EMIS-2017 Ireland

FINDINGS FROM THE EUROPEAN MEN WHO HAVE SEX WITH MEN INTERNET SURVEY (IRELAND)

hpsc

Sláinte Ghnéis &
Clár um Thoirchis Ghéarchéime
Sexual Health &
Crisis Pregnancy Programme

GAY HEALTH NETWORK
25 YEARS

Seirbhís Sláinte Níos Fearr á Forbairt
Building a Better Health Service

EMIS-2017 Ireland

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Foreword

I am very pleased to introduce this report outlining the Irish results of the European Men who have sex with men Internet Survey 2017. The results of EMIS-2017 Ireland provide high quality data which can be used to address the sexual health needs of gay, bi-sexual and other men who have sex with men in Ireland. The results reported here will enable the measurement and development of initiatives aimed at improving sexual health and wellbeing and reducing negative sexual health outcomes. The findings from this study will be used to support the strategic recommendations of the National Sexual Health Strategy 2015 – 2020.

I wish to acknowledge and express gratitude to Sigma Research in the London School of Hygiene and Tropical Medicine, namely Axel J Schmidt and Peter Weatherburn, for designing and managing this large-scale study and for sharing the Irish dataset to inform ongoing work in the area of HIV and STI planning and support in Ireland.

A sincere thank you to the Health Protection Surveillance Centre (HPSC) and the Gay Health Network (GHN) for facilitating EMIS 2017 in Ireland. In particular, to Dr Derval Igoe, Principal Investigator, Claire Casey, Research Officer, Kate O'Donnell and Melissa Brady, Surveillance Scientists, HPSC, for overseeing the analysis of the Irish dataset and for authoring the report; and to Mick Quinlan, Gay Health Network, for coordinating the work with the larger European study and for providing valuable inputs throughout the process. Thank you also to the HSE Sexual Health and Crisis Pregnancy Programme, under HSE Health & Wellbeing, for funding the analysis of the dataset and for working closely with the HPSC and the GHN to produce this report. Thank you to the project's Steering Committee for their expert support and advice throughout the process; and a particular thank you to all of the respondents who took the time to complete the survey and share important information about their lives.

Helen Deely

Acting Assistant National Director, Health & Wellbeing, HSE

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Abbreviations

ANOVA	Analysis of variance
ART	Antiretroviral therapy
CAI	Condomless anal intercourse
CSO	Central Statistics Office
DoH	Department of Health
EIS	Early infectious syphilis
EMIS	European Men who have sex with men Internet Survey
ESTICOM	European Surveys and Training to Improve men who have sex with men Community Health
EU	European Union
GAD	Generalised anxiety disorder
GCN	Gay Community News
GHN	Gay Health Network
GMHS	Gay Men's Health Service
GMSS	Gay Men's Sex Survey
HIQA	Health Information and Quality Authority
HIV	Human Immunodeficiency Virus
HPSC	Health Protection Surveillance Centre
HPV	Human papillomavirus
HSE	Health Service Executive
HTA	Health Technology Assessment
LGBTI	Lesbian, gay, bisexual, transgender and intersex
LGV	Lymphogranuloma venereum
LSHTM	London School of Hygiene and Tropical Medicine
MISI	Men who have sex with men Internet Survey Ireland
MSM	Men who have sex with men
NCDS	National Condom Distribution Service
NGO	Non-governmental organisation
PEP	Post-exposure prophylaxis
PHQ	Patient health questionnaire
PrEP	Pre-exposure prophylaxis
PWID	People who inject drugs
RKI	Robert Koch Institute
SD	Standard deviation
SHCPP	Sexual Health and Crisis Pregnancy Programme
STI	Sexually transmitted infection
TasP	Treatment as prevention
URL	Uniform resource locator
VCBT	Voluntary community-based HIV testing
WHO	World Health Organization

Glossary

Chemsex	The use of specific drugs before or during planned sex to facilitate, initiate, prolong, sustain and intensify the encounter.
Intercourse	In this survey, we use 'intercourse' to mean sex where one partner puts their penis into the other partner's anus or vagina, whether or not this occurs to ejaculation. Intercourse does not include oral sex or the use of dildos.
n=	The number of respondents represented.
Non-steady male partner	This refers to any partner with whom men have had sex with once only, and men they have sex with more than once but who they do not think of as a steady partner (this includes one-night stands, anonymous and casual partners, and regular sex buddies).
PEP	is a medicine taken very soon after exposure (or possible exposure) to HIV to prevent HIV transmission.
PrEP	is a medication taken before exposure or possible exposure to HIV to prevent HIV transmission.
Serosorting	The practice of using HIV status as a decision-making point in choosing sexual behaviour.
Sex	In this survey, we use the term 'sex' to mean physical contact to orgasm (or close to orgasm) for one or both partners.
Significant	This is a statistical term used to denote how likely a finding is to have occurred by chance.
Steady male partner	Refers to boyfriends or husbands that mean they are not single, but not to partners who are simply sex buddies.
Syndemic	A set of linked health problems involving two or more diseases, interacting together, and contributing to excess burden of disease in a population.
Trans man	A trans man (sometimes trans-man or transman) is a transgender person who was assigned female sex at birth but whose gender identity is that of a man.
Variable	Any characteristics, number, or quantity that can be measured or counted.
Viral load	Used to describe the amount of HIV in a body fluid, depending on the applied laboratory technology.

Acknowledgements

We would like to thank all of the men who gave their time to respond to the survey; without their participation we would not have the means to produce such meaningful results.

Gay Health Network (GHN) and Health Protection Surveillance Centre (HPSC) were the country leads in Ireland for EMIS-2017. We would like to acknowledge the invaluable support and expert guidance of the EMIS-2017 Ireland steering committee that oversaw and supported the analysis of the data. They also provided an invaluable peer review of this report at various stages of production.

The members of the steering group were:

Mick Quinlan	Gay Health Network
Ciaran McKinney	Gay Health Network
Bill Foley	Gay Health Network
Martin Davoren	Gay Health Network (Sexual Health Centre, Cork/University College Cork)
Fiona Lyons	Society for the Prevention of Sexually Transmitted Diseases in Ireland
Maeve O'Brien	Sexual Health and Crisis Pregnancy Programme
Sarah Tecklenborg	Sexual Health and Crisis Pregnancy Programme
Susie Clarke	Gay Men's Health Service/Infectious Diseases Society of Ireland
Siobhan O'Dea	Gay Men's Health Service
Louise Hendrick	Public Health HIV/STI Special Interest Group
Margaret Fitzgerald	Health Service Executive, Inclusion Health
Chris Noone	School of Psychology, National University of Ireland, Galway
Axel J. Schmidt	Sigma Research, London School of Hygiene and Tropical Medicine, London, UK
Daniel McCartney	International Planned Parenthood Federation, London, UK
Peter Barrett	Department of Public Health/University College Cork
Derval Igoe	Health Protection Surveillance Centre (Chair)
Kate O'Donnell	Health Protection Surveillance Centre
Melissa Brady	Health Protection Surveillance Centre
Claire Casey	Health Protection Surveillance Centre

We would also like to thank Katy Banahan from HPSC for her administration assistance with the EMIS-2017 steering group during the production of this report.

We would also like to thank the two communication subgroups of EMIS-2017 Ireland:

Communications group responsible for national survey promotion, 2017
Mick Quinlan (Gay Health Network, lead), Derval Igoe, Greg Martin, Kate O'Donnell (Health Protection Surveillance Centre), Anita Ghafoor-Butt, Maeve O'Brien (Sexual Health Crisis Pregnancy Programme), Siobhan O'Dea (Gay Men's Health Service)

Communications group responsible for dissemination of findings, 2019
Maeve O'Brien (Sexual Health Crisis Pregnancy Programme, Chair), Claire Casey, Derval Igoe (Health Protection Surveillance Centre), Anita Ghafoor-Butt, Sarah Tecklenborg (Sexual Health Crisis Pregnancy Programme), Siobhan O'Dea (Gay Men's Health Service), Susan Donlon (HIV Ireland), Mick Quinlan (Gay Health Network)

We would also like to thank the following organisations who promoted EMIS-2017 in Ireland on their websites and social media:

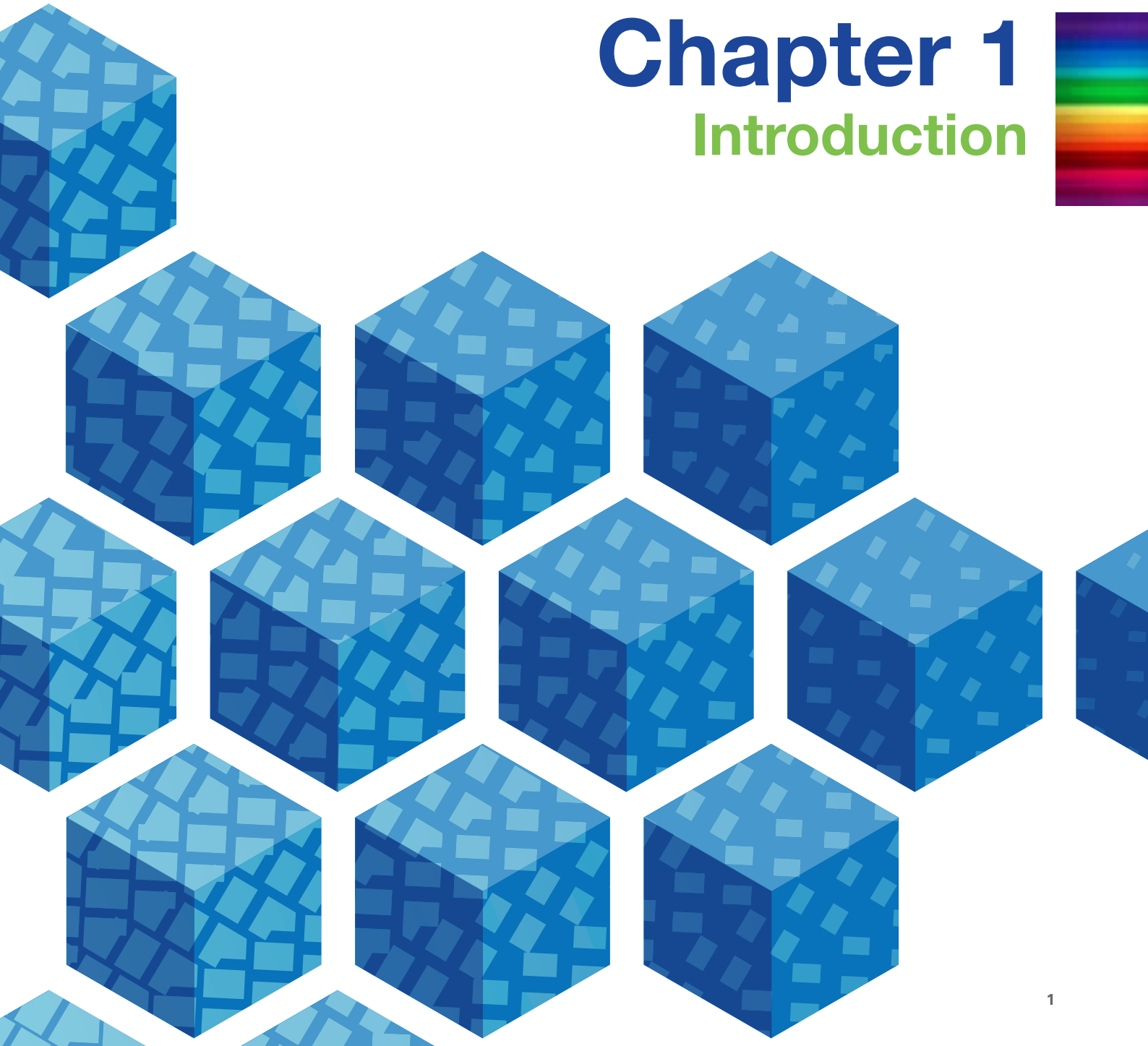
- Man2Man
- HIV Ireland
- Outhouse
- GOSHH
- Sexual Health Centre Cork
- AIDSWEST
- Gay Community News
- Health Service Executive
- Gay Men's Health Service.

We would like to thank the co-ordinators of the overall EMIS-2017 survey for their invaluable knowledge and patience. EMIS-2017 was co-ordinated by Sigma Research at the London School of Hygiene and Tropical Medicine (LSHTM) in association with the Robert Koch Institute (RKI) in Berlin. EMIS core team at Sigma Research (LSHTM): Ford Hickson, David Reid, Axel J. Schmidt and Peter Weatherburn.

Funding: EMIS-2017 was carried out as part of ESTICOM, under the service contract 2015 71 01 with the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA), acting under powers delegated by the Commission of the European Union. The contract arises from the Call for tender No Chafea/2015/Health/38.

We would also like to thank the Sexual Health and Crisis Pregnancy Programme (SHCPP) who funded the analysis of Irish data from EMIS-2017 called 'EMIS-2017 Ireland' and the director of HPSC for allowing the writing group from HPSC to dedicate time to the project.

Chapter 1
Introduction



Chapter 1 Introduction

EMIS-2017 (European Men Who Have Sex with Men Internet Survey-2017) was part of ESTICOM (European surveys and training to improve men who have sex with men community health) and was funded by the European Commission Health Programme 2015–2020. The overall aim of EMIS-2017 was to generate data useful for the planning of Human Immunodeficiency Virus (HIV) and sexually transmitted infection (STI) prevention and care programmes, and the monitoring of progress in this area by:

- describing the level and distribution of HIV transmission risk and precautionary behaviours
- describing related HIV prevention needs
- assessing self-reported STI testing behaviours, and various STI diagnoses, including viral hepatitis.

Data were provided by Sigma Research, London School of Hygiene and Tropical Medicine (LSHTM), the EMIS-2017 co-ordinator, on eligible respondents who were living in Ireland at the time of the survey for a national descriptive analysis of EMIS-2017 data for Ireland.

In Ireland and elsewhere, HIV and STIs disproportionately affect men who have sex with men (MSM). In 2017, there were 492 HIV notifications in Ireland, a rate of 10.3 per 100,000 population. Overall, the rate of HIV diagnoses has been stable between 2015 and 2017, with a slight decrease (2%) between 2016 and 2017.[1] Ireland has a concentrated HIV epidemic, with infections mainly occurring in MSM, in migrants from a country of high endemicity and in people who inject drugs (PWID). By transmission route, MSM are the population most affected by HIV in Ireland. In all, 53% of HIV diagnoses in 2017 were in MSM. Among MSM, 42% of cases in 2017 had been previously diagnosed abroad.[1] This pattern is becoming more common, as increasing proportions of new diagnoses in Ireland in all risk groups are already diagnosed abroad before their first diagnosis in Ireland.

Other STIs remain common among MSM in Ireland. Rates of early infectious syphilis (EIS), gonorrhoea, hepatitis A and hepatitis C in MSM increased in 2017 compared to the previous year.[2, 3, 4, 5] Notifications of EIS have been increasing steadily since 2012, and gonorrhoea has been increasing since 2009. In 2017, MSM were the population most affected by EIS, lymphogranuloma venereum (LGV), gonorrhoea and hepatitis A.[2, 3, 4, 6] For hepatitis C, nearly two-thirds (65%) of the 17 cases who identified as MSM in 2017 were HIV positive at the time of hepatitis C diagnosis.[5]

MSM continue to be a key group at risk of HIV transmission. Policy makers in education, health and social inclusion, clinicians, community-based and voluntary sector organisations, all require accurate and up-to-date information on knowledge, attitudes, needs and behaviours in order to design, fund and implement HIV and STI prevention interventions for gay, bisexual and other MSM in Ireland.

