% did so) compared to web-recruited men (10.8% agreed).

Concern about alcohol use and concern about drug use were strongly associated with each other. Of the men who were concerned about their alcohol use 21.2% were also concerned with drug use compared with 6.7% of men not concerned about alcohol use. Overall, a third (34.9%) of the entire sample worried about either their alcohol use, drug use or both.

5.1.6 Satisfaction with HIV knowledge

The sixth indicator of need was the statement *I'm happy with what I know about HIV*. This is not an indicator of how much men know about HIV but of how satisfied they are with what they know. It has not been asked before in GMSS. Overall, 7.1% disagreed with this statement (including 1.7% *disagreeing strongly*) and a further 12.4% indicated the middle of the scale.

There was small but significant difference in response by recruitment method with web-recruited men more likely to disagree (7.3% expressed unmet need) than booklet-recruited men (6.5% disagreed).

5.2 VARIATION ACROSS DEMOGRAPHIC GROUPS IN HIV PREVENTION NEEDS

The following tables show how these six needs varied by the demographic characteristics described in chapters 2 and 3. All homosexually active men are included in each cross-tabulation. Significant differences are shown by use of **bold** and underlines - the lowest figure is underlined, the highest is in bold. The absence of bold and underline on a row means any difference is not statistically significant.

5.2.0 HIV testing history and needs

The following table shows how needs varied by area of residence in the UK.

All homosexually active men	% by HIV testing history		
	never tested (n=5990)	tested negative (n=7596)	tested positive (n=972)
DISAGREE: <i>The sex I have is always as safe as I want it to be</i>	4.7	6.6	11.8
DISAGREE: <i>I find it easy to say 'no' to sex I don't want</i>	8.1	8.3	11.4
AGREE: <i>I sometimes feel lonely</i>	68.3	63.7	65.6
AGREE: <i>I sometimes worry about how much I drink</i>	28.8	32.4	27.5
AGREE: <i>I sometimes worry about my recreational drug use</i>	8.7	12.3	20.9
DISAGREE: <i>I'm happy with what I know about HIV</i>	9.2	5.7	5.3

Men with diagnosed HIV had the greatest need in relation to sexual control (needs 1 and 2) and were most likely to report concern about their recreational drug use. Men who had never had an HIV test were most likely to report loneliness and were most dissatisfied with what they knew about HIV.

5.2.1 Area of residence and needs

The following table shows how needs varied by area of residence in the UK.

All homosexually active men	% by area of residence group						
	London (n=3706)	South England (n=2603)	Midlands & Eastern England (n=2705)	North England (n=2938)	Wales (n=555)	Scotland (n=972)	Northern Ireland (n=242)
DISAGREE: <i>The sex I have is always as safe as I want it to be</i>	7.8	6.0	5.4	<u>5.1</u>	6.9	5.3	8.4
DISAGREE: <i>I find it easy to say 'no' to sex I don't want</i>	8.3	8.7	8.6	7.6	9.8	8.0	9.6
AGREE: <i>I sometimes feel lonely</i>	63.9	66.5	65.9	65.8	66.6	69.9	70.0
AGREE: <i>I sometimes worry about how much I drink</i>	31.3	<u>28.3</u>	<u>28.3</u>	33.0	31.7	30.0	37.3
AGREE: <i>I sometimes worry about my recreational drug use</i>	15.3	9.1	10.0	10.6	10.3	<u>8.6</u>	13.2
DISAGREE: <i>I'm happy with what I know about HIV</i>	<u>5.5</u>	6.1	7.5	7.8	9.9	8.1	13.2

Four of the needs varied by where men lived. Men living in Northern Ireland were more likely to be in need on three of these measures: they were most likely to say they that the sex they had was not always as safe as they would like, they were most likely to be concerned about their alcohol use and were also most unhappy with what they knew about HIV. Men living in London had the greatest unmet need in relation to recreational drug use and high need in relation to not always having sex that was as safe as they would wish.

5.2.2 Age and needs

The following table shows how needs varied by age.

All homosexually active men	% by age group						
	under 20 (n=1135)	20 - 24 (n=2467)	25 - 29 (n=2130)	30 - 34 (n=2209)	35 - 39 (n=2063)	40s (n=2586)	50+ (n=1525)
DISAGREE: <i>The sex I have is always as safe as I want it to be</i>	6.6	6.6	6.2	7.3	6.2	6.6	<u>3.9</u>
DISAGREE: <i>I find it easy to say 'no' to sex I don't want</i>	12.4	12.1	8.7	7.3	<u>6.5</u>	<u>6.6</u>	<u>6.6</u>
AGREE: <i>I sometimes feel lonely</i>	73.0	70.3	67.2	65.2	<u>62.3</u>	<u>62.8</u>	<u>63.0</u>
AGREE: <i>I sometimes worry about how much I drink</i>	26.8	30.5	31.8	33.0	32.3	30.3	<u>25.8</u>
AGREE: <i>I sometimes worry about my recreational drug use</i>	13.8	13.5	13.5	13.4	11.0	8.5	<u>4.0</u>
DISAGREE: <i>I'm happy with what I know about HIV</i>	16.9	11.6	6.5	5.1	4.6	4.8	<u>3.6</u>

Generally men over 50 had the least unmet need and young men had the most. However, age had a complex relationship to needs. In relation to sexual control, men under 25 have the most difficulty saying no to sex they did not want and this need decreased with age. However, not having sex that was as safe as desired rose to peak in the 30-34 age group and then decreased with increasing age. Men under 20 were most likely to report loneliness, which also decreased with age. While concern about drug use decreases with increasing age, concern about alcohol use rose to a peak in the 30s and decreased thereafter. Satisfaction with HIV knowledge increased as men got older.

5.2.3 Sexuality & gender of partners and needs

The following table shows how needs varied by sexual identity and the gender of men's sexual partners in the last year.

All homosexually active men	% by gender of male partners in the last year and sexuality			
	sex with men only		sex with men & women	
	AND Gay (n=11852)	NOT Gay (n=1280)	AND Bisexual (n=997)	NOT Bisexual (n=471)
DISAGREE: <i>The sex I have is always as safe as I want it to be</i>	6.4	5.3	4.4	6.4
DISAGREE: <i>I find it easy to say 'no' to sex I don't want</i>	8.4	7.7	8.5	11.6
AGREE: <i>I sometimes feel lonely</i>	66.0	69.8	<u>58.5</u>	62.9
AGREE: <i>I sometimes worry about how much I drink</i>	31.2	<u>26.2</u>	27.6	33.3
AGREE: <i>I sometimes worry about my recreational drug use</i>	11.8	8.8	8.8	15.1
DISAGREE: <i>I'm happy with what I know about HIV</i>	<u>6.9</u>	7.4	8.3	7.9

Three of the indicators of need varied by the sexual identity and the gender of men's sexual partners in the last year. Exclusively homosexually active men who were not Gay identified were most likely to report sometimes feeling lonely. Behaviourally bisexual men who did not identify as Bisexual were most likely to be concerned about their alcohol use. Behaviourally bisexual men with a Bisexual identity were most likely to disagree that they were happy with what they knew about HIV.

5.2.4 Ethnicity and needs

The following table shows how needs varied by ethnicity.

All homosexually active men	% by ethnic group					
	Asian / Asian British (n=277)	Black / Black British (n=202)	Mixed (n=263)	White British (n=11982)	White other (n=1647)	All others (n=232)
DISAGREE: <i>The sex I have is always as safe as I want it to be</i>	3.2	7.8	4.8	6.1	7.7	4.6
DISAGREE: <i>I find it easy to say 'no' to sex I don't want</i>	8.2	11.7	8.8	8.4	7.8	7.1
AGREE: <i>I sometimes feel lonely</i>	72.0	67.2	67.2	65.6	64.6	67.2
AGREE: <i>I sometimes worry about how much I drink</i>	<u>23.8</u>	25.2	27.1	31.2	29.4	<u>23.3</u>
AGREE: <i>I sometimes worry about my recreational drug use</i>	14.4	17.3	16.3	10.7	14.7	<u>10.3</u>
DISAGREE: <i>I'm happy with what I know about HIV</i>	9.7	8.7	7.7	7.0	6.8	8.4

Only two of the indicators of need varied by ethnicity. Black men were most likely to be concerned about their recreational drug use. White British men were most likely to report concern over their alcohol use.