A number of previous surveys on knowledge, attitudes, needs and behaviours of MSM have been carried out in Ireland. On initiation of a partnership by Gay Health Network (GHN), the Gay Men's Sex Survey (GMSS) was carried out by Sigma Research and included MSM in Ireland from 2000–2008.[7, 8, 9] More recent surveys conducted in Ireland include: EMIS-2010 and the MSM Internet Survey Ireland (MISI) 2015.[10, 11] EMIS-2010 was a survey of more than 180,000 MSM living in Europe, including 2,037 men living in Ireland. The EMIS-2010 findings for Ireland were used to inform the development of the joint Health Service Executive (HSE) and GHN first National Sexual Health and HIV awareness programme for MSM (www.man2man.ie). MISI 2015 was an Ireland-only based survey and was run by a multi-sectorial partnership of GHN, Gay Men's Health Service (GMHS), Sexual Health and Crisis Pregnancy Programme (SHCPP) and the Health Protection Surveillance Centre (HPSC), supported by a group of

international experts. MISI provided important information which allowed for tailored prevention interventions for the MSM population in Ireland. These surveys were paramount in tracking up-to-date behavioural trends and were key to informing resource allocation and service planning.

1.1 EMIS-2017 Ireland

The EMIS-2017 Ireland project was funded by SHCPP, and was supported by a steering group of national and international partners.

The overall objectives of EMIS-2017 Ireland were to:

- assess reported ill health in MSM, including markers of mental health and HIV/STI diagnoses
- describe risk and precautionary behaviours engaged in by MSM in Ireland
- identify needs in the MSM community, including safer sex, post-exposure prophylaxis (PEP) and pre-exposure prophylaxis (PrEP) use and HIV testing and treatment
- monitor the use of interventions intended to reduce HIV and STI needs.

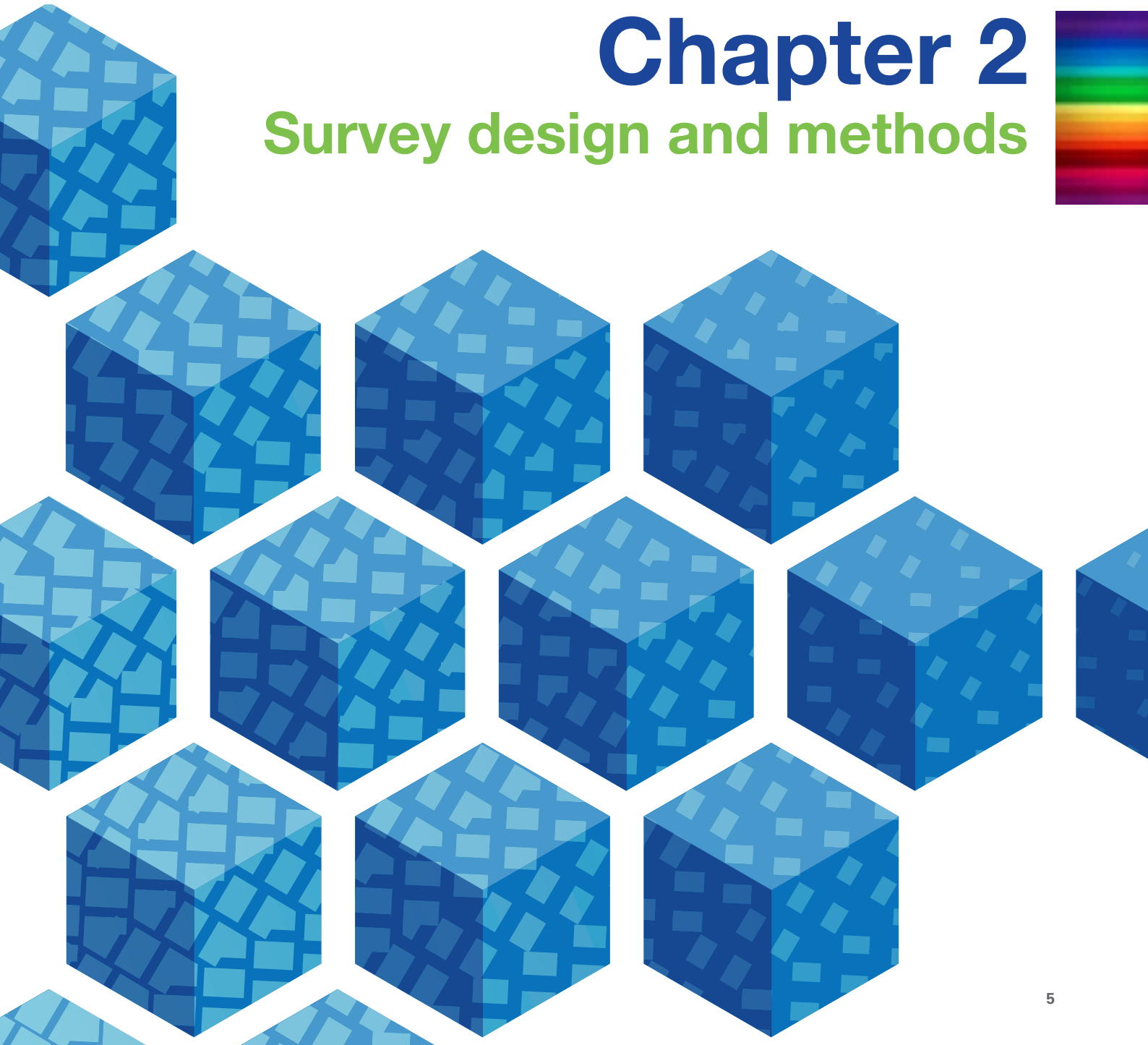
This report presents an overview of the main findings from the EMIS-2017 Ireland dataset.

Chapter 2 describes the methodology used to undertake EMIS-2017 and the analysis of the EMIS-2017 Ireland dataset. Chapters 3 to 7 explore a number of thematic issues and investigate some key questions in more depth. Chapter 8 discusses the importance of the findings in an Irish context and chapter 9 makes recommendations for key areas for action and research for MSM in Ireland.

The results of the survey are described throughout the following chapters:

- **Chapter 3 Demographic profile**
- **Chapter 4 Reported ill health:** This chapter describes reported physical and mental ill health by MSM, and may be of particular interest to healthcare providers and those planning health services for MSM, and services to cater for MSM morbidities.
- **Chapter 5 Risk and precautionary behaviours:** This chapter reports on risk behaviours and precautionary behaviours reported by MSM, and may be of particular interest to those involved in planning, implementing and monitoring interventions to reduce risk behaviours and enable precautionary behaviours. There is also a section that reviews behaviours during last sex session in more detail.
- **Chapter 6 Needs:** This chapter identifies the needs of MSM that, if addressed, may lead to better engagement in precautionary sexual health behaviours and the avoidance of risk behaviours. This chapter may be of particular interest to statutory and non-governmental organisation (NGO) health promotion service providers who are planning, implementing and monitoring interventions.
- **Chapter 7 Interventions:** This chapter is aimed at those who plan, deliver and evaluate interventions and outlines the types of interventions that can influence needs, such as homophobic abuse or access to services.

Chapter 2
Survey design and methods



Chapter 2 Survey design and methods

This chapter provides information on the methodology used in the design, delivery and promotion of EMIS-2017. It describes the final Irish sample prior to the analysis presented in the remainder of the report.

2.1 Survey development

EMIS-2017 was an online, behavioural surveillance survey designed to collect data from MSM living in 50 countries and included all 28 member states of the European Union (EU). Other countries in Europe and outside Europe were also involved. It was an anonymous, self-reported, cross-sectional survey.

EMIS-2017 was adapted from the EMIS-2010 cross-sectional questionnaire.[10] Questions from EMIS-2010 that generated little interest were omitted, and new questions were added based on interest generated by recent developments in the area, e.g. PrEP and chemsex.

The survey was piloted by five health promotion agencies in the UK working with MSM. Following the pilot, the language, content and layout of the survey were amended as necessary. The final survey sought up to 409 data items from respondents. However, very few men were asked all questions, as the survey used intra-questionnaire filters wherever possible. Ethical approval for this study was obtained from the Observational Research Ethics Committee at the LSHTM (review reference 14421 /RR/8805). An important feature of this ethical approval was that local ethical approval was not required from the countries within which participants were recruited given that it was classified as a UK based survey.

2.2 Recruitment procedures

EMIS-2017 had a soft launch on the week beginning 12 October 2017 with very limited promotion; this was done in order to test the online systems. The survey officially began on 19 October 2017 and finished on 30 January 2018.

EMIS-2017 in Ireland was promoted on a number of platforms, including:

- national statutory and NGO websites for MSM
- social networking sites (such as Facebook, Twitter and Instagram)
- geo-spatial sexual contact smartphone applications (apps) and websites.

The EMIS-2017 study co-ordinators commissioned advertising on several dating platform apps that were used by MSM in each country. In Ireland, the EMIS-2017 survey was advertised on: PlanetRomeo, Grindr, Hornet, Recon, Scruff, Gaydar, Manhunt/Jack'd and GROWLr.

A multi-disciplinary communication subgroup for EMIS-2017 Ireland was formed in August 2017, led by GHN. The group was tasked with promotion of EMIS-2017 in Ireland. Information relating to the survey was disseminated to a number of statutory and NGO bodies for advertisement on their websites and social media. In addition, over the duration of the recruitment period, adverts were published in Gay Community News (GCN), which is a national, monthly, free publication. A press release was organised in the latter half of the recruitment period which involved a photoshoot in a popular gay bar in Dublin. This press release was covered in GCN as shown in Figure 2.1. With

regard to 'offline' promotion, posters and business cards were distributed at gay social and community venues, and services.

All promotion of EMIS-2017, whether paid or unpaid, included a unique 'source code' embedded at the end of the Uniform Resource Locator (URL). This allowed researchers to track the source of recruitment for each respondent and allowed the EMIS-2017 co-ordinators to monitor advertising success (and failure) on a daily basis and make adjustments to the strategy as required.

Figure 2.1 Promotional advert for EMIS-2017 in national community publication in Ireland (Gay Community News, 19 January 2018)

2.3 Inclusion criteria for EMIS-2017 Ireland

2.3.1 For the EMIS-2017 survey

Respondents had to indicate that they wished to take part in the EMIS-2017 survey by confirming that they had read and understood the nature and purpose of the study. Qualification criteria also included that they were at or over the age of sexual consent in the country in which they lived (17 years in Ireland), and that they identified as a man or trans man and that they were sexually attracted to men and/or were currently or previously sexually active with men.

2.3.2 For this report

Respondents who indicated that they lived in Ireland were included in the Irish dataset. All qualifying respondents included in the dataset were analysed for this report. In several places, the questionnaire allowed logically inconsistent data to be supplied, where answers to two questions could not both be valid. Three discrepancy flags were created to indicate whether a respondent had supplied inconsistent data in the following three areas: age, steady partners, and non-steady partners. Overall, 200 respondents (9.6%) in the Irish dataset had discrepant data in one or more of these three areas. The overall European report did not exclude discrepant data in their analysis and, given the descriptive nature of this report, we did not exclude any cases on the basis of discrepancies.

2.4 Participation

There were 2,106 consenting respondents from Ireland. Twenty-three (1.1%) respondents did not meet the criteria for inclusion. Two indicated they were not a man or a trans man, 13 indicated they had no evidence of homosexual desire or behaviour and eight were below the age of consent or did not indicate their age. Overall, 2,083 qualifying respondents were included in the Irish dataset. The majority of respondents (32%) were directed to the survey from Grindr, 18% from social media channels (Facebook, Twitter or Instagram), and 18% from other local methods of recruitment including national websites (Table 2.1).

Table 2.1 Source of recruitment (n=2,083)

Source of recruitment	n	%
Grindr	670	32.2
National websites	368	17.7
Facebook, Twitter, Instagram	366	17.6
Unknown source code	297	14.3
Other dating apps	182	8.7
Planet Romeo	98	4.7
Hornet	99	4.7
Softstart	3	0.1

The highest number of respondents recruited in a single week was 290 in week 13 (11 January to 17 January). This was in response to the press release organised by the EMIS-2017 Ireland communications group. There were periodic increases in the numbers who completed the survey in the latter half of the study.

Smartphones were the most popular method of accessing the EMIS-2017 survey in Ireland (79%), followed by desktop (17%) and a tablet device (5%). It took respondents an average of 29 minutes to complete the survey.

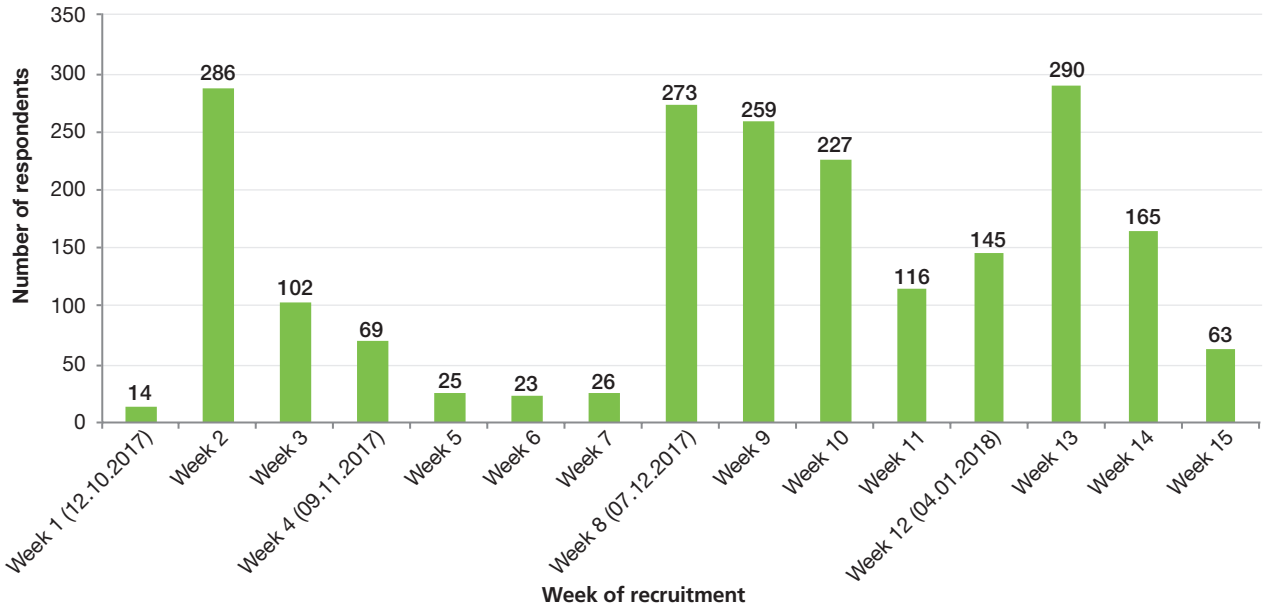


Figure 2.2 Number of survey respondents by week of recruitment from 12 October 2017 to 31 January 2018

2.5 Languages used for survey completion

Respondents had a choice of 33 languages in which to complete the survey. Twenty-five languages were used to complete the survey in Ireland.

Ninety-two percent of respondents used English to complete the survey. Among the 8% of respondents who used a language other than English to complete the survey (n=162), the most commonly used languages were Portuguese (23%), Spanish (20%) and Italian (10%).

2.6 Data analysis

The survey data were extracted from Demographix and imported into SPSS by Sigma Research at LHSTM. The data were cleaned and recoded. The data were transferred to the EMIS-2017 Ireland research group in October 2018 and imported into STATA where they were further recoded and analysed for this report. The likelihood that differences among individuals in different groups were due to chance was established using chi-squared analysis (χ^2), independent t-test or analysis of variance (ANOVA) where appropriate. A 5% ($p \leq 0.05$) level of significance was applied.

It was not mandatory to answer all questions in the survey and therefore the tables and figures presented in this report are the valid responses for each question, that is, they exclude people who did not answer that particular question. Percentages are provided to one decimal place in the tables. Percentages in the text are rounded up to the nearest integer.