5.2.5 Years of education and needs

The following table shows how needs varied by years of full-time education since the age of 16.

All homosexually active men	% by years in full-time education			
	None (n=2296)	1 - 2 years (n=3380)	3 - 5 years (n=4992)	6 + years (n=3855)
DISAGREE: <i>The sex I have is always as safe as I want it to be</i>	5.9	6.4	6.2	6.3
DISAGREE: <i>I find it easy to say 'no' to sex I don't want</i>	9.1	8.7	8.6	7.5
AGREE: <i>I sometimes feel lonely</i>	67.0	67.3	64.5	64.9
AGREE: <i>I sometimes worry about how much I drink</i>	31.2	29.2	31.8	30.0
AGREE: <i>I sometimes worry about my recreational drug use</i>	12.6	12.4	10.9	<u>10.3</u>
DISAGREE: <i>I'm happy with what I know about HIV</i>	8.2	9.0	6.5	<u>5.5</u>

Only two of the needs indicators varied by the number of years in full-time education. Men with less education were more likely to be concerned about their drug use and to be dissatisfied with what they knew about HIV. Men with six or more years of education were least likely to have these concerns.

5.2.6 Relationship status and needs

The following table shows how needs varied by current relationship status with men.

All homosexually active men	% by CURRENT relationship status		
	Single (n=6604)	1 regular male partner (n=5913)	2 + regular male partners (n=2632)
DISAGREE: The sex I have is always as safe as I want it to be	7.0	4.2	8.7
DISAGREE: I find it easy to say 'no' to sex I don't want	8.7	6.5	12.0
AGREE: I sometimes feel lonely	78.9	52.6	65.1
AGREE: I sometimes worry about how much I drink	30.9	29.7	31.9
AGREE: I sometimes worry about my recreational drug use	11.5	10.0	14.2
DISAGREE: I'm happy with what I know about HIV	7.4	6.5	7.6

Four of the indicators of need varied by current relationship status. Men with 1 regular partner reported the least need on all four measures. Men with two or more regular partners had the greatest need in relation to sexual control, sexual assertiveness and concern about their recreational drug use. Single men were most likely to report sometimes feeling lonely.

5.2.7 Volume of male sexual partners and needs

The following table shows how needs varied by the volume of male partners men had in the preceding year.

All homosexually active men	% by volume of male sexual partners in last year				
	one (n=2673)	2, 3 or 4 (n=4440)	5 to 12 (n=3766)	13 to 29 (n=1941)	30+ (n=1763)
DISAGREE: The sex I have is always as safe as I want it to be	2.6	4.5	7.1	7.5	13.0
DISAGREE: I find it easy to say 'no' to sex I don't want	4.9	6.8	8.9	10.1	14.8
AGREE: I sometimes feel lonely	54.8	69.9	68.8	67.5	63.2
AGREE: I sometimes worry about how much I drink	28.3	30.5	31.7	32.4	29.8
AGREE: I sometimes worry about my recreational drug use	7.6	10.2	11.9	13.3	17.0
DISAGREE: I'm happy with what I know about HIV	6.3	7.8	7.0	7.1	7.0

Four of the needs indicators varied by the number of male sexual partners men had in the last year. Men with a single partner were least likely to express need in relation to all four of these indicators. Men with one male sexual were least likely to report sometimes feeling lonely (many of these probably had a regular co-habiting partner). Need for sexual control and assertiveness rose with the number of male partners men reported. The greater the number of partners men reported the greater their likelihood of reporting need in relation to control of drug use.

5.2.8 Disability and needs

The following table shows how needs varied by whether men had a current long-term illness, health problem or disability.

All homosexually active men	% by disability	
	NOT Disabled (n=13037)	Disabled (n=1423)
DISAGREE: The sex I have is always as safe as I want it to be	6.0	8.3
DISAGREE: I find it easy to say 'no' to sex I don't want	8.2	10.7
AGREE: I sometimes feel lonely	64.7	75.1
AGREE: I sometimes worry about how much I drink	30.5	31.3
AGREE: I sometimes worry about my recreational drug use	11.1	14.3
DISAGREE: I'm happy with what I know about HIV	7.0	7.9

Compared with others, men with an illness, health problem or disability had greater need in relation to sexual control and were considerably more likely to report sometimes feeling lonely. They were also more likely to be concerned about their recreational drug use.

5.2.9 Current religious belief and needs

The following table shows how needs varied by men's current religious belief.

All homosexually active men	% by current religious belief				
	NO religion (n=8857)	Protestant (n=2292)	Catholic (n=951)	Other Christian (n=1267)	non-Christian religion (n=1020)
DISAGREE: The sex I have is always as safe as I want it to be	6.5	5.3	7.9	5.2	5.9
DISAGREE: I find it easy to say 'no' to sex I don't want	8.5	7.0	7.7	9.2	10.1
AGREE: I sometimes feel lonely	<u>64.8</u>	67.5	65.8	<u>64.9</u>	70.4
AGREE: I sometimes worry about how much I drink	31.9	27.7	30.1	31.6	<u>25.3</u>
AGREE: I sometimes worry about my recreational drug use	12.2	<u>7.3</u>	11.3	11.8	13.5
DISAGREE: I'm happy with what I know about HIV	7.3	<u>5.3</u>	9.2	7.0	8.2

The relationship between need and current religious belief was not consistent. Catholic men were most likely to report being dissatisfied with what they knew about HIV. Men who had no religion or an other Christian religion were most likely to worry about how much they drank. Men from non-Christian religions were most likely to report feeling lonely and worrying about their recreational drug use. However, they were least likely though to have concerns about their drinking.

5.2.10 Sex work and needs

The following table shows how needs varied by men's relationship to paid sex in the last year.

All homosexually active men	% by sex work in the last year			
	Neither paid or been paid (n=12881)	PAID for sex only (n=710)	BEEN paid for sex only (n=659)	BOTH paid & been paid for sex (n=125)
DISAGREE: The sex I have is always as safe as I want it to be	6.0	7.3	8.7	15
DISAGREE: I find it easy to say 'no' to sex I don't want	7.8	8.8	17.5	27
AGREE: I sometimes feel lonely	65.5	70.3	67.1	64
AGREE: I sometimes worry about how much I drink	30.4	29.4	32.9	36
AGREE: I sometimes worry about my recreational drug use	10.8	11.5	20.3	26
DISAGREE: I'm happy with what I know about HIV	7.0	5.3	10.7	16

As we would expect, need varied by men's relationship to sex work. Those who had both paid for sex and been paid for sex had the greatest need in terms of sexual control, sexual assertiveness and were most likely to report concerns about their drug use and least likely to report satisfaction with their HIV knowledge. Men only selling sex generally had greater need than those only buying sex, or those not involved with the sale or purchase of sex. There was no difference between groups in terms of loneliness.

5.3 SUMMARY AND CONCLUSIONS

As in previous years, different indicators of need show different levels of unmet need. Overall in 2004:

- 6.2% sometimes have sex that is not as safe as they want it to be.
- 7.1% are not happy with what they know about HIV.
- 8.5% do not find it easy to say no to sex they do not want.
- 11.4% sometimes worry about their drug use.
- 30.6% sometimes worry about their alcohol use.
- 65.7% sometimes feel lonely.