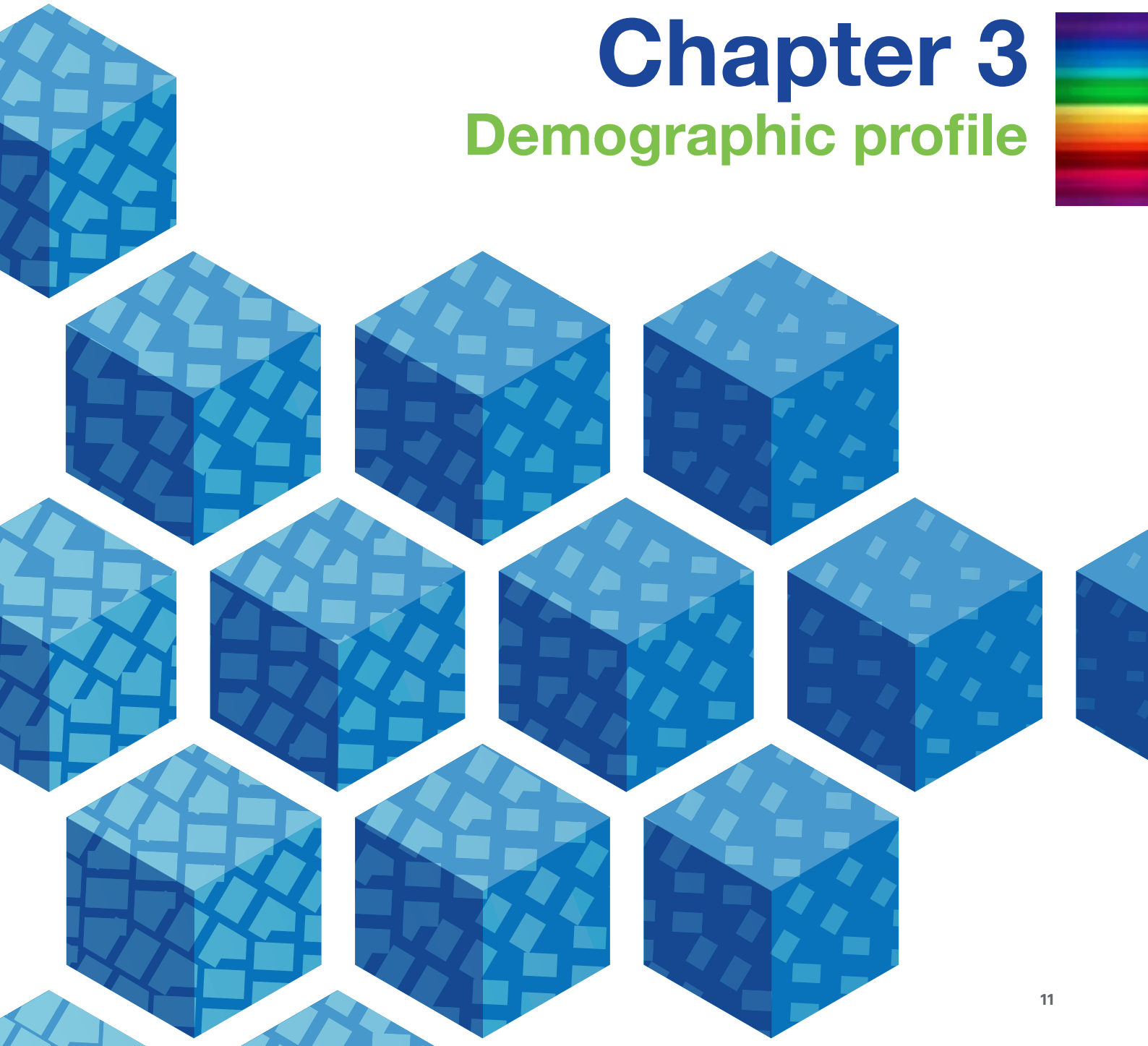
2.7 Strengths and limitations

Strengths and limitations of the EMIS-2017 survey are listed in Table 2.2.

Table 2.2 Strengths and limitations of the survey

Strengths	Limitations
Built on the experience of previous surveys, including EMIS-2010	• Convenience sample • Self-reported survey • Cross-sectional survey and therefore cannot conclude that any relationships observed are causal
Large sample size which facilitates the analysis of subgroups	Long completion time among Irish respondents – 29 minutes
Number of recruitment methods used, including offline promotion in club/bar washrooms and health services for MSM	Multiple comparison analysis was used to compare indicators by key characteristics – increased chance of false positives
Survey available in 33 languages	Weaknesses in some survey questions: • Non-standardised measure of alcohol and tobacco consumption • Scales used for sexual happiness and thoughts of harm or better off dead not validated in this population
Broad geographical coverage across Ireland	Difficulties in comparing prevalence of chemsex in EMIS-2017 Ireland to other surveys in the Irish context due to variance in the definition of chemsex
Broad range of topics included	

Chapter 3
Demographic profile



Chapter 3 Demographic profile

3.1 Gender identity

Two thousand and eighty-three men were included in the final analytic sample. Fewer than 1% (n=17) of respondents identified as a trans man.

3.2 Age

Age was a qualifying condition for the survey, i.e. being at or above the age of consent for sex in Ireland (17 years and older). Figure 3.1 shows the distribution of age across the entire sample.

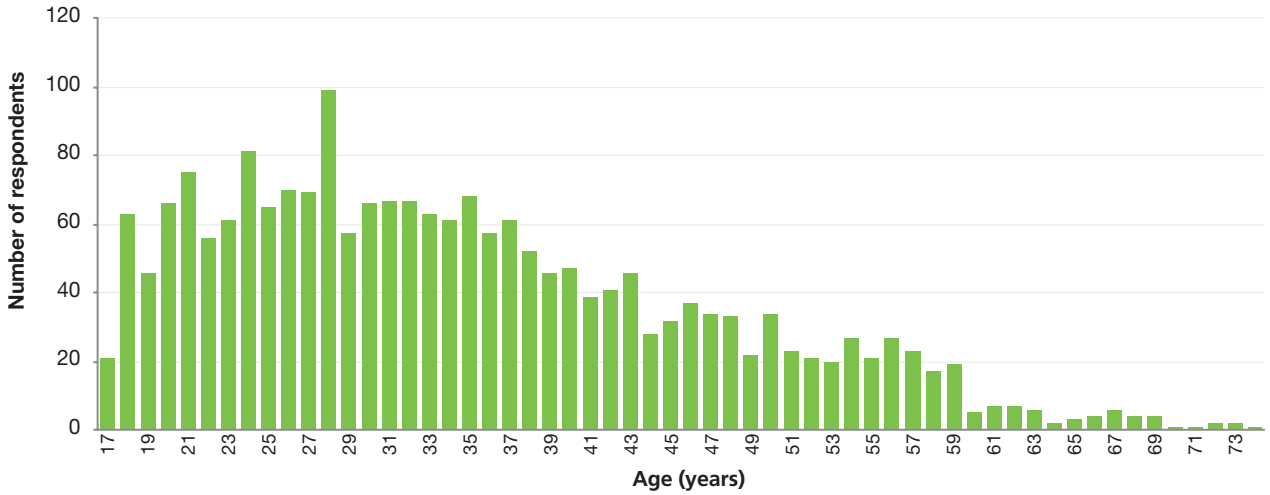


Figure 3.1 Age distribution of respondents (n=2,083)

The median age of respondents was 33 years (range 17 to 74 years) and the average was 35 years. Twenty-three percent of respondents (n=469) were young people aged 17–24 years and 8% (n=162) were 55 years or older (Table 3.1).

Table 3.1 Distribution of respondents by age group (n=2,083)

Age group (years)	n	%	Cumulative %
17-24	469	22.5	22.5
25–39	968	46.5	69.0
40–54	484	23.2	92.2
≥55	162	7.8	100.0

3.3 County of residence and settlement size

There were respondents from all 26 counties in the Republic of Ireland. One hundred and twenty-one men (6%) did not provide their county of residence. More than half the respondents were living in Dublin (57%), 9% were living in Cork, 5% in Galway and 4% in Limerick. All other counties accounted for the remaining 26% of responses.

Figure 3.2 shows the response rate for each county per 10,000 male population aged 17–74 years. The response rate per 10,000 male population aged 17–74 years was highest in Dublin (23.1), Limerick (11.0) and Carlow (10.5). It was lowest in Longford (3.6), Cavan (3.4) and Monaghan (3.3).

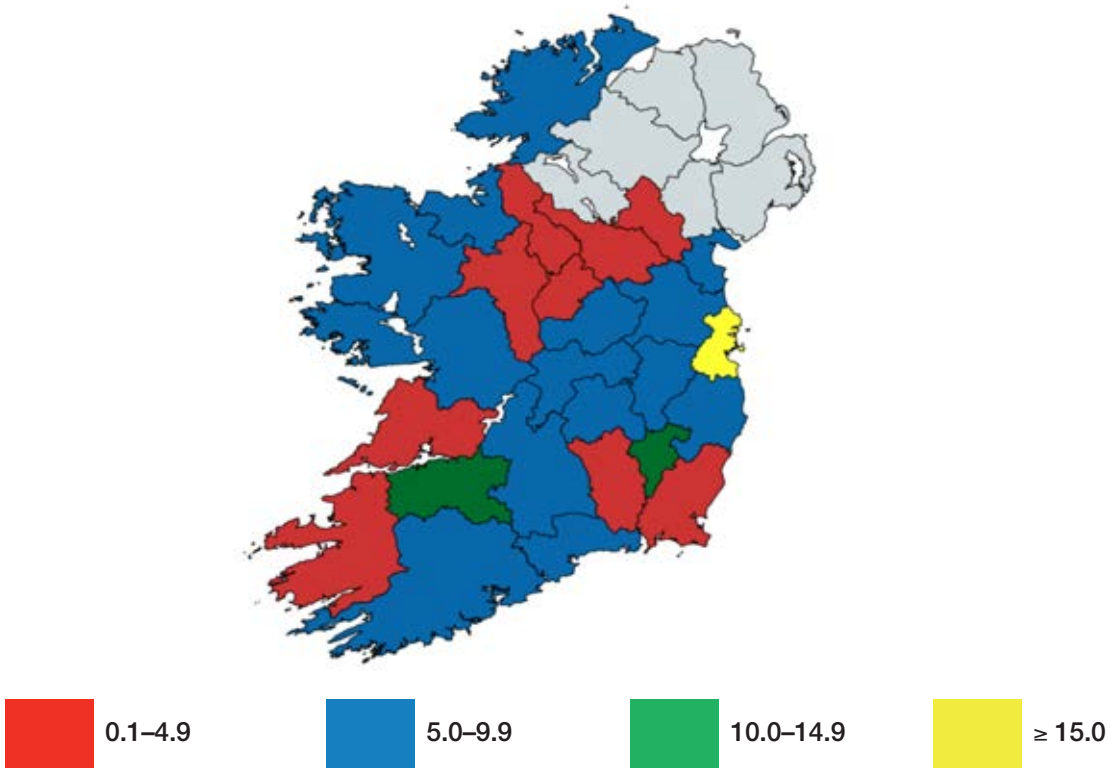


Figure 3.2 Response rate per 10,000 male population of each county in the Republic of Ireland

Data for the male population aged 17–74 years of each county was derived from the Central Statistics Office (CSO) website.[12]

Respondents were asked 'How would you describe the place you live?' and were given several options with an estimated population of each option. It should be noted these definitions were automatically given by the EMIS-2017 survey and are not necessarily accurate in an Irish context. Table 3.2 shows the distribution of respondents based on settlement size. Nearly half of respondents lived in a settlement with more than 500,000 people, and 18% lived in a village or countryside of less than 10,000 inhabitants.

Table 3.2 Distribution of respondents by settlement size (n=2,070, missing n=13)

Settlement size	n	%
Very big city or town (≥1 million population)	662	32.0
Big city or town (500,000–999,999 population)	329	15.9
Medium-sized city/town (100,000–499,999 population)	261	12.6
Small city/town (10,000–99,999 population)	454	21.9
Village or countryside (<10,000 population)	364	17.6

3.4 Country of birth, length of residence in Ireland and reasons for migration

Seventy-five percent of respondents were born in Ireland and 25% were born abroad. Of those born abroad, 26% were born in the United Kingdom, 38% were born in other European countries and 19% were born in Latin America and the Caribbean (Table 3.3).

Respondents not born in Ireland were born in 65 different countries. The most common countries of birth were England (n=80), Brazil (n=62), Northern Ireland (n=34), Poland (n=29) and Germany (n=25).

Table 3.3 Distribution of respondents born outside Ireland by region of birth as per World Health Organization (WHO) regions (amended) (n=514, missing n=3)

Region of birth	n	%
Europe (excluding UK)	193	37.5
United Kingdom	134	26.1
Latin America and Caribbean	95	18.5
Canada, USA	30	5.8
Western Pacific Region (excl. AU and NZ)	29	5.6
African region	16	3.1
South East Asia	8	1.6
Eastern Mediterranean	7	1.4
Western Pacific Region: AU and NZ	2	0.4

Of the men born abroad, 37% were living in Ireland for more than 10 years, 14% between six and ten years, 33% between one and five years and 15% for less than one year. Work and study were the most common reasons for men born abroad to come to Ireland (62%). Fewer than one percent of respondents cited seeking asylum or coming to Ireland as a refugee as the reason they came to Ireland.

3.5 Education, employment and financial coping

3.5.1 Education

The median number of years in education since the age of 16 was six years. Almost all men (97%) had some education after the age of 16, and the majority (86%) had more than two years education after 16 years of age. Figure 3.3 shows the breakdown of respondents by years in full-time education since the age of 16.

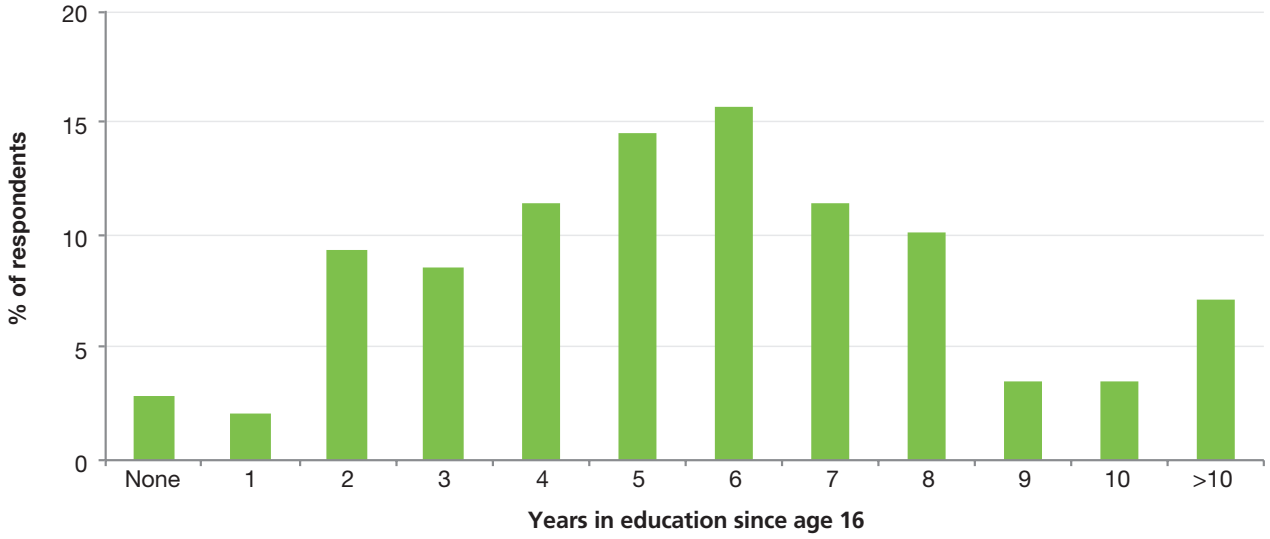


Figure 3.3 Years spent in full time education since the age of 16 years (n=1,894, missing n=189)

3.5.2 Employment

Overall, 73% of men were in employment, with two-thirds either employed full-time or self-employed. Eighteen percent of respondents were students and 5% were unemployed. The remaining men were either retired (2%), on long-term sick leave/medically retired (1%) or indicated 'other' (1%).

Table 3.4 shows the association between employment status and age group. The majority of men who were employed were aged between 25-39 years (55%), and the majority of students were aged 17-24 years (78%).

Table 3.4 Employment status by age group (n=2,073, missing n=10)

Age group (years)	Employed n (%) 1,505 (72.6)	Unemployed n (%) 94 (4.5)	Student n (%) 373 (18.0)	Other*n (%) 101 (4.9)
17-24	147 (9.8)	23 (24.5)	290 (77.7)	6 (5.9)
25–39	831 (55.2)	39 (41.5)	73 (19.6)	21 (20.8)
40–54	433 (28.8)	21 (22.3)	8 (2.1)	21 (20.8)
≥55	94 (6.2)	11 (11.7)	2 (0.5)	53 (52.5)
p-value	<0.001			

**Other=retired/long-term sick/medically retired/other*

3.5.3 Financial coping

Men were asked 'Which of these phrases would you say comes closest to your feelings about your income these days?' and were offered several responses as shown in Table 3.5.