Interventions which will be encountered by a large and diverse proportion of the population should attempt to address needs poorly met for a large proportion of the population. Interventions which are more targeted at specific sub-groups can attempt to address needs more commonly unmet within those sub-groups. Interventions addressing a particular need should attempt to over-serve those groups who more commonly have that need unmet. The previous tables are intended to assist in the identification of these differences.

6 Intervention use and preferences

This final chapter considers the use of HIV and STI testing interventions, including recency of testing and location of men’s last HIV and STI tests. It then examines men’s desires to learn more about HIV and sexual health, including their willingness to use specific common interventions, and their ideals with respect to the characteristics of someone giving them information about HIV and sexual health. Finally we examine variation in the use of, and preferences for, interventions across the demographic characteristics described in chapters 2 and 3.

6.1 USE OF HIV TESTING INTERVENTIONS

All men were asked their HIV testing histories (see chapter 3). Overall, those recruited via the internet were significantly more likely to have never had an HIV test compared to those recruited via the booklet (46.3% compared to 34.4%).

When was your most recent HIV test result? (All respondents, N=15885, missing=117)	% Web responses (n=11861)	% Booklet responses (n=4024)	% ALL responses (n=15885)
In the last year	29.7	36.0	31.3
In the last five years	17.7	20.5	18.4
More than five years ago	6.3	9.1	7.0
I've NEVER had a check-up	46.3	34.4	43.3

Concentrating solely on those men that had ever tested for HIV, we find that the relationship between method of recruitment and recency of HIV testing is not what might be expected. Despite being less likely to have ever tested, web-recruited men who had tested for HIV had done so significantly more recently than booklet-recruited men. This is an age effect. Younger men were more likely to have tested in the last year and were more likely to have been recruited on the web than older men. Controlling for age, there was no association between recency of testing and recruitment method.

All men who have ever had an HIV test were also asked *Where did you go for your last HIV test?* They were offered four answers and an *other* category. Men ticking *other* were asked to say where the HIV test had occurred.

Where did you go for your last HIV test? (Men who had ever tested, N=9005, missing = 72)	% Web responses (n=6373)	% Booklet responses (n=2632)	% ALL responses (n=9005)
GUM, STD or sexual health clinic	75.5	79.1	76.6
GP surgery/ local doctor	12.7	10.7	12.1
Private health care clinic	8.4	5.4	7.5
I used a home testing kit	0.5	0.3	0.4
Other	2.9	4.5	3.4

The majority of men who had ever had an HIV test had their last one at a GUM, STD or sexual health clinic (76.6%, n=6894). Among all men that had ever had an HIV test, 12.1% (n=1092) had their last test at their General Practitioners and 7.5% (n=679) had used a private health care clinic. Use of HIV home testing

kits remains rare. The most common *other* answers were hospital-settings (but not GUM or HIV clinics) at 0.8%; via life insurance companies at 0.3%; abroad at 0.2%; and via work; in community settings via AIDS service organisations; via blood donation; and via research projects (all at about 0.1%).

As the table above demonstrates responses varied significantly by means of recruitment. Excluding the *other* and home testing kit categories (as they are so small) we still observe that, compared to those recruited online, men who completed the booklet were significantly more likely to have used an HIV, GUM, STD or sexual health clinic (83.1% compared to 77.7%) and less likely to have used their GP (11.2% compared to 13.5%) or a private health care clinic (5.7% compared to 8.8%). Controlling for age this effect persisted, with men recruited on the internet still being less likely to have tested at a GUM clinic.

6.2 USE OF STI TESTING INTERVENTIONS

All men were asked *When was the last time that you had a check-up for sexually transmitted infections (other than HIV)?* and offered the four answers outlined below. While over a third of all men (36.9%, n=5850) had never had a check-up for sexually transmitted infections (STIs) other than HIV, a somewhat higher proportion (38.5%, n=6100) had a check-up in the last year. As the table below demonstrates responses varied significantly by means of recruitment.

When was the last time that you had a check-up for sexually transmitted infections (other than HIV)? (All men, N=15857, missing=145)	% Web responses (n=11879)	% Booklet responses (n=3978)	% ALL responses (n=15857)
In the last year	36.3	45.0	38.5
In the last five years	17.4	20.3	18.1
More than five years ago	5.9	8.2	6.5
I've NEVER had a check-up	40.4	26.5	36.9

The relationship between method of recruitment and STI screening history was not straightforward. Considering all men, those recruited via the internet were significantly more likely to have never had a check-up for STIs compared to those recruited via the booklet. However, when we consider only those that had ever had an STI screen then there was no difference by recruitment method. That is, similar proportions had tested in the last year (61.0%), the last 5 years (28.7%) and more than 5 years ago (10.3%). This data also suggests that, among those that have ever tested for STIs, testing was relatively recent in the vast majority of cases.

When was the last time that you had a check-up for sexually transmitted infections (other than HIV)? (only men who have, N=10007)	% Web responses (n=7085)	% Booklet responses (n=2922)	% ALL responses (n=10007)
In the last year	60.8	61.3	61
In the last five years	29.2	27.6	28.7
More than five years ago	10	11.1	10.3

All men who have ever had an STI check-up were also asked *Where was your last check-up for sexually transmitted infections?* They were offered four answers and an *other* category. Men ticking *other* were asked to say where the testing had occurred. The majority of all men who had ever had an STI check-up had their last one at a GUM, STD or sexual health clinic (80.6%, n=8027). While 2.4% overall stated that their last STI screen was at an HIV clinic, this was made up of a fifth of all men with diagnosed HIV (19.4%, n=196) and 0.5% (n=43) of men never tested or tested negative for HIV. Among men who had ever had an STI check-up, three quarters (77.2%, n=781) of all those with diagnosed HIV had their last check-up at a GUM, STD or sexual health clinic.

Among all men that had ever had a STI check-up, one-in-nine (10.9%, n=1089) last did so at their General Practitioners and one-in-twenty (4.7%, n=465) had it at a private health care clinic.

Where was your last check-up for sexually transmitted infections? (men who have had a check-up, N=9953, missing=54)	% Web responses (n=7056)	% Booklet responses (n=2897)	% ALL responses (n=9953)
GUM, STD or sexual health clinic	79.9	82.5	80.6
GP surgery/ local doctor	11.2	10.4	10.9
Private health care clinic	5.1	3.7	4.7
HIV clinic	2.7	1.8	2.4
Other	1.1	1.8	1.3

The most common *other* answers were hospital-settings (but not GUM or HIV clinics) at 0.6%; abroad at 0.2%; and in community settings via AIDS service organisations at 0.2%.

As the table above demonstrates responses varied significantly by means of recruitment. Excluding the *other* category and merging HIV clinic with GUM, STD or sexual health clinic we still observe that, compared to those recruited online, men who completed the booklet were significantly more likely to use an HIV, GUM, STD or sexual health clinic (85.7% compared to 83.5%) and less likely to use a their GP (10.5% compared to 11.3%) or a private health care clinic (3.7% compared to 5.1%). As with HIV testing, this association was independent of age, with men recruited on the web being less likely to have used a GUM clinic for their last check-up.

6.3 LEARNING MORE ABOUT SEXUAL HEALTH AND HIV

All men were asked *Would you like to know more about sexual health and HIV?* Just under half (47.2%, n=7478) answered *yes*, and just over half answered *no* (52.8%, n= 8376). In this section we examine the learning preferences of only that half (47.2%) of the sample with an interest in knowing more about sexual health and HIV.

6.3.1 How would you like to learn more

All those men that wanted to learn more about sexual health and HIV were asked *How would you personally like to learn more?* and given 13 options and an *other* category. Men could tick as many options as applied. As the table below demonstrates responses varied by means of recruitment. In this and subsequent tables significant differences are shown by use of **bold** and underlines - the lowest figure is underlined, the highest is in bold. The absence of bold and underline on a row means any difference was not statistically significant.

Compared to booklet-recruited men, those recruited online were significantly more likely to want to learn more *from websites* and by *talking to a worker in an internet chat room*. For every other learning opportunity outlined below (except two) men recruited on the Gay commercial scene via the booklet were more likely to say *yes* to that method than web-recruited men. The only options that did not vary by recruitment method were *reading booklets, leaflets and postcards* and *talking to a worker at a GP surgery / local doctor*.

How would you personally like to learn more? (Men that would like to know more about sexual health and HIV, n=7406, missing=72)	% Web responses (n=5550)	% Booklet responses (n=1856)	% ALL responses (n=7406)
From websites	74.4	48.2	67.8
Reading booklets, leaflets and postcards	54.0	57.0	54.7
Reading articles in the Gay & HIV press	49.5	54.3	50.7
Reading adverts in the Gay & HIV press	36.9	45.5	39.1
Reading newsletters	35.7	39.7	36.7
Reading posters in Gay venues	27.0	33.7	28.7
Talking to a worker at a GUM / STD or HIV clinic	31.0	34.8	31.9
'Talking' to a worker in an internet chat room	24.1	15.7	22.0
Talking to a worker at a health promotion service or AIDS charity	18.5	31.3	21.7
Talking to a worker at a GP surgery / local doctor	16	15.7	15.9
Talking to a worker on the Gay scene or at a sauna / cruising ground	16.6	23.8	18.4
Talking to a worker on a telephone helpline	16.3	24.8	18.4
Taking part in a group or workshop	17.8	26.9	20.1
Other answers	3.6	6.1	4.2

Among men that wanted to learn more about sexual health and HIV, *reading* interventions were more commonly cited as a personal preference than *talking* interventions. The three most common preferred interventions were *from websites* (67.8% of men that wanted to learn more); *reading booklets, leaflets and postcards* (54.7%) and *reading articles in the Gay and HIV press* (50.7%). No other intervention was a preferred option for more than half of men that wanted to learn more.

Four more interventions were cited as a preferred option by more than a quarter of men that wanted to learn more. These were *reading adverts in the Gay and HIV press* (39.1% of men that wanted to learn more); *reading newsletters* (36.7%); *talking to a worker at a GUM or HIV clinic* (31.9%) and *reading posters in Gay venues* (28.7%). All the other interventions involved *talking* (or interacting) and were preferred options for 16-22% of men who wanted to learn more. Included here was *'talking' to a worker in an internet chat room* (at 22.0%), which involves reading and writing but is interactive and personalised and was asked in the context of other talking interventions. All the talking interventions are assumed to occur one-to-one, except *taking part in a group or workshop*, which was a preferred option of a fifth of men who wanted to learn more (20.1%).

The two most common *other* answers were via newspapers or the "mainstream" or "straight" press and from television (including documentaries, news and advertisements). While neither of these was cited by more than 1% of men who wanted to learn more these were by far the commonest *other* answers. *Other* answers (in broad order of appearance) were via email; at schools / colleges / university; via friends; reading medical and research reports; via general reading; on the radio; through voluntary and community (Gay) groups; in the workplace; talking to Gay men's / community workers; from people living with HIV; though the post; public libraries; via SMS / texts; on the telephone; from my parents; everywhere, anywhere and anyhow.

6.3.2 Ideal characteristics of an educator

All men that wanted to learn more about sexual health and HIV were also asked: *For you, what is the most important characteristic or quality of someone giving you information or advice about HIV?* They were given a blank line on which to write their answer. Of the 7845 men that said yes to learning more 30.3% (n=2266) left the space blank. The following includes only those men that wanted to learn more about sexual health and HIV and answered *what is the most important characteristic or quality of someone giving you information or advice about HIV?* (n=5212)

Answers were coded into 42 discrete categories, with each man allowed up to 4 answers (3024 required only one code for their answer, 1732 required two, 380 required three and 76 required four). Under 3% (n=147) of answers could not be coded in this initial analysis. Another 1% (n=55) answered with *not sure* or *don't know* and were excluded from the following. These pre-codes were then re-coded, sorted and categorised by two researchers working independently, prior to agreement on the four core categories reported below.

Important characteristics or qualities of someone giving you information or advice about HIV (Men who wanted more information about HIV, n=5212, missing = 2266)	% Web responses (n=3861)	% Booklet responses (n=1351)	% ALL responses (n=5212)
Values, ethics, principles (styles, attitudes)	43.4	39.8	42.5
Other characteristics of the intervener (standing)	18.1	13.5	16.9
Skills (and competencies) of the intervener	35.9	36.9	36.2
Knowledge of the intervener	25.0	28.3	25.9

Overall, the most common answer referred to the **values, ethics or principles** of the intervention or the intervener. While 2213 men (42.5%) gave an answer in this category, three main responses account for nearly all of them. These three most common answers included characteristics or qualities of an intervener (someone), an intervention, or in some cases, the setting in which an intervention occurred. Over 13% of all men answering this question (n=681) stressed that the most important characteristic or quality of someone giving them information or advice was that they were “non-judgmental” (or far less commonly “not patronising” or “not homophobic”). Also included in this category were a further 5% (n=279) of all answers that stressed that the most important characteristic of the intervention (or intervener) was “confidentiality”, “privacy” or “anonymity”. Hence, almost a fifth of all men answering the question revealed some substantial concern about the characteristics or qualities of potential interveners (or interventions). A further 13% of all men answering this question (n=680) stressed that the most important characteristic or quality of someone giving them information or advice was that they were “honest” or “frank” (or far less commonly “truthful” or “open”). This element of the main category called **values, ethics or principles** was more positive and revealed the substantial value men place on receiving straightforward information and advice (in a manner that does not “judge” them or their sexual activities).

The least commonly used of the four main categories concerned the **characteristics of the intervener** (and the esteem they were held in). While this category could have been merged with the above it was useful to view it independently as it gave further insight into what men would value, beyond an honest, confidential and non-stigmatising service. A sixth (16.9%, n=880) of all men gave an answer that fundamentally concerned the esteem they held a potential intervener in. Again three main elements make it up the category. The first concerns the **professional identity** of the intervener and was mainly made up of the answers “qualified” (n=111) or “professional” (n=72), with far less men actually specifying a qualification or profession (though some mentioned “doctors” etc). The second element of this category concerns specific **personal characteristics** that an intervener should ideally have - most commonly they should be Gay / Bisexual (n=107) or “be

familiar with the Gay scene” and / or have experience (or first hand knowledge) of it (n=122). Other answers included “HIV positive”, “male”, and references to age groups (“older”, “younger”, “same age as me”) but none of these account for more than 1% of all answers. The final element of this category denotes **other markers of esteem** and fundamentally concerns the “trustworthiness”, “authority” and “credibility” (n=318) of potential interveners. These characteristics appear here as we felt the prior answers (“professional”, “Gay”) also denote credibility, trustworthiness and authority.

Overall, the second most common category of answers referred to the **skills (and competencies)** of a prospective intervener. Over a third of all men (n=1886, 36.2%) gave an answer in this category. The three most common answers were characteristics or qualities of an intervener (someone) rather than an intervention. These were sensitive, caring, empathetic, understanding, sincere (n=467); approachable, easy to relate to (n=415); and easy to understand; clear; good communication skills (n=350). Other answers included here were “calm”; “patient”; “engaging”; “good listener”; “confident”; and “competent”.

The third common category of answer referred to the **knowledge** of a prospective intervener. Over a quarter of all men (n=1350, 25.9%) gave an answer in this category. Again, answers were usually characteristics or qualities of an intervener (someone) rather than an intervention. One simple answer accounted for almost half of those in this category - the important characteristic or quality of someone giving them information or advice about HIV was that they were “knowledgeable” or “well informed” (n=575). Other major answers in this category were “detailed” (n=214); “accurate” (n=133) and “up-to-date” (n=67).