Overall, almost half of men (49%) felt that they were living comfortably or really comfortably and over 17% felt that they were struggling or really struggling on their present income.

Table 3.5 Distribution of respondents by financial coping (n=2,077, missing n=6)

Financial coping	n	%
Really comfortable	290	14.0
Comfortable	729	35.1
Neither comfortable nor struggling	696	33.5
Struggling	267	12.9
Really struggling	95	4.6

Table 3.6 shows the association between financial coping and employment status. The majority of employed men were either living really comfortably or comfortably on their present income, whereas the majority of unemployed men (58%) were struggling or really struggling on their current income. Twenty-seven percent of students were struggling or really struggling on their current income.

Table 3.6 Financial status by employment status (n=2,071, missing n=12)

Financial status	Employed n (%) n=1,505	Unemployed n (%) n=93	Student n (%) n=372	Other*n (%) n=101
Really comfortable	246 (16.3)	6 (6.4)	26 (7.0)	11 (10.9)
Comfortable	600 (39.9)	8 (8.6)	92 (24.7)	27 (26.7)
Neither comfortable nor struggling	482 (32.0)	25 (26.9)	152 (40.9)	34 (33.7)
Struggling	143 (9.5)	31 (33.3)	78 (21.0)	15 (14.8)
Really struggling	34 (2.3)	23 (24.7)	24 (6.4)	14 (13.9)
p-value	<0.001			

**Other=retired/long-term sick/medically retired/other*

3.6 Sexual attraction, sexual identity and outness

3.6.1 Sexual attraction

Men were asked 'Who are you sexually attracted to?' and were asked to tick as many as apply (see Table 3.7). Eighty three percent were exclusively attracted to men, 15% were also attracted to women and 6% were also attracted to non-binary people. Figures add up to more than 100% as there is overlap between the latter two categories.

Table 3.7 Sexual attraction of respondents (n=2,081, missing n=2)

	n	%
Men only	1,723	82.8
Men and women	206	9.9
Men, women and non-binary people	85	4.1
Men and non-binary people	39	1.9
Women only	12	0.6
No one	6	0.3
Women and non-binary people	5	0.2
Non-binary people only	5	0.2

3.6.2 Sexual identity

Men were asked to pick an option to best describe how they think of themselves in terms of sexual identity (n=2,083). Most men (81%) identified as gay or homosexual, 13% as bisexual, 1% as straight or heterosexual, 5% stated they didn't use a term and <1% used another term to describe themselves.

3.6.3 Outness

Outness was defined as the degree to which people were open about their sexual attraction with others. Overall, 51% of men were out about their attraction to men to all or almost all of the people they knew and 69% were out to more than half of the people they knew. Thirty-one percent were out to less than half who knew them, of whom 15% were only out to a few people, and 6% were not out to anyone.

Table 3.8 shows the association between outness and sexual identity. The majority of MSM (76%) who identified as gay were out to more than half of the people who knew them. Nearly three-quarters of men who identified as bisexual were out to less than half of the people who knew them and 27% were not out to anyone.

Table 3.8 Outness by sexual identity (n=2,052, missing n=31)

Outness	Gay n (%) n=1,689	Bisexual n (%) n=250	Other*n (%) n=113
All or almost all	981 (58.1)	31 (12.4)	26 (23.0)
More than half	309 (18.3)	36 (14.4)	17 (15.0)
Less than half	169 (10.0)	39 (15.6)	8 (7.1)
Few	188 (11.1)	76 (30.4)	42 (37.2)
None	42 (2.5)	68 (27.2)	20 (17.7)
p-value	<0.001		

**Other=straight/heterosexual, any other term, I don't usually use a term*

3.7 Partnership status

Respondents were asked if they currently have a 'steady partner'. Overall, 35% indicated they had a steady partner and 59% were single, with the remaining saying it was complicated.

Of those who had a steady partner, 84% were with one man only, 4% were with more than one man, 10% were with one woman only and 2% were in other steady relationships.

Men with a steady male partner (n=659) were also asked 'Does your steady male partner have HIV?' Overall, 2% did not know their partner's HIV status, 89% knew their partner was HIV negative, 8% knew he was HIV positive and had an undetectable viral load, and fewer than 1% knew he was HIV positive and that his viral load was detectable.

3.8 Buying and selling sex

All men were asked 'When was the last time you paid a man to have sex with you? By paid we mean you gave him money, gifts or favours in return for sex' and 'When was the last time you were paid by a man to have sex with him? By paid we mean he gave you money, gifts or favours in return for sex.'

Table 3.9 shows the percentage of men who had ever paid for or had been paid for sex with another man. More men bought sex than were paid for it in their lifetime (14% versus 12%) and in the last 12 months (6% versus 4%).

Table 3.9 Distribution of respondents paying/being paid for sex with men

Time period	Paid for sex* (n=2,017, missing n=66)	Were paid for sex† (n=2,020, missing n=63)
	n (Cumulative %)	n (Cumulative %)
Last 4 weeks	29 (1.4)	29 (1.4)
Last 6 months	58 (4.3)	26 (2.7)
Last 12 months	35 (6.0)	33 (4.4)
Last 5 years	84 (10.2)	55 (7.1)
Ever	80 (14.2)	89 (11.5)

**Paying for sex meant giving money, gifts or favours in return for sex*
†Being paid for sex meant being given money, gifts or favours in return for sex

Of those who had paid for sex in the last 12 months (n=122), 39% had done so three or more times, with the remainder (61%) paying for sex once or twice.

Of those who had been paid for sex in the last 12 months (n=88), 48% had done so three or more times, with the remainder (52%) being paid for sex once or twice.

Chapter 4
Reported ill health

Chapter 4 Reported ill health

This chapter describes physical and mental ill health reported by MSM and it may be of particular interest to healthcare providers and those planning health services for MSM. MSM are disproportionally affected by mental health problems. Numerous studies have demonstrated that sexual minorities are at increased risk for anxiety, depressive and substance use disorders.[13,14] Additionally, poor mental health in MSM has been associated with an increased risk of HIV transmission.[15]

This chapter includes sections on mental health (anxiety and depression; thoughts of self-harm/better off dead; sexual unhappiness; possible alcohol dependency) and HIV and STIs (prevalence of HIV; unsuppressed diagnosed HIV; diagnoses of chlamydia, gonorrhoea and syphilis; first diagnosis of anal or genital warts; and past or current hepatitis C infection).

4.1 Mental Health

4.1.1 Indicators of anxiety and depression

The Generalised Anxiety Disorder (GAD-2) screening tool, which consists of the two core criteria for a generalised anxiety disorder, was used to assess anxiety in EMIS-2017. All men were asked 'Over the last 2 weeks, how often have you been bothered by the following problems:

1 Feeling nervous, anxious or on edge

2 Not being able to stop or control worrying?'

Responses to the questions were: not at all (0 points); some days (1 point); more than half the days (2 points); nearly every day (3 points).

The two-item Patient Health Questionnaire (PHQ-2), which consists of diagnostic core criteria for depressive disorders, was used to assess depression in EMIS-2017. All men were asked 'Over the last 2 weeks, how often were you bothered by the following problems:

1 Little interest or pleasure in doing things

2 Feeling down, depressed, or hopeless?'

Responses to the questions were: not at all (0 points); some days (1 point); more than half the days (2 points); nearly every day (3 points).

For GAD-2 and PHQ-2, a total score of three or greater indicates a 'yellow flag' and a total score of five or greater indicates a 'red flag' for anxiety or depression. GAD-2 and PHQ-2 are considered screening tools for anxiety and depression, and are not diagnostic tools. Both scales are validated for use in the general population.[16]

Table 4.1 shows the proportion of men in each category for anxiety and depression. Three-quarters of respondents had no indication of anxiety and 79% had no indication of depression. Twenty-five percent had some indication of anxiety, with 11% indicating a 'red flag' for anxiety. Twenty-one percent of respondents had some indication of depression, with 8% indicating a 'red flag' for depression.

Table 4.1 Prevalence of anxiety and depression among respondents

	Anxiety (n=2,073, missing n=10)	Depression (n=2,061, missing n=22)
	n (%)	n (%)
Normal range (0–2 points)	1,548 (74.7)	1,629 (79.0)
Yellow flag (3–4 points)	306 (14.8)	261 (12.7)
Red flag (≥5 points)	219 (10.6)	171 (8.3)

Both scales have been validated for use in the general population.

4.1.2 Thoughts of self-harm or of being better off dead

All men were asked 'Over the last 2 weeks, how often have you been bothered by thoughts that you would be better off dead, or of hurting yourself in some way?' This scale has not been validated for use in the general population. Table 4.2 shows the proportion of respondents giving each response.

Overall, 23% of respondents had considered hurting themselves or thought they would be better off dead over the past two weeks and 7% had coinsidered it more than half of the days during that time.

Table 4.2 Prevalence of thoughts of self-harm or of being better off dead in respondents in the last 2 weeks (n=2,075, missing n=8)

	n	%
Not at all	1,603	77.2
Some days	325	15.7
More than half the days	86	4.1
Nearly every day	61	2.9

This scale has not been validated for use in the general population.

4.1.3 Sexual happiness

Men were asked 'How happy are you with your sex life on a scale of 1 to 10 where 1 is the most unhappy and 10 is the most happy?' The average score for sexual happiness was 6.0 (standard deviation 2.3). Figure 4.1 shows the profile of scores for this question.

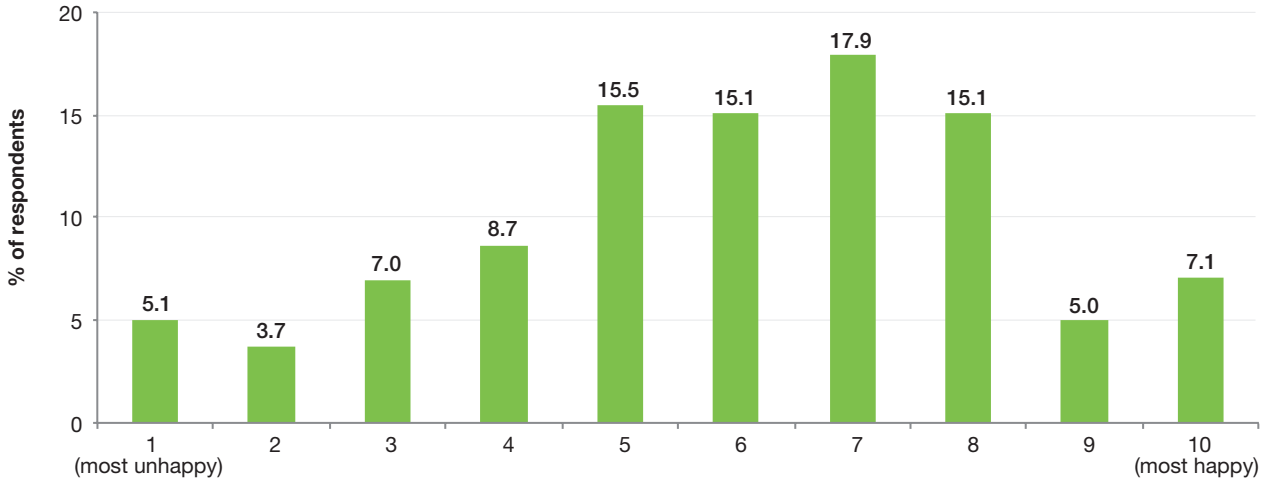


Figure 4.1 Profile of sexual happiness of respondents (n=2,071, missing n=12)

This scale has not been validated for use in the general population.

4.1.4 Possible alcohol dependency

The CAGE-4 screening measure was used to assess possible alcohol dependency. The CAGE-4 questionnaire for alcohol misuse has been previously validated for use in the general population.[17] Men who indicated they drank alcohol in the last 12 months [n=1,958 (94% of total sample)] were asked: 'Thinking about drinking alcohol in the past 12 months:

1 Have you tried to cut down on your drinking
2 Have people annoyed you by criticising your drinking
3 Have you felt bad or guilty about your drinking
4 Have you taken a drink first thing in the morning to steady your nerves or get rid of a hangover?'

Indicating 'yes' to two or more statements indicated possible alcohol dependency and would require further evaluation.

Table 4.3 shows the distribution of responses given by respondents. Thirty one percent of men who consumed alcohol in the last 12 months reported possible alcohol dependency which represented 29% of all respondents.

Table 4.3 Indicators of possible alcohol dependency in respondents who consumed alcohol in the last 12 months (n=1,952, missing n=6)

	n	%
Tried to cut down on your drinking	861	44.1
People annoyed you by criticising your drinking	344	17.6
Felt bad or guilty about your drinking	579	29.6
Taken a drink first thing in the morning to steady your nerves or get rid of a hangover	168	8.6
Possible alcohol dependency*	596	30.6

**Indicating yes to two or more of the above statements indicates possible alcohol dependency*

Information on social determinants of mental health, including social integration, reliable alliance and internalised homonegativity of respondents, is covered in section 6.1. The prevalence of homophobic abuse is covered in section 7.1.

4.2 HIV and STIs

4.2.1 Prevalence of HIV

All men were asked if they had ever received an HIV test result and, if yes, what the result was (Table 4.4). Twenty-three percent had never tested for HIV, 70% had tested negative at their last HIV test and 7% had received a positive diagnosis.

Among the subset of men who had ever tested for HIV (n=1,601), 9% had received a positive HIV diagnosis.

Table 4.4 HIV testing history (n=2,071, missing n=12)

	n	%
Never tested	470	22.7
Last test negative	1,459	70.4
Diagnosed positive	142	6.9

Table 4.5 describes the results of HIV tests and the recency of testing. The proportion of men who tested for HIV in the previous 12 months (recent testing) was 53%. Among respondents who had tested for HIV in the last year, less than 1% were diagnosed positive.

Table 4.5 Recency of last negative test and first positive test (n=2,063, missing n=20)

Testing history	Recency of test	n	% of total
Last test negative (n=1,458, missing n=1)	≤12 months	1,086	52.6
	>12 months	372	18.0
Last test positive (n=135, missing n=7)	≤12 months	12	0.6
	>12 months	123	6.0
Never tested	-	470	22.8
Total	-	2,063	100.0

4.2.2 Last viral load in men living with HIV

Men who had been diagnosed HIV positive (n=142) were asked 'What was the result of your viral load the last time you had your HIV infection monitored?' Ninety-six percent had an undetectable viral load, 3% did not know whether their last viral load was detectable and 1% had a detectable viral load.

4.2.3 Most recent diagnoses of syphilis, gonorrhoea and chlamydia

Overall, 55% of respondents had tested for an STI (not including HIV) within the previous 12 months, 21% had tested more than 12 months ago, and 24% had never tested for an STI. Of those with a history of ever having had an STI test, 72% had an STI test in the last 12 months. This topic is further discussed in section 7.8.

All men were asked 'When were you last diagnosed with syphilis?' Identical questions were asked about gonorrhoea and chlamydia. Table 4.6 shows the recency of diagnoses of syphilis, gonorrhoea and chlamydia. Gonorrhoea was the most commonly diagnosed bacterial STI in the last 12 months (9%), followed by chlamydia (6%) and syphilis (3%). Among the subset of respondents who had tested for an STI in the last 12 months (n=1,115), the prevalence of gonorrhoea increased to 16%, chlamydia increased to 10% and syphilis increased to 6%.

Table 4.6 Recency of STI diagnosis

Time period	Syphilis (n=2,051, missing n=32)	Gonorrhoea (n=2,045, missing n=38)	Chlamydia (n=2,038, missing n=45)
	n (Cumulative %)	n (Cumulative %)	n (Cumulative %)
Last 4 weeks	8 (0.4)	32 (1.6)	11 (0.5)
Last 6 months	23 (1.5)	72 (5.1)	46 (2.8)
Last 12 months	35 (3.2)	81 (9.1)	55 (5.5)
Last 5 years	86 (7.4)	183 (18.0)	155 (13.1)
Ever	79 (11.3)	116 (23.7)	86 (17.3)

Overall, 14% of all men were diagnosed with any bacterial STI (syphilis, chlamydia or gonorrhoea) in the last 12 months. Among the subset of respondents who had tested for an STI in the last 12 months, the prevalence increased to 26%.

4.2.4 First diagnosis of anal or genital warts

All men (n=2,083) were asked if they had ever been diagnosed with anal or genital warts (n=2,083). Sixteen percent (n=327) of men indicated they had ever been diagnosed with anal or genital warts, with 1% of men diagnosed in the last 12 months.

4.2.5 Past and current hepatitis C infection

All men (n=2,083) were asked if they had ever been diagnosed with hepatitis C. One percent (n=24) of respondents reported that they were ever diagnosed with hepatitis C, with 0.2% of these first diagnosed in the last 12 months. Fewer than 1% of all men were diagnosed with both HIV and hepatitis B or C.

4.3 Reported ill health in MSM by key characteristics

This section explores how reported ill health among MSM in Ireland was distributed across several characteristics: age, employment status and HIV testing history. The likelihood that differences among individuals in different groups were due to chance was established using chi-squared analysis (χ^2) for continuous variables and independent t-test or ANOVA for categorical variables. If the significance value was ≤0.05, there was deemed to be a significant difference between the groups.

Table 4.7 shows reported ill health in MSM by age group. Fifteen percent of respondents aged 17-24 indicated a 'red flag' for anxiety and 30% had thoughts over the last two weeks that they would be better off dead, or of hurting themselves. Less than 1% of 17-24 year olds reported an HIV diagnosis, 8% reported a gonorrhoea diagnosis in the last 12 months, 4% reported a chlamydia diagnosis and 1% a syphilis diagnosis. These

percentages are lower compared to other age groups (Table 4.7). A higher percentage (17%) of men aged 55 and over reported being HIV positive compared to other age groups.

Twenty percent and 22% of unemployed men had red flags for anxiety and depression, respectively. Forty-one percent of unemployed men had thoughts of hurting themselves or of being better off dead in the last two weeks and 43% indicated possible alcohol dependency (among men who consumed alcohol within the last 12 months). (Table 4.8).

Men with diagnosed HIV reported a higher frequency of gonorrhoea (16%), chlamydia (14%) and syphilis (12%) diagnoses in the last 12 months compared to those who never tested for HIV, or those whose last HIV test was negative (Table 4.9).

Table 4.7 Reported ill health in MSM by age group

Age groups (n=2,083)	17-24 (n=469)	25–39 (n=968)	40-54 (n=484)	≥55 (n=162)	All*	p value
Reported ill health in MSM						
% 'Red flag' for anxiety	15.5	10.2	7.9	6.8	10.6	<0.001
% 'Red flag' for depression	10.1	8.4	6.7	6.9	8.3	0.281
% Thoughts that you would be better off dead, or hurting yourself, last 2 weeks	29.8	21.2	20.6	17.9	22.7	<0.001
Average sexual happiness self-rating (out of 10)	5.7	6.1	5.8	6.0	6.0	0.004
% Possible alcohol dependency†	29.2	33.0	29.5	22.7	30.6	0.061
% Diagnosed with HIV	0.6	6.9	9.6	16.5	6.9	<0.001
% Gonorrhoea diagnosis last 12 months	7.6	11.3	7.6	4.5	9.0	0.007
% Chlamydia diagnosis last 12 months	4.3	6.4	4.3	7.2	5.5	0.187
% Syphilis diagnosis last 12 months	1.1	3.2	4.2	6.5	3.2	0.004

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

† Among those who indicated they drank alcohol in last 12 months; 17-24 n=448, 25-39 n=917, 40-54 n=441, ≥55 n=141

Table 4.8 Reported ill health in MSM by employment status

Employment status (n=2,073, missing n=10)	Employed (n=1,505)	Unemployed (n=94)	Student (n=373)	Other (n=101)	All*	p value
Reported ill health in MSM						
% 'Red flag' for anxiety	8.8	20.2	13.2	16.8	10.5	<0.001
% 'Red flag' for depression	6.8	22.3	8.1	15.1	8.2	<0.001
% Thoughts that you would be better off dead, or hurting yourself, last 2 weeks	19.0	40.9	30.4	30.7	22.6	<0.001
Average sexual happiness self-rating (out of 10)	6.1	5.5	5.8	5.7	6.0	0.020
% Possible alcohol dependency†	31.1	42.9	25.6	28.3	30.5	0.014
% Diagnosed with HIV	7.4	9.7	1.3	16.0	6.8	<0.001
% Gonorrhoea diagnosis last 12 months	9.9	3.3	7.6	7.0	9.1	0.088
% Chlamydia diagnosis last 12 months	6.1	2.2	4.0	5.1	5.5	0.212
% Syphilis diagnosis last 12 months	3.6	3.3	1.1	5.0	3.2	0.063

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

† Among those who indicated they drank alcohol in last 12 months; Employed n=1,411, Unemployed n=84, Student n=352, Other n=92

Table 4.9 Reported ill health in MSM by HIV testing history

HIV testing history (n=2,071, missing n=12)	Never tested (n=470)	Last test negative (n=1,459)	Diagnosed positive (n=142)	All*	p value
Reported ill health in MSM					
% 'Red flag' for anxiety	12.7	13.4	9.7	10.6	0.100
% 'Red flag' for depression	8.9	12.9	7.7	8.3	0.099
% Thoughts that you would be better off dead, or hurting yourself, last 2 weeks	26.4	21.0	28.9	22.8	0.011
Average sexual happiness self-rating (out of 10)	5.5	5.8	6.1	6.0	<0.001
% Possible alcohol dependency†	26.9	32.0	28.5	30.6	0.119
% Gonorrhoea diagnosis last 12 months	0.6	11.0	16.2	9.0	<0.001
% Chlamydia diagnosis last 12 months	0.9	6.2	14.4	5.5	<0.001
% Syphilis diagnosis last 12 months	0.0	3.3	12.1	3.2	<0.001

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

† Among those who indicated they drank alcohol in last 12 months; Never tested n=427, Last test negative n=1,372, Diagnosed positive n=137

Chapter 5

Risk and precautionary behaviours

Chapter 5 Risk and precautionary behaviours

This chapter reports on risk and precautionary behaviours reported by MSM, and may be of particular interest to those involved in planning, implementing and monitoring interventions to reduce risk behaviours and enable precautionary behaviours. There is also a section that reviews behaviours during last sex session in more detail.

This chapter includes sections relating to:

- HIV treatment
- seeking and taking PEP and PrEP
- being vaccinated against hepatitis
- sex with men
- sex with women
- the use of alcohol, tobacco and drugs
- injecting drugs
- combining sex, drugs and alcohol
- last sex session with a non-steady partner.

5.1 HIV treatment among men with HIV

Overall, 7% indicated that they had been diagnosed with HIV (see also section 4.2.1). For individuals living with HIV, taking effective anti-retroviral treatment (ART) that results in an undetectable viral load prevents HIV being transmitted to others.

5.1.1 HIV antiretroviral treatment

Men living with HIV (n=142) were asked if they had ever taken ART and, if yes (n=134), if they were currently taking it. Overall, 94% of men living with HIV had ever taken ART, and of those 99% were currently on ART.

5.1.2 Time between diagnosis and treatment

Men who ever used ART (n=134) were asked 'How much time was there between your HIV diagnosis and you starting treatment?'

Twenty-seven percent of men indicated starting treatment for HIV within one month of diagnosis and a further 30% received treatment within one year of diagnosis. The remainder (43%) started treatment more than a year from their diagnosis.

Table 5.1 shows the relationship between year of diagnosis and average time for starting ART. It should be noted that ART was not available in Ireland before 1996. The time between diagnosis and treatment has substantially declined over time. The average time for starting ART was two years for men diagnosed between 2006 and 2010 and was less than three months for men diagnosed in 2016 or 2017. The decrease in time between diagnosis and treatment reflects current HSE guidelines which state that all people living with HIV attending HIV services in Ireland are offered ART and informed of the benefits of ART in improving their personal health and reducing HIV viral load.[18]

Table 5.1 Year of diagnosis and average time between diagnosis and starting treatment (n=119, missing n=15)

Year of diagnosis	n	Average time for starting treatment (months)
1991–1995	4	63
1996–2000	8	48
2001–2005	22	52
2006–2010	25	25
2011–2015	42	9
2016–2017	18	3

5.2 Seeking and taking HIV chemoprophylaxis

Men without HIV can reduce their risk of acquiring infection by taking HIV antiviral drugs known as chemoprophylaxis (PEP and PrEP). Taken correctly, PEP and PrEP are effective means of protection against HIV transmission.

5.2.1 Seeking and taking Post-Exposure Prophylaxis (PEP)

Men who were not diagnosed with HIV or who had never tested for HIV (n=1,929) were asked 'Have you ever tried to get PEP (even if you did not take it)?' Overall, 13% had tried to get PEP.

Of the men who tried to get PEP (n=252), 72% took at least one course, one in five could not get it and 7% could get it but decided not to take it. In the total sample of men (n=1,928), 10% had taken at least one course of PEP, while 3% could not get it (Table 5.2).

Table 5.2 Distribution of respondents who had ever/never taken PEP

Ever taken PEP	Of those who tried to get PEP* (n=251, missing n=1)		Total sample* (n=1,928, missing n=1)	
	n	%	n	%
No, could not get it	50	19.9	50	2.6
Had the opportunity but didn't take it	17	6.8	17	0.9
Yes, taken one course of pills	140	55.8	140	7.3
Yes, taken more than one course of pills	42	16.7	42	2.2
I don't know	2	0.8	2	0.1
Never tried to get PEP	-	-	1,677	87.0

**excluding men diagnosed HIV positive*

5.2.2 Seeking and taking Pre-Exposure Prophylaxis (PrEP)

Men who were not diagnosed with HIV or who had never tested for HIV (n=1,929) were asked 'Have you ever tried to get PrEP?' Overall, 10% had tried to get PrEP.

Of the men who tried to get PrEP (n=198), 55% had never taken PrEP, 31% were taking it daily and 9% were taking it on an event-based basis (PrEP is taken at least 24 hours in advance of intercourse in place of taking it daily). In the total sample of men (n=1,917), 4% were currently taking PrEP (with 3% taking it daily) and 95% had never taken PrEP (Table 5.3).

Table 5.3 Distribution of respondents who had ever/never taken PrEP

Ever taken PrEP	Of those who tried to get PrEP* (n=192, missing n=6)		Total sample* (n=1,917, missing n=12)	
	n	%	n	%
No	105	54.7	1,826	95.2
Currently taking it on a daily basis	59	30.7	60	3.1
Used to, but no longer taking it	11	5.7	11	0.6
Currently taking it on event based basis	17	8.9	18	0.9
Don't know	-	-	2	0.1

**excluding men diagnosed HIV positive*

5.3 Being vaccinated against hepatitis A and B

Forty-eight percent of all men had been fully vaccinated against hepatitis A and 5% had natural immunity to hepatitis A. Forty-three percent of respondents did not know if they had been vaccinated against hepatitis A.

Fifty-three percent of all men had been fully vaccinated against hepatitis B and 4% had natural immunity to hepatitis B. Thirty-six percent of men did not know if they had been vaccinated against hepatitis B (Table 5.4).

Table 5.4 Distribution of respondents who have been vaccinated against hepatitis A/B

Hepatitis vaccination status	Hepatitis A (n=2,076, missing n=7)		Hepatitis B (n=2,077, missing n=6)	
	n	%	n	%
No, I've had hepatitis A/B (naturally immune)	99	4.8	86	4.1
No, I have chronic hepatitis B infection	-	-	6	0.3
Yes, and I have completed the course	997	48.0	1,107	53.3
Yes, but I did not complete the course	97	4.7	88	4.2
Yes, but I did not respond to the vaccinations	-	-	36	1.7
I don't know	883	42.6	754	36.3

5.4 Sex with men

Respondents were told 'In this survey we use "sex" to mean physical contact to orgasm (or close to orgasm) for one or both partners.' Men were also told 'In this survey we use the term "intercourse" to mean sex where one partner puts their penis into the other partner's anus or vagina whether or not this occurs to ejaculation. Intercourse does not include oral sex or the use of dildos.'

Overall, 97% of men had ever had sex with a man and the median age of first sex was 18 years. Ninety-three percent of men had sex with a man within the last 12 months.

Among men who ever had sex with a man (n=2,022), 93% of men had ever had intercourse with a man and the median age of first intercourse was 19 years. Eighty-one percent of men had intercourse with a man in the last 12 months.

5.4.1 Steady partners in last 12 months

The survey defined the term 'steady partner' as 'boyfriends or husbands that mean you are not "single", but not to partners who are simply sex buddies'. Men who reported having sex in the last 12 months were asked a series of questions about a steady partner (n=1,930).

Half of respondents had sex with one or more steady partners in the last 12 months. Of these, 72% reported sex with one steady partner, 22% with 2–4 steady partners and 6% with five or more steady partners.

Among men who had sex with steady partners, 75% had condomless anal intercourse (CAI), 17% had intercourse using a condom and 8% did not have any intercourse.

The majority of men who indicated CAI with a steady partner in the last 12 months reported having one partner only (80%), 17% had CAI with 2–4 steady partners and 3% with five or more steady partners.

5.4.2 Non-steady partners in last 12 months

The survey defined 'non-steady partners' to mean 'men you have had sex with once only, and men you have sex with more than once but who you don't think of as a steady partner (including one-night stands, anonymous and casual partners, or regular sex buddies)'. Men who reported having sex in the last 12 months were asked a series of questions about non-steady partners (n=1,930).

Proportions of men who had sex with one or more non-steady male partner(s) within the last 12 months are summarised in Figure 5.1. Seventy-nine percent reported having sex with non-steady male partners in the last 12 months. Of these men, 12% reported one non-steady partner, 28% reported 2–4 partners, 21% reported 5–9 partners and 39% reported 10 or more. Of the men who had sex with at least one non-steady partner in the last 12 months (n=1,518), 54% reported CAI, 32% had intercourse using a condom and 14% did not have intercourse. Among men who had CAI (n=791), 32% had CAI with one non-steady partner, 34% with 2–4 partners, 14% with 5–9 partners and 19% with 10 or more.

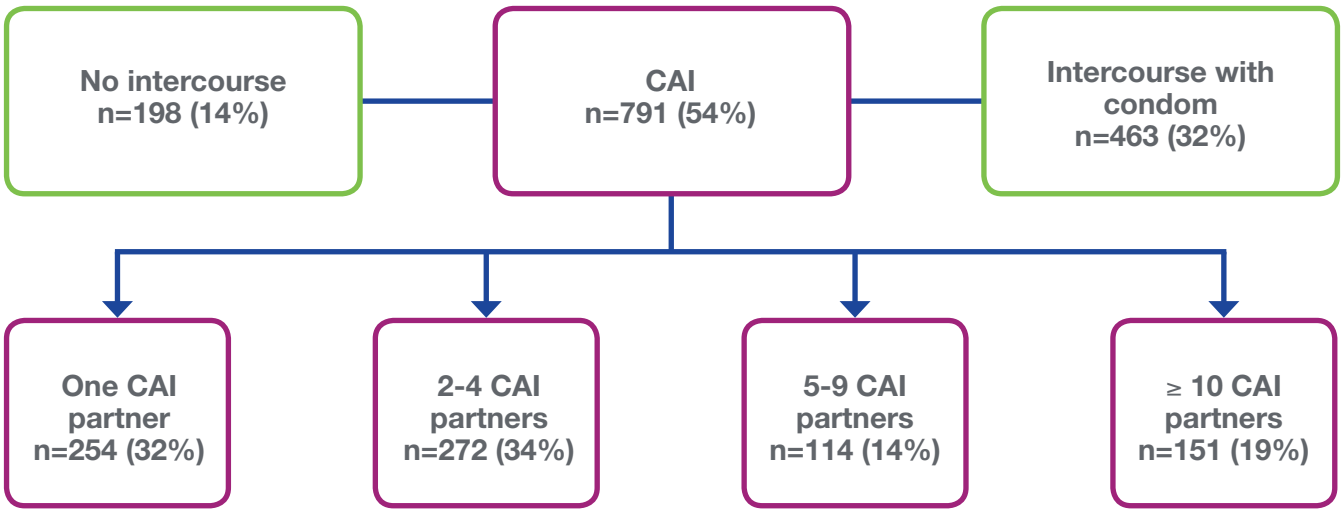


Figure 5.1 Details of the type of sex men had with one or more non-steady male partner(s) within the last 12 months (n=1,452, missing n=66)

Men who had intercourse with non-steady partners in the last 12 months (n=1,298) were asked 'In the last 12 months, how often were condoms used when you had intercourse with non-steady male partners?' Thirty-seven percent of men reported consistent use of condoms with non-steady partners in the last 12 months, 54% reported inconsistent use and 9% never used condoms in the last 12 months with non-steady partners.