6.4 VARIATION ACROSS DEMOGRAPHIC GROUPS IN USE OF, AND PREFERENCE FOR INTERVENTIONS

The following tables show how the use of, and preferences for, interventions varied by the demographic characteristics described in chapters 2 and 3.

All men are included in the STI and HIV testing cross-tabulations and in the question on wanting to know more about sexual health and HIV. However, only men that say *yes* to *Would you like to know more about sexual health and HIV?* (47.2%, n=7478) are included in the intervention preferences questions in the lower half of these tables. Again, in these tables significant differences are denoted by use of **bold** and underlines - the lowest figure is underlined, the highest is in bold. The absence of bold and underline on a row means any difference was not statistically significant.

6.4.0 HIV testing history and use of interventions

The following table shows how use of interventions varied by HIV testing history.

All men	% by HIV testing history		
	never tested (n=6880)	tested negative (n=7981)	tested positive (n=1038)
NOT STI tested last year	89.7	43.4	15.1
STI tested in last year & last STI tests @ GUM	6.4	47.5	65.1
STI tested in last year & last STI tests @ GP	3.0	5.2	1.4
Want to learn more about sexual health / HIV	48.4	47.1	40.6
<i>Of those who wanted to learn more ...</i>	(n=3269)	(n=3697)	(n=416)
from websites	68.9	67.1	67.3
Reading booklets etc	52.4	56.5	58.2
Reading articles	45.9	53.8	61.3
Reading adverts	36.1	41.0	44.5
Reading newsletters	35.0	37.0	48.1
Reading posters	26.3	30.9	27.9
Talking at GUM or HIV clinic	21.6	38.7	53.1
Talking in internet chat room	22.1	21.1	29.6
Talking at AIDS charity	17.3	23.5	40.6
Talking at GP surgery	15.9	15.4	20.4
Talking at PSV / PSE	15.8	20.3	23.1
Talking on telephone help-line	16.1	19.5	26.9
Taking part in group / workshop	14.9	23.1	34.4

Men's STI testing behaviour appears to mirror their HIV testing patterns. Men who have never tested for HIV were substantially more likely to have not tested for STIs in the last year, compared to men that had ever HIV tested. Men with diagnosed HIV were most likely to have been tested for STIs in the last year (84.9% had compared to 56.6% of tested negative men and only 10.3% of men that had never tested for HIV). Diagnosed HIV positive men were most likely to have screened for STIs at GUM (and HIV) out-patients clinics and last likely to have screened in a GP setting.

Men who had never tested for HIV were most likely to say they wanted to learn more about HIV and sexual health, and men with diagnosed HIV were least likely to do so. However, when we examine the preferences of those men that want to learn more, the opposite pattern emerges. Diagnosed positive men were most likely to state a preference for ten of the thirteen interventions offered and in almost all cases men who had never tested for HIV were least likely to do so. This suggests untested men recognise their need to learn more about HIV and sexual health but are unclear of the best way to do so.

6.4.1 Area of residence and use of interventions

The following table shows how use of interventions varied by area of residence in the UK.

All men	% by area of residence group						
	London (n=3983)	South England (n=2835)	Midlands & Eastern England (n=2981)	North England (n=3233)	Wales (n=621)	Scotland (n=1064)	Northern Ireland (n=275)
NOT HIV tested last year	60.6	69.2	71.6	71.5	73.1	72.2	76.4
NOT STI tested last year	49.0	64.8	66.3	64.8	66.2	64.4	73.4
HIV tested in last year & last HIV test @ GUM	31.5	23.8	22.6	23.0	21.1	21.2	<u>18.1</u>
STI tested in last year & last STI tests @ GUM	41.3	28.1	27.1	28.5	28.2	28.1	<u>20.8</u>
HIV tested in last year & last HIV test @ GP	3.3	3.6	3.1	3.4	3.2	4.0	3.7
STI tested in last year & last STI tests @ GP	3.4	3.9	4.0	4.4	3.4	4.5	4.0
Want to learn more about sexual health / HIV	48.2	46.0	47.9	46.5	48.5	47.3	53.8
<i>Of those who wanted to learn more ...</i>	(n=1895)	(n=1278)	(n=1406)	(n=1466)	(n=295)	(n=498)	(n=147)
from websites	67.9	67.6	66.5	66.2	67.8	73.5	72.8
Reading booklets etc	56.3	55.9	55.5	55.7	55.9	50.0	50.3
Reading articles	57.3	49.1	49.2	51.2	48.5	46.0	<u>43.5</u>
Reading adverts	40.2	37.4	41.3	40.2	40.3	32.7	36.7
Reading newsletters	36.6	33.9	37.6	38.9	38.6	36.5	37.4
Reading posters	27.6	26.1	28.3	32.4	29.8	30.5	29.9
Talking at GUM or HIV clinic	35.8	<u>29.5</u>	30.4	33.0	30.2	31.9	33.3
Talking in internet chat room	21.4	21.4	22.1	23.1	24.1	22.1	29.3
Talking at AIDS charity	21.3	20.6	22.5	23.3	20.7	21.3	22.4
Talking at GP surgery	14.3	15.8	15.2	18.6	14.6	16.3	14.3
Talking at PSV / PSE	<u>17.2</u>	<u>17.0</u>	21.2	19.0	19.3	14.5	23.8
Talking on telephone help-line	18.3	17.5	19.1	19.6	18.6	17.9	19.7
Taking part in group / workshop	21.2	18.2	19.3	21.4	19.3	18.5	23.1

Use of HIV testing and STI screening interventions varied by area of residence - London-resident men were least likely to have not tested for HIV or screened for STIs in the last year and Northern Irish resident men were most likely not to have done so. Similarly, London-resident men were most likely to have tested for HIV or STIs at GUM and Northern Irish resident men were least likely to have done so. However, exempting London and Northern Irish resident men, the variation on these measures was not substantial across the three other English regions and Wales and Scotland.

There is no variation by area of residence in desire to learn more about HIV and sexual health, nor in the acceptability of most of the intervention types.

6.4.2 Age and use of interventions

The following table shows how use of interventions varied by age.

All men	% by age group						
	under 20 (n=1395)	20 - 24 (n=2706)	25 - 29 (n=2267)	30 - 34 (n=2340)	35 - 39 (n=2215)	40s (n=2781)	50+ (n=1716)
NOT HIV tested last year	79.7	65.8	<u>61.9</u>	65.9	67.8	71.4	75.7
NOT STI tested last year	75.5	61.8	57.8	58.1	<u>57.1</u>	60.6	68.3
HIV tested in last year & last HIV test @ GUM	<u>14.8</u>	27.0	29.6	27.3	25.9	22.3	20.1
STI tested in last year & last STI tests @ GUM	<u>18.3</u>	29.8	33.7	35.1	35.4	31.8	24.6
HIV tested in last year & last HIV test @ GP	3.7	4.2	3.9	3.3	3.1	3.0	<u>1.8</u>
STI tested in last year & last STI tests @ GP	4.2	5.7	4.3	3.1	3.1	3.4	3.1
Want to learn more about sexual health / HIV	52.9	52.0	51.2	46.3	43.3	<u>42.8</u>	44.2
<i>Of those who wanted to learn more ...</i>	(n=722)	(n=1387)	(n=1139)	(n=1070)	(n=946)	(n=1169)	(n=741)
from websites	70.1	71.4	69.9	69.3	69.0	66.7	<u>60.5</u>
Reading booklets etc	55.8	55.9	54.8	53.8	56.1	53.6	53.6
Reading articles	45.4	51.0	52.5	51.3	52.0	52.0	49.0
Reading adverts	39.2	41.0	42.8	41.9	42.2	34.0	<u>27.1</u>
Reading newsletters	38.1	38.5	35.1	34.0	36.8	35.8	39.4
Reading posters	36.0	34.1	30.9	28.7	27.0	22.4	<u>18.6</u>
Talking at GUM or HIV clinic	32.1	31.1	31.8	33.3	35.0	32.8	<u>25.6</u>
Talking in internet chat room	27.0	24.4	22.9	21.7	22.3	19.6	<u>15.5</u>
Talking at AIDS charity	21.6	20.6	21.9	20.4	22.6	22.7	20.1
Talking at GP surgery	25.3	18.5	16.9	13.1	14.6	12.3	<u>10.5</u>
Talking at PSV / PSE	21.1	17.2	15.4	18.9	18.4	19.2	19.0
Talking on telephone help-line	20.1	18.7	17.3	17.5	18.1	18.3	17.0
Taking part in group / workshop	22.0	18.1	18.6	20.1	20.7	20.8	20.4

Age had a complex relationship to intervention use and preferences. The youngest age group (under 20s) was least likely to have tested for HIV or STIs in the last year, although testing was also relatively uncommon among the over 50s. The 25-39 year olds were among the most likely to have tested in the last year and to have done so at GUM. Men under 25 years old were most likely have used GP practices to test for HIV and STIs.

Although men under 25 were also most likely to want to learn more about HIV and sexual health, almost a half of them did not want to do so. There was no obvious over-riding pattern in intervention preferences among men that wanted to learn more about HIV and sexual health.

6.4.3 Sexuality & gender of partners and use of interventions

The following table shows how use of interventions varied by sexual identity and the gender of men's sexual partners in the last year.

All men	% by gender of male partners in the last year and sexuality				
	sex with men only		sex with men & women		NO sex with men
	AND Gay (n=12189)	NOT Gay (n=1341)	AND Bisexual (n=1031)	NOT Bisexual (n=497)	BUT Gay or Bisexual (n=898)
NOT HIV tested last year	65.5	77.6	76.3	67.3	91.6
NOT STI tested last year	57.6	72.0	68.9	61.3	90.4
HIV tested in last year & last HIV test @ GUM	27.8	15.9	16.2	24.5	5.6
STI tested in last year & last STI tests @ GUM	34.9	20.0	19.8	27.3	6.4
HIV tested in last year & last HIV test @ GP	3.5	3.2	4.1	4.5	1.2
STI tested in last year & last STI tests @ GP	3.9	3.3	7.2	6.1	1.6
Want to learn more about sexual health / HIV	48.8	47.8	40.2	41.8	34.8
<i>Of those who wanted to learn more ..</i>	(n=5850)	(n=625)	(n=406)	(n=200)	(n=308)
from websites	67.2	71.0	72.2	65.0	68.2
Reading booklets etc	56.6	48.3	46.1	46.0	50.3
Reading articles	55.0	37.3	23.2	39.0	41.9
Reading adverts	41.9	29.6	19.0	37.0	33.8
Reading newsletters	37.0	35.8	34.0	32.0	39.0
Reading posters	30.4	24.8	14.5	28.0	24.7
Talking at GUM or HIV clinic	33.5	29.4	24.6	28.5	20.8
Talking in internet chat room	21.9	22.4	21.9	27.5	19.8
Talking at AIDS charity	22.6	19.0	15.3	24.5	17.9
Talking at GP surgery	16.0	15.0	13.5	19.5	18.2
Talking at PSV / PSE	18.4	18.7	16.7	25.5	15.3
Talking on telephone help-line	18.4	18.9	17.2	23.0	17.2
Taking part in group / workshop	20.8	18.6	14.5	18.0	19.8

Gay identified men who were exclusively homosexually active in the last year were most likely to have tested for HIV and STIs and to have done so at GUM settings. Irrespective of their sexual identity, behaviourally bisexual men were most likely to have used GP settings for testing. Men who had no sex in the last year were least likely to have used any of the testing interventions.

Exclusively homosexually active men were most likely to want to learn more about HIV and sexual health, and the Gay identified men among them preferred the majority of the reading interventions that significantly varied.

6.4.4 Ethnicity and use of interventions

The following table shows how use of interventions varied by ethnicity.

All men	% by ethnic group					
	Asian / Asian British (n=316)	Black / Black British (n=220)	Mixed (n=304)	White British (n=13124)	White other (n=1745)	All others (n=266)
NOT HIV tested last year	72.0	58.4	63.1	70.4	58.6	66.0
NOT STI tested last year	66.7	43.8	55.5	63.0	53.3	62.5
HIV tested in last year & last HIV test @ GUM	21.2	33.6	26.3	24.0	29.2	21.6
STI tested in last year & last STI tests @ GUM	25.0	45.4	32.0	30.2	35.3	23.9
HIV tested in last year & last HIV test @ GP	2.6	5.6	5.7	3.0	5.9	4.9
STI tested in last year & last STI tests @ GP	2.9	5.1	7.1	3.7	5.5	4.9
Want to learn more about sexual health / HIV	56.8	61.6	52.8	45.6	51.0	69.4
<i>Of those who wanted to learn more ...</i>	(n=175)	(n=132)	(n=157)	(n=5866)	(n=880)	(n=183)
from websites	66.9	64.4	61.8	68.0	68.0	71.6
Reading booklets etc	54.3	51.5	56.7	54.3	55.8	65.0
Reading articles	50.9	47.0	46.5	50.1	56.5	52.5
Reading adverts	37.1	40.9	43.3	38.4	41.3	47.5
Reading newsletters	35.4	50.0	37.6	36.0	38.1	45.4
Reading posters	32.0	32.6	29.3	28.2	30.6	31.1
Talking at GUM or HIV clinic	32.0	32.6	30.6	31.8	33.8	29.5
Talking in internet chat room	24.6	15.9	24.2	21.8	22.2	26.8
Talking at AIDS charity	25.7	18.2	20.4	21.3	23.6	25.7
Talking at GP surgery	22.3	9.1	19.7	15.1	19.1	21.3
Talking at PSV / PSE	22.3	16.7	25.5	18.2	17.6	21.9
Talking on telephone help-line	23.4	18.9	17.8	18.2	18.1	21.3
Taking part in group / workshop	25.7	25.0	21.7	19.0	23.6	27.3

The relationship between ethnicity and use of HIV and STI testing interventions was relatively stable and predictable. Black men were least likely to have not tested for HIV or screened for STIs in the last year and Asian men were most likely not to have done so. Similarly, Black men were most likely to have tested for HIV or STIs at GUM and Asian men were least likely to have done so. For STI and HIV testing at GP settings the relationships were slightly different though Asian men remained least likely to use these services. The widespread notion that White British men have privileged access to services, and are most likely to use them is NOT supported.

Men of *other* ethnicities were most likely to want to learn more about HIV and sexual health, followed by Black men. White British men were least likely to want to. Preference for three individual interventions varied by ethnicity but not in a consistent fashion.

6.4.5 Years of education and use of interventions

The following table shows how use of interventions varied by years of full-time education since the age of 16.