5.4.3 Risk mitigation in condomless anal intercourse with non-steady partners

Seventy-nine percent of men who had sex in the previous 12 months had sex with non-steady partners in the last 12 months. Of these, 87% had intercourse with non-steady partners in the last 12 months, and 63% did not always use a condom. This is shown by HIV status in Table 5.5.

Table 5.5 Risk mitigation in CAI with non-steady male partners by HIV status

Sexual behaviour measure	Men without diagnosed HIV		Men with diagnosed HIV	
	n/N	%	n/N	%
Sex with non-steady partners in last 12 months among men who had sex with a man in the previous 12 months	1,392/1,767	78.8	116/135	85.9
Intercourse with non-steady male partners in last 12 months among men who had sex with a non-steady partner in previous 12 months	1,181/1,376	85.8	108/111	97.3
Inconsistent condom use during intercourse with non-steady male partners in last 12 months among men who had intercourse with a non-steady partner in previous 12 months	717/1,179	60.8	90/108	83.3

Serosorting

Men who had indicated inconsistent condom use with non-steady partners in the last 12 months (n=807) were asked questions regarding serosorting (the practice of using HIV status as a decision-making point in choosing sexual behaviour) and their responses are given in Table 5.6 by HIV status.

Table 5.6 Distribution of serosorting in respondents who indicated inconsistent condom use by HIV status

Intercourse with non-steady partners*	Men without diagnosed HIV (n=717)		Men with diagnosed HIV (n=90)	
	n	%	n	%
Who you knew at the time was HIV positive	89	12.4	57	63.3
Who you knew at the time was HIV negative	413	57.8	56	62.2
Whose HIV status you did not know or think about at the time	487	67.9	71	78.9

**Multiple answers possible*

Undetectable viral load and PrEP use

Men who had inconsistent condom use with non-steady partners who they knew at the time were HIV positive were asked 'Did that HIV positive man/those HIV positive men have undetectable viral load?' Table 5.7 shows the responses given by respondents.

Table 5.7 Knowledge of undetectable viral load of non-steady male partner who was HIV positive among men who indicated inconsistent condom use

Non-steady partner(s) had an undetectable viral load	Men without diagnosed HIV (n=89, missing n=0)	
	n	%
Yes, I knew he did/they all did	66	74.2
Yes, I knew some of them did	10	11.2
No, he did not/none of them did	1	1.1
I don't know	8	9.0
Don't understand	4	4.5

Men who had inconsistent condom use with non-steady male partners who they knew at the time were HIV negative were asked 'Was that HIV negative man/were those HIV negative men taking PrEP?' Table 5.8 shows the responses given.

Table 5.8 Knowledge of PrEP use of non-steady male partner who was HIV negative among respondents who indicated inconsistent condom use

Non-steady partner was taking PrEP	Men without diagnosed HIV (n=413, missing n=0)		Men with diagnosed HIV (n=56, missing n=0)	
	n	%	n	%
Yes, I knew he was/they all were	38	9.2	12	21.4
Yes, I knew some of them were	100	24.2	15	26.8
No, he was not/none of them were	133	32.2	6	10.7
I don't know	140	33.9	22	39.3
Don't understand	2	0.5	1	1.8

5.5 Sex with women

In the total sample, 44% of men (n=900) reported ever having sex with a woman, with 9% reporting they had sex with a woman within the past 12 months. Of those who had sex with a woman in the last 12 months (n=195), 9% had not had any intercourse with women, 47% had intercourse with one female partner, 27% with 2–4 female partners and 17% with five or more partners.

In men who indicated they had intercourse with at least one woman in the last 12 months (n=178), 31% always used condoms and, equally, 31% reported never using condoms. Thirty-eight percent of respondents reported inconsistent condom use when having sex with women.

5.6 Use of alcohol, tobacco and drugs

5.6.1 Alcohol, tobacco, poppers and prescription drugs

All men were asked 'When was the last time you consumed alcohol/tobacco products/poppers (nitrate inhalants)?' They were also asked 'When was the last time you consumed Viagra, Cialas, Levitra or other substances that help to get or keep an erection?' and 'When was the last time you consumed sedatives or tranquilisers (Valium, Rivotril, Rohypnol, Xanax, Seduxen, Phenazepam)?' Table 5.9 shows the distribution of responses given by respondents.

Table 5.9 Respondent use of alcohol, tobacco, poppers and prescription drugs

n (Cumulative %)	Last 4 weeks	Last 12 months	Ever
Alcohol (n=2,079, missing n=4)	1,850 (89.0)	1,958 (94.2)	2,018 (97.1)
Tobacco products (n=2,078, missing n=5)	783 (37.7)	981 (47.2)	1,356 (65.3)
Poppers (n=2,078, missing n=5)	585 (28.2)	952 (45.8)	1,332 (64.1)
Erectile dysfunction drugs (n=2,076, missing n=7)	238 (11.5)	427 (20.6)	619 (29.8)
Sedatives/tranquilizers (n=2,076, missing n=7)	153 (7.4)	352 (17.0)	573 (27.6)

5.6.2 Other drugs

All men were asked 'When was the last time you consumed: cannabis (hashish, marijuana); synthetic cannabinoids (e.g. Spice, K2, herbal incense); ecstasy (E, XTC, MDMA) in the form of a pill; ecstasy (E, XTC, MDMA) in the form of a crystal or powder; amphetamine (speed); crystal meth (Tina, Pervitin); heroin or related drugs (poppy straw, kompot, fentanyl); mephedrone (4-MMC, meow, methylone, bubbles); synthetic stimulants other than mephedrone (e.g. MXE, bathsalts, 3-MMC, 4-MEC, 4-FA, XTC-light); GHB/GBL (liquid ecstasy); ketamine (special K); LSD (acid); cocaine; crack cocaine.'

Table 5.10 shows the frequency with which different drugs were used. Overall, 41% of respondents used drugs in the last 12 months and 26% had used drugs in the last four weeks. The most commonly used drugs in the last 12 months were cannabis (34%), cocaine (20%), ecstasy pills (19%) and ecstasy powder (15%). In the last four weeks, cannabis and cocaine were used by 17% and 9% of respondents, respectively.

Table 5.10 Respondents use of illicit drugs

n (Cumulative %)	Last 4 weeks	Last 12 months	Ever
Cannabis (n=2,060, missing n=23)	349 (16.9)	700 (34.0)	1,095 (53.2)
Cocaine (n=2,057, missing n=26)	185 (9.0)	418 (20.3)	666 (32.4)
Ecstasy pill (n=2,059, missing n=24)	143 (7.0)	387 (18.8)	681 (33.1)
Ecstasy powder (n=2,055, missing n=28)	99 (4.8)	309 (15.0)	508 (24.7)
Synthetic cannabinoids (n=2,053, missing n=30)	16 (0.8)	32 (1.6)	202 (9.8)
Crack cocaine (n=2,059, missing n=24)	6 (0.3)	11 (0.5)	48 (2.3)
Heroin or related (n=2,060, missing n=23)	7 (0.3)	11 (0.5)	45 (2.2)
Stimulant drugs			
Ketamine (n=2,059, missing n=24)	65 (3.2)	173 (8.4)	335 (16.3)
GHB/GBL (n=2,058, missing n=25)	66 (3.2)	152 (7.4)	268 (13.0)
Crystal meth (n=2,056, missing n=27)	31 (1.5)	79 (3.8)	156 (7.6)
Mephedrone (n=2,057, missing n=26)	10 (0.5)	30 (1.5)	154 (7.5)
Synthetic stimulants other than mephedrone (n=2,059, missing n=24)	9 (0.4)	21 (1.0)	104 (5.1)
Amphetamine (n=2,057, missing n=26)	32 (1.6)	143 (7.0)	409 (19.9)
LSD (n=2,057, missing n=26)	20 (1.0)	73 (3.6)	266 (12.9)
Use of any stimulant drug (n=2,043)	152 (7.4)	331 (16.2)	596 (29.2)
Any drug use (n=2,029)	518 (25.5)	838 (41.3)	1,116 (55.0)

5.7 Injecting drugs

All men were asked 'Have you ever injected an anabolic steroid (testosterone), or had someone else inject into you?' and 'Have you ever injected any drug to get high (other than anabolic steroids or prescribed medicines), or had someone else inject into you?' Table 5.11 shows the frequency of drug injecting among respondents.

Table 5.11 Frequency of drug injecting

	Anabolic steroids (n=2,074, missing n=9)		Any drug to get high (n=2,076, missing n=7)	
	n	%	n	%
Within last 12 months	25	1.2	17	0.8
More than 12 months ago	18	0.9	26	1.3
Never	2,031	97.9	2,033	97.9

Fewer than 1% of respondents indicated they had injected any drug to get high in the last 12 months and just over 1% of respondents had injected anabolic steroids in the last 12 months.

Of men who indicated they injected drugs to get high in the last 12 months (n=17), 59% had done so three times or less and three-quarters of men had done it five times or less. Crystal meth was used by 83% of men who injected drugs, followed by ketamine (18%). Among men who had injected to get high in the last 12 months (n=17), 29% had injected with a used needle or syringe.

5.8 Combining sex, drugs and alcohol

5.8.1 Sex under intoxication

Men who had sex with men in the last 12 months (n=1,930) were asked 'In the last 12 months, how much of the sex you've had with men has been under the influence of alcohol or any other drug?' Over 45% indicated they had some sex under the influence of alcohol or any other drug, while 12% said almost all or all sex was under the influence (Table 5.12).

Table 5.12 Recency of sex under intoxication in the last 12 months (alcohol and/or drugs) (n=1,929, missing n=1)

Sex under the influence of alcohol or any other drug	n	%
All of it	79	4.1
Almost all of it	145	7.5
More than half	127	6.6
About half	190	9.8
Less than half	332	17.2
Almost none of it	533	27.6
None of it	523	27.1

5.8.2 Use of stimulant drugs during sex

Twenty percent of all respondents had ever used stimulant drugs to make sex more intense or last longer and 14% had done so in the last 12 months. Table 5.13 shows the frequency of use. Stimulant drugs included in this definition were: ecstasy/MDMA, cocaine, amphetamine, crystal meth, mephedrone and ketamine. It should be noted that 'chemsex' was not directly asked about and we are using stimulant drug use during sex as a proxy for this.

In men who indicated they had ever used any illicit recreational drug [n=1,115 (55% of total sample)], 36% had ever used stimulant drugs to make sex more intense or last longer and 25% had done so in the last 12 months.

Table 5.13 Use of stimulant drugs to make sex more intense or last longer

Recency		Whole sample (n=2,060, missing n=23)	Men who used any illicit recreational drug (n=1,155, missing n=0)
	Cumulative n	Cumulative %	Cumulative %
Last 4 weeks	121	5.9	10.5
Last 6 months	211	10.2	18.3
Last 12 months	286	13.9	24.8
Last 5 years	362	17.6	31.3
Ever	415	20.1	35.9

Men who had indicated they had used stimulant drugs during sex in the last 12 months (n=286) were asked 'When was the last time you combined stimulant drugs and sex with more than one man at the same time?' Table 5.14 shows the distribution of responses.

Table 5.14 Recency of stimulant drug use to make sex more intense or last longer with more than one man among men who used stimulant drugs during sex in previous 12 months (n=286)

Recency	n	Cumulative %
Last 4 weeks	64	22.4
Last 6 months	70	46.8
Last 12 months	41	61.2
Last 5 years	29	71.3
Ever	9	74.5
Never	73	-

Overall, 75% of men who had used stimulant drugs during sex in the previous 12 months had experience of doing so with more than one partner at once, with 61% doing so in the last 12 months.

In men who used stimulant drugs during sex with more than one partner in the last 12 months (n=180), 74% had done so in private dwellings.

In men who used stimulant drugs during sex with more than one partner in the last 12 months (n=180), 51% had been doing so for less than 3 years, while 14% had engaged in this for more than 10 years.

5.9 Last sex session with non-steady partners

Men who had any kind of sex with non-steady partners in the last 12 months (n=1,518) were asked to think about the most recent occasion they had sex with a non-steady partner (whether or not they had intercourse). This section presents information on the last sexual encounter with a non-steady partner in the last 12 months.

5.9.1 Number of partners involved and if they previously had sex with those non-steady partners

Among respondents who reported non-steady partners in the last 12 months, 82% indicated that the last sexual encounter was between him and one other non-steady partner, 5% indicated it was between him, his steady partner and a non-steady partner, 6% indicated it was between him and two non-steady partners and 7% had sex with three or more non-steady partners during their last sexual encounter.

The majority (62%) of men had not previously had sex with the non-steady partner involved in their latest sexual encounter. Of all encounters with non-steady partners, 14% reported the sex was with a partner they had met once before and 24% with partners they had met more than once before. Men who had a threesome with two non-steady partners were most likely to have had sex with these men previously.

5.9.2 How and where the non-steady partner(s) were met

The most common place men had their first point of contact with their last non-steady partner was on a mobile phone (60%), followed by elsewhere on the internet (10%) (Table 5.15).

Table 5.15 Where respondents met their last non-steady sexual partner (n=1,513, missing n=5)

	n	%
On my mobile phone	900	59.5
Elsewhere on the internet	145	9.6
Elsewhere	127	8.4
A gay sauna	99	6.5
A gay disco or nightclub	89	5.9
A gay café or gay bar	40	2.6
A gay community centre, gay organisation	37	2.4
A cruising location	32	2.1
A backroom of a bar or gay sex club	28	1.9
A gay sex party in a private home	10	0.7
A porn cinema	6	0.4

The most common place for sex with a non-steady partner was a private home (73%). This was followed by a hotel room (10%) and a sauna (7%) (Table 5.16). Multiple partner and group sex more often occurred in saunas, sex clubs and backrooms.

Table 5.16 Locations for sex (n=1,512, missing n=6)

	n	%
Private home	1,109	73.4
Hotel room	152	10.0
Sauna	101	6.7
Cruising location	70	4.6
Club/backroom	33	2.2
Porn cinema	8	0.5
Other	39	2.6

5.9.3 Sexual acts and condom use

At their last sexual encounter, mutual masturbation and receptive and insertive oral sex were engaged in by the majority of respondents (Table 5.17)

Table 5.17 Sexual acts during the last sexual encounter with a non-steady partner (n=1,493, missing n=25)

	n	%
Receptive oral sex	1,289	86.3
Insertive oral sex	1,201	80.4
Mutual masturbation	1,197	80.2
Receptive anal intercourse	669	44.8
Insertive anal intercourse	606	40.6
Insertive oral-anal sex	608	40.7
Receptive oral-anal sex	535	35.8
Receptive fisting	97	6.5
Insertive fisting	75	5.0
Use sex toys for penetration	103	6.9
Sharing sex toys for penetration	35	2.3
Other sex acts	117	7.8

Multiple answers possible

Twenty-seven percent of men who reported sex with non-steady partners in the last 12 months reported no anal intercourse during their last sexual encounter. One-third reported receptive anal intercourse only, 28% reported insertive intercourse only and 12% reported both.

Thirty-seven percent of men who engaged in anal intercourse with their last non-steady partner did not use a condom. Fifty-two percent of men reported consistent condom use and 11% reported inconsistent condom use.