All men	% by years in full-time education			
	None (n=2587)	1 - 2 years (n=3759)	3 - 5 years (n=5418)	6 + years (n=4112)
NOT HIV tested last year	73.7	70.3	68.1	<u>64.9</u>
NOT STI tested last year	66.9	64.3	60.0	<u>57.6</u>
HIV tested in last year & last HIV test @ GUM	<u>21.6</u>	23.5	25.5	26.7
STI tested in last year & last STI tests @ GUM	<u>25.8</u>	28.9	32.4	33.7
HIV tested in last year & last HIV test @ GP	<u>2.6</u>	3.7	3.0	4.0
STI tested in last year & last STI tests @ GP	3.7	4.1	3.7	4.3
Want to learn more about sexual health / HIV	44.8	48.1	47.8	47.1
<i>Of those who wanted to learn more ...</i>	(n=1125)	(n=1778)	(n=2542)	(n=1913)
from websites	<u>63.4</u>	67.4	69.0	69.5
Reading booklets etc	<u>51.6</u>	53.3	53.9	59.0
Reading articles	<u>46.1</u>	49.1	52.3	53.1
Reading adverts	37.1	41.6	39.3	37.4
Reading newsletters	38.2	37.6	35.5	36.6
Reading posters	28.5	29.8	28.4	28.0
Talking at GUM or HIV clinic	29.5	31.3	33.1	32.4
Talking in internet chat room	23.8	24.4	21.7	<u>19.4</u>
Talking at AIDS charity	22.8	22.4	21.0	21.4
Talking at GP surgery	18.0	16.2	16.0	14.4
Talking at PSV / PSE	21.6	19.2	18.0	<u>16.2</u>
Talking on telephone help-line	20.0	19.3	17.9	17.5
Taking part in group / workshop	22.0	21.0	19.1	19.5

The relationship between education and use of HIV and STI testings interventions was stable and consistent with previous years. Men with 6 or more years of full-time education beyond the age of 16 were least likely to have not tested for HIV or screened for STIs in the last year and men with none were most likely not to have tested. Similarly, men with 6 or more years of education were most likely to have tested for HIV or STIs at GUM and to have tested for HIV at their GPs. Men with no full-time education beyond aged 16 were always least likely to have tested.

Educational history had no relationship to overall desire to learn more about HIV and sexual health. However, preference for five individual interventions varied by education: men with higher levels of education favoured three of the reading interventions and men with no (or limited) education favoured two of the talking interventions.

6.4.6 Relationship status and use of interventions

The following table shows how use of interventions varied by current relationship status with men.

All men	% by CURRENT relationship status		
	Single (n=7098)	1 regular male partner (n=6106)	2 + regular male partners (n=2697)
NOT HIV tested last year	74.0	67.2	58.3
NOT STI tested last year	67.5	60.9	47.7
HIV tested in last year & last HIV test @ GUM	20.9	25.7	32.3
STI tested in last year & last STI tests @ GUM	26.2	31.7	40.9
HIV tested in last year & last HIV test @ GP	2.8	3.7	4.5
STI tested in last year & last STI tests @ GP	3.3	4.0	5.5
Want to learn more about sexual health / HIV	46.5	47.2	48.8
<i>Of those who wanted to learn more ...</i>	(n=3234)	(n=2843)	(n=1295)
from websites	67.7	68.7	66.9
Reading booklets etc	53.4	56.5	54.2
Reading articles	47.6	54.4	50.4
Reading adverts	36.9	41.4	39.3
Reading newsletters	35.7	37.3	38.0
Reading posters	28.0	29.3	29.2
Talking at GUM or HIV clinic	30.7	32.7	33.7
Talking in internet chat room	21.6	21.1	24.8
Talking at AIDS charity	20.8	21.7	23.9
Talking at GP surgery	16.0	15.5	16.6
Talking at PSV / PSE	17.4	17.3	23.2
Talking on telephone help-line	17.7	18.1	20.5
Taking part in group / workshop	19.3	19.5	23.6

The relationship between relationship status and use of HIV testing and STI screening interventions was stable and consistent. Single men were most likely to have not tested for HIV or screened for STIs in the last year and men with 2 or more regular male partners were least likely not to have tested. Similarly, men with 2 or more regular partners were most likely to have tested for HIV or STIs at GUM and to have tested for HIV or STIs at their GPs. Single men were always least likely to have tested.

Current relationship status had no relationship to overall desire to learn more about HIV and sexual health. However, preference for four individual interventions varied by relationship status: men with one current regular partner favoured two of the reading interventions and men with two or more current regular male partners favoured two of the talking interventions.

6.4.7 Volume of male sexual partners and use of interventions

The following table shows how use of interventions varied by the volume of male partners men had in the preceding year.

All men	% by volume of male sexual partners in the last year					
	None (n=914)	one (n=2760)	2, 3 or 4 (n=4557)	5 to 12 (n=3851)	13 to 29 (n=1970)	30+ (n=1800)
NOT HIV tested last year	91.6	78.1	71.9	64.8	57.0	<u>55.5</u>
NOT STI tested last year	90.4	75.5	66.9	56.6	46.1	<u>38.5</u>
HIV tested in last year & last HIV test @ GUM	<u>5.5</u>	15.1	21.9	28.1	35.6	37.7
STI tested in last year & last STI tests @ GUM	<u>6.3</u>	17.4	25.8	35.4	45.2	52.0
HIV tested in last year & last HIV test @ GP	<u>1.3</u>	3.7	3.2	3.5	3.9	3.4
STI tested in last year & last STI tests @ GP	<u>1.7</u>	4.3	4.5	3.9	4.3	3.4
Want to learn more about sexual health / HIV	<u>34.7</u>	43.0	49.0	49.8	51.0	45.1
<i>Of those who wanted to learn more ...</i>	(n=313)	(n=1158)	(n=2191)	(n=1889)	(n=995)	(n=800)
from websites	68.7	70.1	69.5	67.8	66.0	<u>62.4</u>
Reading booklets etc	50.8	54.3	54.5	56.0	53.3	56.5
Reading articles	<u>41.2</u>	49.3	48.7	52.3	51.3	57.6
Reading adverts	<u>33.2</u>	37.2	38.2	38.7	41.2	44.3
Reading newsletters	39.0	38.7	36.9	34.8	35.0	38.8
Reading posters	24.6	27.5	29.0	27.8	29.3	32.5
Talking at GUM or HIV clinic	<u>20.4</u>	26.0	29.2	34.1	37.4	41.1
Talking in internet chat room	19.8	19.3	22.1	23.0	22.4	23.1
Talking at AIDS charity	<u>17.6</u>	20.9	20.3	20.8	24.0	27.9
Talking at GP surgery	17.9	16.6	16.3	14.5	16.0	16.4
Talking at PSV / PSE	<u>15.0</u>	14.5	15.7	18.2	22.7	28.0
Talking on telephone help-line	17.3	<u>16.0</u>	17.5	18.6	19.4	23.3
Taking part in group / workshop	19.8	19.2	18.8	<u>18.5</u>	22.3	26.1

Use of HIV testing and STI screening interventions varied by the volume of men's male sexual partners in the last year. Men with 30+ male partners were least likely not to have tested for HIV or screened for STIs in the last year and men with no male partners were most likely not to have done so. Similarly, men with 30+ partners were most likely to have tested for HIV or STIs at GUM and men with none were least likely to have done so. The relationship between testing and screening and doing so at GUM was fairly predictable. The more partners men had the more likely they were to test at GUM. The relationship of male partner numbers to use of screening at GP services was somewhat less predictable.

Men with higher numbers of male partners tended to be more likely to want to learn more about HIV and sexual health, although this desire peaked in men with 13-29 partners and fell back for the men with 30+. Where preferences for individual interventions varied, men with 30+ partners tended to be most likely to find them acceptable, and men with none found them least acceptable. The only exception was the internet where men with 1-4 partners found the intervention most acceptable, and men with 30+ found it least acceptable. It must be noted however, that among men with 30+ partners the internet remained the most popular option.

6.4.8 Disability and use of interventions

The following table shows how use of interventions varied by whether men had a current long-term illness, health problem or disability.

All men	% by disability	
	NOT Disabled (n=14185)	Disabled (n=1605)
NOT HIV tested last year	69.0	66.2
NOT STI tested last year	62.8	50.5
HIV tested in last year & last HIV test @ GUM	24.5	26.9
STI tested in last year & last STI tests @ GUM	30.0	38.4
HIV tested in last year & last HIV test @ GP	3.4	3.5
STI tested in last year & last STI tests @ GP	4.0	3.9
Want to learn more about sexual health / HIV	47.1	48.7
Of those who wanted to learn more ...	(n=6570)	(n=768)
from websites	68.4	63.8
Reading booklets etc	54.5	57.2
Reading articles	50.5	53.0
Reading adverts	38.8	41.5
Reading newsletters	35.8	44.8
Reading posters	28.6	30.1
Talking at GUM or HIV clinic	31.2	38.3
Talking in internet chat room	21.5	26.0
Talking at AIDS charity	20.4	33.2
Talking at GP surgery	15.1	22.9
Talking at PSV / PSE	17.7	24.9
Talking on telephone help-line	17.7	24.7
Taking part in group / workshop	18.7	32.0

There was no obvious relationship between use of HIV testing interventions and having a current long-term illness, health problem or disability. However, men with disabilities were more likely to have tested for STIs in the last year and to have done so at GUM (or HIV clinics). This may be a consequence of a quarter of men with disabilities also having diagnosed HIV.

Health status had no relationship to overall desire to learn more about HIV and sexual health. However, in all seven of the *talking* interventions it was men with a current long-term illness, health problem or disability who were significantly more likely to find them acceptable. The same pattern emerged for only one of the reading interventions (*newsletters*).

6.4.9 Current religious belief and use of interventions

The following table shows how use of interventions varied by men's current religious belief.

All men	% by current religious belief				
	NO religion (n=9865)	Protestant (n=2537)	Catholic (n=1254)	Other Christian (n=1509)	non- Christian religion (n=1139)
NOT HIV tested last year	68.6	71.4	66.9	69.3	<u>65.0</u>
NOT STI tested last year	61.1	64.9	59.1	64.6	<u>57.1</u>
HIV tested in last year & last HIV test @ GUM	25.4	22.9	24.3	22.5	26.7
STI tested in last year & last STI tests @ GUM	31.5	<u>28.7</u>	29.8	<u>27.7</u>	34.5
HIV tested in last year & last HIV test @ GP	3.2	2.8	4.3	4.1	4.1
STI tested in last year & last STI tests @ GP	4.0	3.4	5.2	3.6	3.9
Want to learn more about sexual health / HIV	<u>45.1</u>	48.9	52.9	48.8	53.4
Of those who wanted to learn more ...	(n=4272)	(n=1215)	(n=535)	(n=671)	(n=588)
from websites	69.4	67.2	68.2	<u>62.4</u>	65.5
Reading booklets etc	54.9	56.4	55.5	51.7	53.7
Reading articles	51.6	51.9	50.1	46.3	49.7
Reading adverts	39.3	37.7	40.6	38.7	39.5
Reading newsletters	36.1	37.2	40.9	38.5	34.5
Reading posters	28.9	26.3	29.9	28.5	31.8
Talking at a GUM or HIV clinic	31.6	31.4	34.0	30.8	34.9
Talking in an internet chat room	22.4	21.6	24.5	18.5	22.1
Talking at an AIDS charity	20.6	21.4	25.6	24.1	24.1
Talking at a GP surgery	15.8	13.6	17.0	16.5	19.4
Talking at a PSV / PSE	17.5	18.7	20.9	18.0	21.8
Talking on a telephone help-line	17.8	17.0	21.3	20.1	20.6
Taking part in group or workshop	19.4	19.5	23.2	20.3	24.1

The relationship between use of HIV testing and STI screening interventions and current religious belief was inconsistent. Protestant men were most likely not to have tested for HIV or screened for STIs in the last year and men of non-Christian religious beliefs (Islam, Judaism, Hinduism, Buddhism, Paganism, Sikhism and other religions) were most likely to have done so. Settings for HIV testing in the last year did not vary by religion, though they did for STI testing in GUM. Protestant men were least likely to have tested for STIs at GUM and men of other non-Christian religious beliefs were most likely to have done so.

Catholic men and men of other religions were most likely to want to learn more about HIV and sexual health, and men with no current religion were least likely to want to. Preference for only one individual intervention varied significantly by current religious belief - websites were most favoured by men with no current religious belief.

6.4.10 Sex work and use of interventions

The following table shows how use of interventions varied by men's relationship to paid sex in the last year.

All men	% by sex work in the last year			
	Neither paid or been paid (n=13177)	PAID for sex only (N=729)	BEEN paid for sex only (n=669)	BOTH paid & been paid for sex (n=129)
NOT HIV tested last year	67.8	68.5	<u>53.2</u>	57.4
NOT STI tested last year	60.7	60.5	<u>40.2</u>	46.8
HIV tested in last year & last HIV test @ GUM	25.5	<u>23.3</u>	38.9	31.0
STI tested in last year & last STI tests @ GUM	31.8	<u>30.7</u>	46.9	38.1
HIV tested in last year & last HIV test @ GP	3.4	3.0	5.1	7.0
STI tested in last year & last STI tests @ GP	<u>3.9</u>	<u>3.9</u>	8.2	9.5
Want to learn more about sexual health / HIV	47.9	45.2	53.3	<u>42.1</u>
<i>Of those who wanted to learn more ...</i>	(n=6212)	(n=326)	(n=352)	(n=52)
from websites	68.3	67.5	63.9	52
Reading booklets etc	55.8	<u>41.7</u>	53.4	46
Reading articles	51.9	44.5	48.0	<u>37</u>
Reading adverts	39.9	<u>28.5</u>	38.4	33
Reading newsletters	36.7	31.6	40.9	27
Reading posters	29.0	<u>17.5</u>	36.4	27
Talking at a GUM or HIV clinic	32.4	28.2	38.1	29
Talking in an internet chat room	21.9	20.6	26.4	21
Talking at an AIDS charity	21.7	17.2	26.4	23
Talking at a GP surgery	15.8	<u>10.7</u>	20.5	19
Talking at a PSV / PSE	<u>17.9</u>	20.9	24.1	25
Talking on a telephone help-line	18.4	17.2	21.3	12
Taking part in group or workshop	20.2	16.0	30.8	21

As we would expect, use of HIV testing and STI screening interventions varied by men's relationship to buying and selling sex. Men who had been paid for sex were least likely not to have tested for HIV or screened for STIs in the last year and men who had neither bought or sold sex, or had only bought sex were most likely not to have done so. Similarly, men who had only been paid for sex were most likely to have tested for HIV or STIs at GUM and men who had only paid for sex were least likely to have done so.

Men who had been paid for sex were also most likely to want to learn more about HIV and sexual health. Where preferences for individual interventions varied men who had been paid for sex tended to find them most acceptable, and men with no relationship to paid sex found them least acceptable. However, the relationship between specific intervention preferences and engagement in sex work was not uniform.

6.5 SUMMARY AND CONCLUSIONS

As the population group most likely to be infected with HIV and STIs, the promotion of GUM services to Gay men should remain a priority. The groups of men in whom HIV and STI testing occurred most recently were the same groups more likely to use GUM services.

Generally, reading interventions appear more popular than talking and listening interventions in almost all sub-groups of men. This is challenging as it is generally felt that the latter are more effective education methods. This finding reinforces the observations that there is no single intervention (or magic-bullet) that is acceptable to all men and that all sexual health promotion programmes require a mixed portfolio of interventions. In particular, increased exploitation of internet-based interventions may prove fruitful.

STI screening is vital for sexually active men with HIV and it is encouraging to see that a very high proportion of men with diagnosed HIV had done so in the last year. Men living with diagnosed HIV also appear happy to learn more through a wide variety of interventions although information does not appear a common unmet need. Men who do need to know more about sexual health and HIV (especially those who have never tested for HIV), appear far less confident about how they would like to do so.

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