Consistent condom use was highest when receptive anal intercourse was engaged in and lowest if both insertive and receptive anal intercourse were part of the same sex session (Table 5.18).

Table 5.18 Use of condoms during anal intercourse (n=1,095, missing n=3)

	Receptive anal intercourse only n=489 n (%)	Insertive anal intercourse only n=429 n (%)	Both receptive and insertive anal intercourse n=177 n (%)
No condom use	164 (33.5)	169 (39.4)	72 (40.7)
Inconsistent condom use	39 (8.0)	49 (11.4)	31 (17.5)
Consistent condom use	286 (58.5)	211 (49.2)	74 (41.8)

5.9.4 Substance use before and during their last sexual encounter with a non-steady partner

Of the 1,518 men who answered questions about their last sexual encounter with a non-steady partner, 60% (n=904) reported substance use before and/or during sex.

The most common substances used by respondents before and during sex were alcohol (42%), poppers (29%), erectile dysfunction medications (12%), cannabis (8%) and cocaine (5%). Figure 5.2 shows the frequencies of reported substance use.

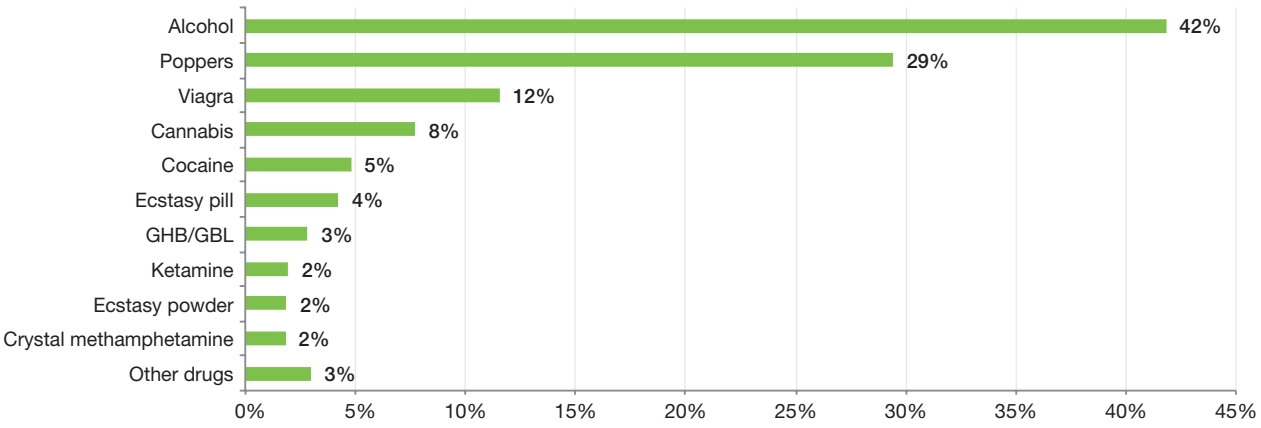


Figure 5.2 Reported substance use by respondents before or during their last sexual encounter with a non-steady partner

Substance use occurred most frequently in clubs/backrooms of bars and was least likely to occur in cruising locations and private homes.

Use of crystal methamphetamine, mephedrone, other synthetic stimulants, GHB/GBL and/or ketamine were most common in clubs/backrooms (9%), followed by private homes (8%) and saunas (5%).

Injecting drug use was rare in the overall sample of men who had sex with non-steady partners in the last 12 months (n=10, 0.6%).

5.10 Risk and precautionary behaviours by key characteristics

This section reports how risk and precautionary behaviours were distributed across several characteristics: age, employment status and HIV testing history. The likelihood that differences among individuals in different groups were due to chance was established using chi-squared analysis (χ^2) for continuous variables and independent t-test or ANOVA for categorical variables. If the significance value was ≤0.05, there was deemed to be a significant difference between the groups.

Just over one-third of respondents aged 17-24 years were vaccinated against hepatitis A and B. Thirty-five percent of men aged 55 years and over had CAI with two or more non-steady partners in the last 12 months. Sixteen percent of men aged 25–39 years had used stimulant drugs to make sex last longer or more intense in the last 12 months and 11% did so with more than one partner (Table 5.19).

Six percent of unemployed men stated they were taking PrEP on a daily basis compared to 3% in the overall sample. Among students, 37% were vaccinated against hepatitis A and 43% were vaccinated against hepatitis B, which is lower than among other groups (Table 5.20).

Men who had a negative HIV test reported a higher percentage of PEP and PrEP taking compared to men who had never tested. Men who tested (both positive and negative) reported higher percentages of being vaccinated against hepatitis A and B. Fifty-nine percent of men diagnosed with HIV reported CAI with two or more non-steady partners in the last 12 months. Twenty-six percent of men diagnosed with HIV reported using stimulant drugs to make sex more intense or last longer and the same percentage reported doing so with more than one partner (Table 5.21).

Table 5.19 Risks and precautionary behaviours by age

Age groups n=2,083	17-24 (n=469)	25–39 (n=968)	40-54 (n=484)	≥55 (n=162)	All*	p value
Risk and precautionary behaviours						
% Ever taken PEP†	4.5	12.9	7.8	8.3	9.4	0.576
% Daily use of PrEP‡	1.7	3.5	3.7	3.9	3.1	0.256
% Vaccinated against/naturally immune to Hepatitis A	34.0	59.3	57.8	53.1	52.8	<0.001
% Vaccinated against/naturally immune to Hepatitis B	37.5	64.0	64.8	53.4	57.4	<0.001
% CAI with ≥2 non-steady partners	19.6	29.5	26.0	34.9	26.9	<0.001
% Stimulant drugs used to make sex last longer or more intense, in last 12 months	10.9	16.3	14.3	6.9	13.9	0.002
% Used stimulant drugs to make sex last longer with >1 partner, in last 12 months	6.0	10.6	9.4	3.7	8.7	0.003

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

† Excluding men diagnosed with HIV; 17-24 n=465, 25-39 n=899, 40-54 n=433, ≥55 n=132

‡ Excluding men diagnosed with HIV; 17-24 n=463, 25-39 n=894, 40-54 n=430, ≥55 n=130

Table 5.20 Risks and precautionary behaviours by employment status

Employment status (n=2,073, missing n=10)	Employed (n=1,505)	Unemployed (n=94)	Student (n=373)	Other (n=101)	All*	p value
Risk and precautionary behaviours						
% Ever taken PEP†	10.9	8.3	5.7	3.6	9.5	0.248
% Daily use of PrEP‡	3.7	6.0	1.1	0.0	3.1	0.009
% Vaccinated against/naturally immune to Hepatitis A	57.2	45.2	37.0	50.5	52.7	<0.001
% Vaccinated against/naturally immune to Hepatitis B	62.3	47.9	42.5	46.5	57.3	<0.001
% CAI with ≥2 non-steady partners	29.7	27.5	16.1	26.3	26.9	<0.001
% Stimulant drugs used to make sex last longer or more intense, in last 12 months	15.7	14.1	8.3	6.1	13.8	<0.001
% Used stimulant drugs to make sex last longer with >1 partner, in last 12 months	10.1	12.0	4.0	2.0	8.7	<0.001

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

† Excluding men diagnosed with HIV; Employed n=1,385, Unemployed n=84, Student n=368, Other n=84

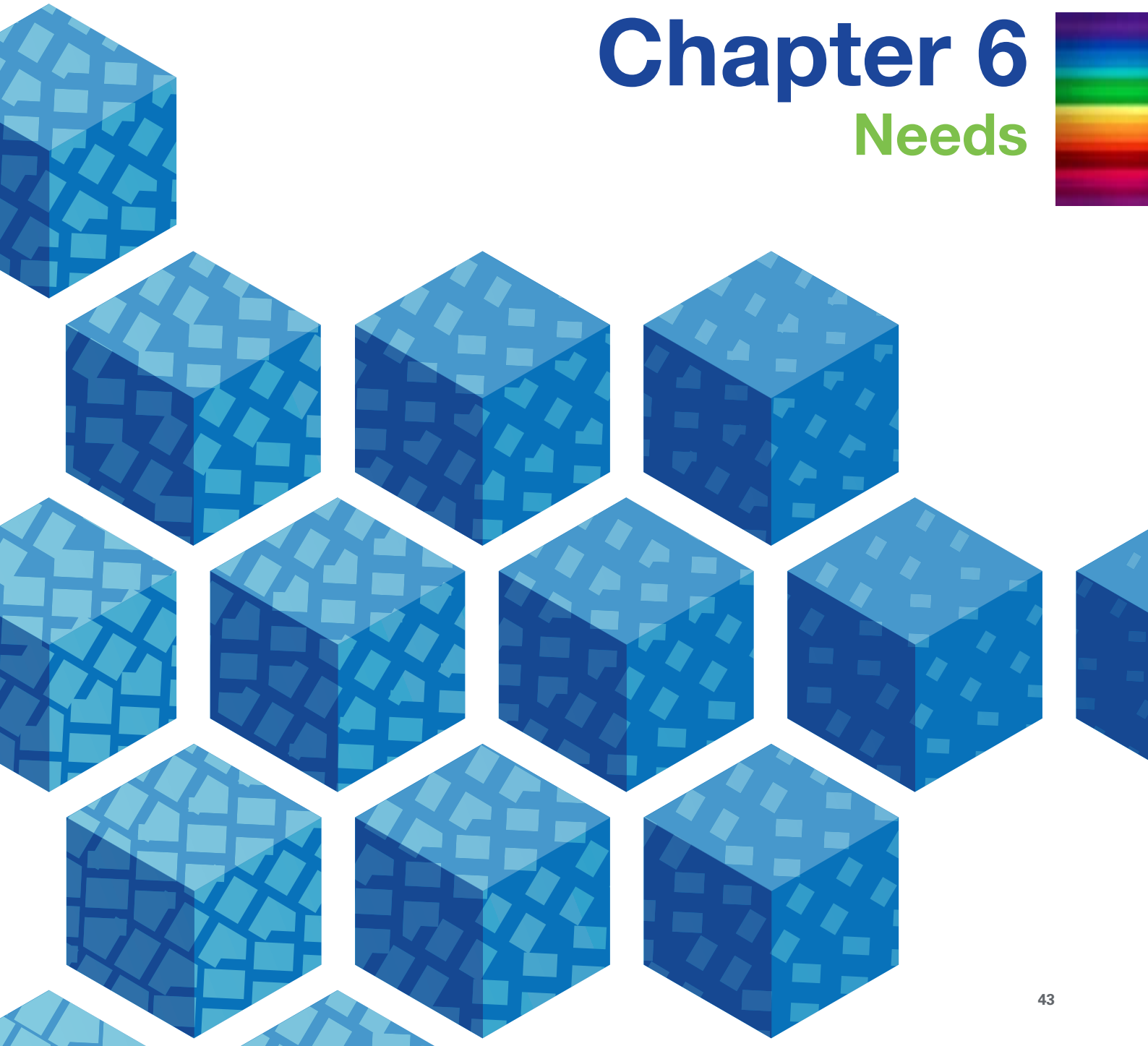
‡ Excluding men diagnosed with HIV; Employed n=1,377, Unemployed n=83, Student n=367, Other n=83

Table 5.21 Risk and precautionary behaviours by HIV testing history

HIV testing history (n=2,071, missing n=12)	Never tested (n=470)	Last test negative (n=1,459)	Diagnosed positive (n=142)	All*	p value
Risk and precautionary behaviours					
% Ever taken PEP	0.2	4.2	-	3.6	<0.001
% Daily use of PrEP	0.2	4.1	-	3.0	<0.001
% Vaccinated against/naturally immune to Hepatitis A	20.3	60.7	77.3	52.7	<0.001
% Vaccinated against/naturally immune to Hepatitis B	24.4	65.9	77.3	57.2	<0.001
% CAI with ≥2 non-steady partners	10.9	29.1	58.8	26.9	<0.001
% Stimulant drugs used to make sex last longer or more intense, in last 12 months	6.2	15.2	26.2	13.9	<0.001
% Used stimulant drugs to make sex last longer with >1 partner, in last 12 months	3.0	8.9	25.5	8.7	<0.001

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

Chapter 6
Needs



Chapter 6 Needs

This chapter identifies needs of MSM that, if addressed, can lead to better engagement in precautionary sexual health behaviours and the avoidance of risk behaviours. This chapter may be of particular interest to statutory and NGO health promotion service providers who are planning, implementing and monitoring interventions.

This chapter contains information relating to needs concerning:

- Social support, reliable alliance and internalised homonegativity
- Safer sex (self-efficacy, condom access and HIV and STI transmission knowledge)
- Safer drug use
- Use of PEP
- Use of PrEP
- HIV testing and treatment
- Viral hepatitis.

6.1 Social support, reliable alliance and internalised homonegativity

Two key health provisions for MSM are social support and freedom from external and internalised homonegativity. In order to reduce the burden on individual respondents, men were randomly assigned either two sub-scales from the Social Provisions Scale (four items each for Social Integration and Reliable Alliance), or the Short Internalised Homonegativity scale.

6.1.1 Social Integration and Reliable Alliance

The Social Provisions Scale is a validated scale to measure the availability of social support: emotional support or attachment and social integration.[19] A random sample of half of respondents (n=1,056) were asked 'Do you disagree or agree with the following eight statements?'

- There is no one who shares my interests and concerns.*
- There are people who enjoy the same social activities as I do.
- There is no one who likes to do the things I do.*
- I feel part of a group of people who share my attitudes and beliefs.
- There are people I can count on in an emergency.
- There is no one I can depend on for aid if I really need it.*
- There are people I can depend on to help me if I really need it.
- If something went wrong no one would help me.*

The first four items measured social integration and the second four measured reliable alliance. Respondents were asked to strongly disagree (1 point), disagree (2 points), agree (3 points) or strongly agree (4 points) with the above statements. The maximum score available for both social integration and reliable alliance was 16. Questions marked with an asterisk had their scales reversed, i.e. the numerical scoring scale ran in the opposite direction.

Social integration

Social integration is the extent to which people feel they belong in a group. The average [± standard deviation (SD)] score on the social integration sub-scale was 12.8 (±2.5) out of 16. The average score (±SD) in the general population for social integration was reported previously as 14.0 (±1.9).[19] This means that the respondents in this survey were slightly less likely on average to feel socially integrated than those in the general population.

Figure 6.1 shows how the scores for the random sample of respondents were distributed. Ideally, individuals would be on the right of this scale.

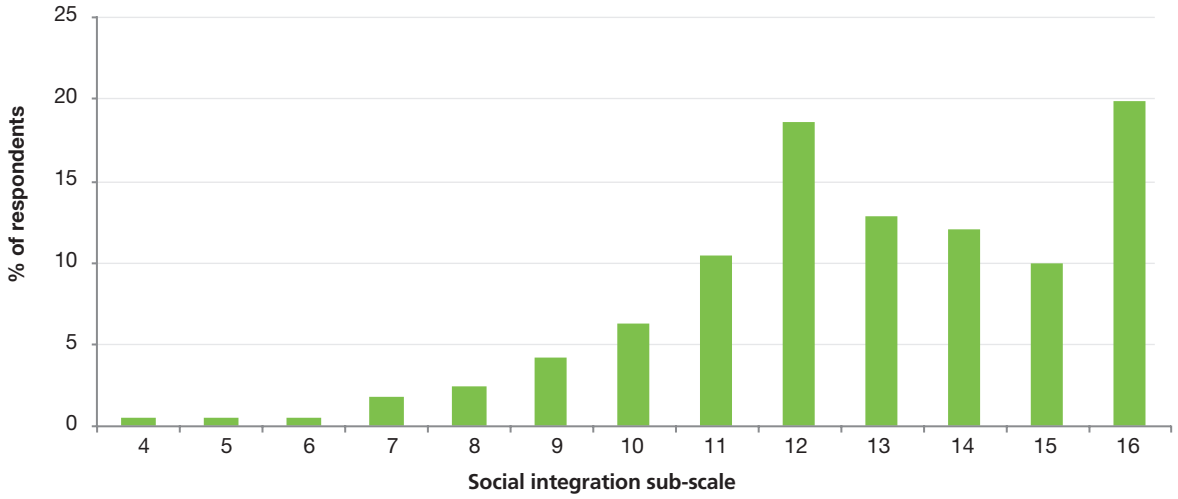


Figure 6.1 Social integration sub-scale for a random sample of respondents (n=1,040, missing n=16)

Reliable alliance

Reliable alliance is the extent to which people can call on others when they are in need. The average (±SD) reliable alliance score was 13.7 (±2.5) out of 16. The average (±SD) in the general population for social integration was reported previously as 14.4 (±1.9).[19] This means that the respondents in this survey were slightly less likely on average to feel that they can call on others when in need than those in the general population.

Figure 6.2 shows how the scores for a random sample of respondents were distributed. Ideally, individuals would be on the right of this scale. Almost 40% of men scored maximum points on the scale relating to reliable alliance.

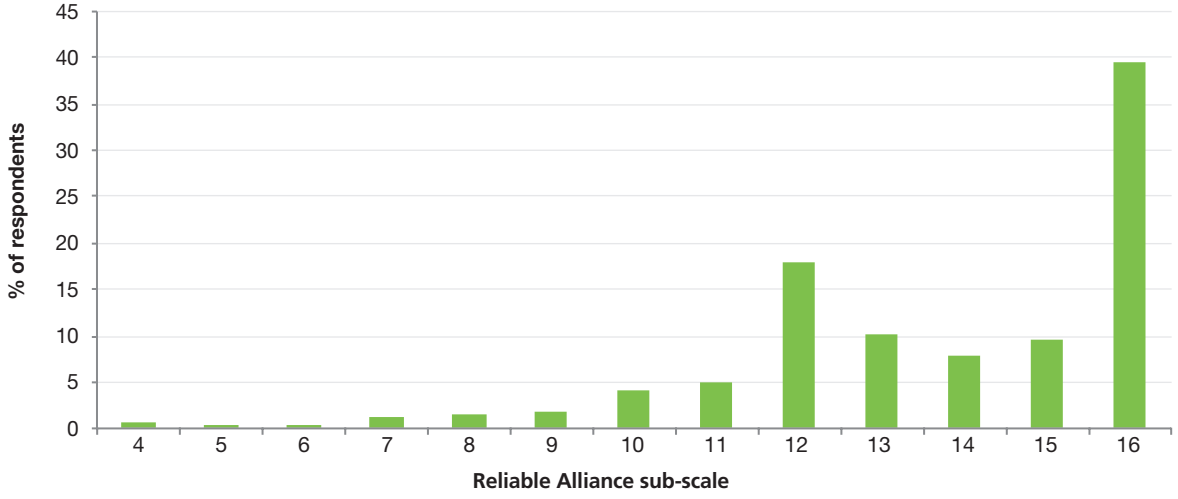


Figure 6.2 Reliable alliance sub-scale for a random sample of respondents (n=1,021, missing n=35)

6.1.2 Internalised homonegativity

Negative feelings towards one's own homosexuality has been shown to be related to higher sexual risk taking and lower rates of HIV testing,[20] and has been associated with anxiety and depression among MSM.[21] The results for anxiety and depression for this survey can be found in section 4.1.1.

The Short Internalised Homonegativity Scale is a validated scale to measure the internalisation of negative attitudes and assumptions about homosexual people by homosexual people themselves.[22] Men who were not asked about the social provisions scale (n=1,027) were asked 'Do you strongly disagree (1 point) or strongly agree (7 points) with the following seven statements?'

- I feel comfortable in gay bars.
- I feel comfortable being seen in public with an obviously gay person.
- I feel comfortable discussing homosexuality in a public situation.
- I feel comfortable being a homosexual man.
- Homosexuality is morally acceptable to me.
- Even if I could change my sexual orientation, I wouldn't.
- Social situations with gay men make me feel uncomfortable.

The above seven items form a single scale measuring 'internalised homonegativity'. This score was computed by: rescaling the items from 1–7 to 0–6 and reversing the scores for the first six items.

The seven responses sum to a score of between 0–42 which was divided by 7 to give a total score between zero and six, with zero being the 'best' score.

The average (±SD) score on the internalised homonegativity scale was 1.3 (±1.3) out of 6. This was similar to the overall European score from EMIS-2017 of 1.5.

Figure 6.3 shows how the scores were distributed. Ideally, individuals would be on the left of this scale. Thirty-one percent of respondents scored zero, representing the 'best' possible score.

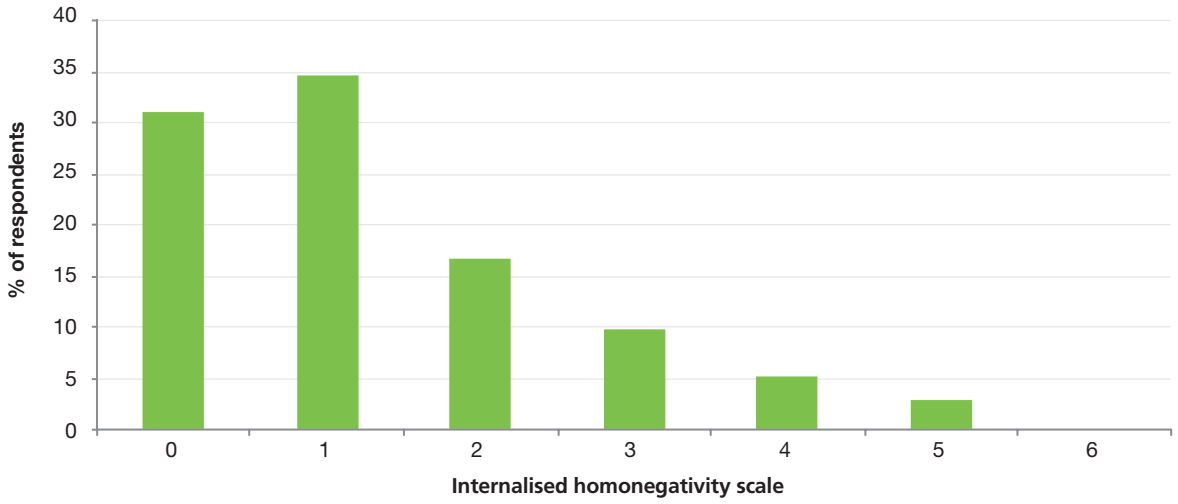


Figure 6.3 Internalised homonegativity sub-scale for a random sample of respondents (n=947, missing n=80)

6.2 Safer sex

6.2.1 Self-efficacy

All men were asked if they agreed or disagreed with the following two statements: 'The sex I have is always as safe as I want it to be' and 'I find it easy to say "no" to sex I don't want'.

Table 6.1 shows the responses to each statement. Sixteen percent did not agree the sex they have is always as safe as they want it to be and 12% did not agree that they find it easy to say 'no' to sex they do not want.

Table 6.1 Distribution of responses to self-efficacy statements

	The sex I have is always as safe as I want it to be (n=2,079, missing n=4)		I find it easy to say no to unwanted sex (n=2,077, missing n=6)	
	n	%	n	%
Strongly agree	778	37.4	846	40.7
Agree	790	38.0	803	38.7
Neither/not sure	179	8.6	181	8.7
Disagree	234	11.3	182	8.8
Strongly disagree	98	4.7	65	3.1

6.2.2 Lack of condom during intercourse

Men were asked about the last time they had CAI solely because they did not have a condom. The responses are shown in Table 6.2. In the last 12 months, 27% of men indicated they had CAI solely because they did not have a condom.

Table 6.2 Recency of CAI because they did not have a condom (n=2,076, missing n=7)

	n	%	Cumulative %
Last 4 weeks	203	9.8	9.8
Last 6 months	195	9.4	19.2
Last 12 months	152	7.3	26.5
Last 5 years	230	11.1	37.6
More than 5 years ago	160	7.7	45.3
Never	1,136	54.7	-

6.2.3 HIV and STI transmission knowledge

Six statements were used to assess knowledge about HIV and STI transmission by asking respondents whether or not they knew the statements were true. Respondents were given the following options: *I knew this already; I wasn't sure about this; I didn't know this already; I don't understand this;* and *I do not believe this*. Those who answered 'I knew this already' were considered to have pre-existing knowledge and the rest were defined as the proportion with knowledge gaps. Table 6.3 shows the knowledge gaps for HIV and STI transmission.

Overall, basic knowledge about HIV/STI transmission was generally high. One percent of respondents did not already know any of the six HIV/STI transmission facts and 84% knew at least five of the six facts. The average number of facts known about HIV/STI transmission was 5 out of 6.

Table 6.3 Knowledge gaps for HIV and STI transmission

	Already knew n (%)	Didn't already know n (%)
HIV cannot be passed during kissing, including deep kissing, because saliva does not transmit HIV (n=2,074, missing n=9)	1,745 (84.1)	329 (15.8)
You can pick up HIV through your penis while being 'active' in anal or vaginal sex without a condom, even if you don't ejaculate (n=2,076, missing n=7)	1,747 (84.2)	329 (15.8)
You can pick up HIV through your rectum or vagina while being 'passive' during sex (n=2,062, missing n=21)	1,963 (95.2)	99 (4.8)
Most STIs can be passed on more easily than HIV (n=2,077, missing n=6)	1,573 (75.7)	504 (24.3)
Because they sometimes have no symptoms, people can have STIs without knowing it (n=2,077, missing n=6)	1,925 (92.7)	152 (7.3)
The correct use of condoms throughout intercourse reduces the likelihood of picking up and passing on STIs (n=2,079, missing n=4)	2,031 (97.7)	48 (2.3)

6.3 Safer drug use

Men who indicated they used any of the following drugs: poppers, sedatives, cannabis, synthetic cannabinoids, ecstasy pills, ecstasy powder, amphetamine, crystal methamphetamine, heroin, mephedrone, synthetic stimulants other than mephedrone, GHB/GBL, ketamine, LSD, cocaine or crack cocaine in the last 12 months (n=1,361) were asked 'Do you disagree or agree with the following statement: I worry about my recreational drug use'. Table 6.4 shows the responses given by respondents.

Twenty-two percent of respondents who indicated drug use said they don't take drugs in response to this question. This may be because these men do not see themselves as recreational drug users.

Table 6.4 Distribution of respondents who reported taking drugs who worry about their drug use (n=1,333, missing n=28)

	n	%
Strongly agree	31	2.3
Agree	77	5.8
Neither/not sure	135	10.1
Disagree	306	23.0
Strongly disagree	485	36.4
Don't take drugs	299	22.4

6.4 Use of PEP

6.4.1 Awareness of PEP

Eighty-three percent of all men had heard of PEP and 13% were unaware of PEP, with the remainder not sure if they had heard of PEP.

6.4.2 Knowledge of PEP

Three statements assessed respondents' knowledge about PEP using the same knowledge response set as section 6.2.3. Table 6.5 shows the knowledge gaps for PEP. The average number of facts known about PEP was 2 out of 3.

Table 6.5 Knowledge gaps for PEP

	Already knew n (%)	Didn't already know n (%)
PEP attempts to stop HIV infection taking place after a person is exposed to the virus (n=2,077, missing n=6)	1,542 (74.2)	535 (25.8)
PEP is a one-month course of anti-HIV drugs (n=2,078, missing n=5)	954 (45.9)	1,124 (54.1)
PEP should be started as soon as possible after exposure, preferably within hours (n=2,073, missing n=10)	1,389 (67.0)	684 (33.0)

6.4.3 Confidence in accessing PEP

Men not diagnosed with HIV (n=1,929) were asked 'How confident are you that you could get PEP if you thought you needed it?'

Overall, 22% of men were not at all confident they could access PEP if they required it. Conversely, 45% of men were either quite confident or very confident they could get PEP if they needed it.

6.5 Use of PrEP

6.5.1 Awareness of PrEP

Eighty-six percent of men had heard of PrEP and 11% were unaware of PrEP, with the remainder not sure they had heard of PrEP.

6.5.2 PrEP knowledge

Three statements assessed respondents' knowledge about PrEP using the same knowledge response set as section 6.2.3. Table 6.6 shows the knowledge gaps for PrEP.

Twenty-nine percent of men did not know the purpose of PrEP and 40% did not know it can be taken as a single daily pill in advance of sex. The average number of facts known about PrEP was 2 out of 3.

Table 6.6 Knowledge gaps for PrEP

	Already knew n (%)	Didn't know n (%)
PrEP involves someone who does not have HIV taking pills before as well as after sex to prevent them getting HIV (n=2,073, missing n=10)	1,480 (71.4)	593 (28.6)
PrEP can be taken as a single daily pill if someone does not know in advance when they will have sex (n=2,073, missing n=10)	1,242 (59.9)	831 (40.1)
If someone knows in advance when they will have sex, PrEP needs to be taken as a double dose approx. 24 hours before sex and then at both 24 and 48 hours after the double dose (n=2,071, missing n=12)	402 (19.4)	1,669 (80.6)

6.5.3 Intention to use PrEP

Men not diagnosed with HIV (n=1,929) were asked 'If PrEP was available and affordable to you, how likely would you be to use it?'

Nearly half of respondents (49%) were likely to use PrEP if it was available and affordable, 24% were unlikely to use it and 27% were unsure.

6.6 HIV testing and treatment

6.6.1 Knowledge of HIV status

All men were asked 'What do you think your current HIV status is (whether or not you've ever tested for HIV)?'

Thirty-seven percent of men were unsure of their HIV status (33% probably negative; 4% not sure; 0.3% probably positive), with the remainder sure they were either HIV negative (56%) or HIV positive (7%).

6.6.2 HIV test and treat knowledge

Seven statements assessed respondents' knowledge about HIV testing and treatment using the same knowledge response set as section 6.2.3. Table 6.7 shows the knowledge gaps for HIV testing and treatment.

Overall, a high proportion of respondents knew the HIV testing and treatment facts presented to them. Fifty nine percent of respondents knew that a person with HIV who is on effective treatment (called 'undetectable viral load') cannot pass their virus to someone else during sex. The average number of facts known about HIV testing and treatment was 6 out of 7.

Table 6.7 Knowledge gaps for HIV testing and treatment

	Already knew n (%)	Didn't already know n (%)
AIDS is caused by a virus called HIV (n=2,081, missing n=2)	2,028 (97.4)	53 (2.6)
You cannot be confident about whether someone has HIV or not from their appearance (n=2,081, missing n=2)	2,011 (96.6)	70 (3.4)
There is a medical test that can show whether or not you have HIV (n=2,080, missing n=3)	2,051 (98.6)	29 (1.4)
If someone becomes infected with HIV it may take several weeks before it can be detected in a test (n=2,081, missing n=2)	1,779 (85.5)	302 (14.5)
There is currently no cure for HIV infection (n=2,081, missing n=2)	1,933 (92.9)	148 (7.1)
HIV infection can be controlled with medicines so that its impact on health is much less (n=2,073, missing n=10)	2,000 (96.5)	73 (3.5)
A person with HIV who is on effective treatment (called 'undetectable viral load') cannot pass their virus to someone else during sex (n=2,081, missing n=2)	1,231 (59.1)	850 (40.9)

6.6.3 Knowing where to get an HIV test

As stated in section 4.2.1, 77% of men had ever tested for HIV and 23% (n=470) had never tested for HIV. Of men who had never tested, 27% did not know where to get an HIV test and 18% were not sure.

6.7 Viral hepatitis

6.7.1 Where to access hepatitis vaccinations

Men who were not vaccinated or not naturally immune to hepatitis A (n=980, 47% of total sample) or hepatitis B (n=878, 42% of total sample) were asked 'Do you know where you could get vaccinated against hepatitis A or hepatitis B?' Forty percent of men did not know where to get hepatitis A vaccination and 17% were not sure. Thirty eight percent of men did not know where to get hepatitis B vaccination and 17% were not sure.

6.7.2 Hepatitis A and B knowledge

Five statements assessed respondents' knowledge about hepatitis A and B using the same knowledge response set as section 6.2.3. Table 6.8 shows the knowledge gaps for hepatitis A and B.

Twenty three percent of men did not know that vaccines exist for hepatitis A and B and 37% of men did not know that doctors recommend that MSM are vaccinated against hepatitis A and B. The average number of facts known about hepatitis was 3 out of 5.

Table 6.8 Knowledge gaps for hepatitis A and B

	Already knew n (%)	Didn't already know n (%)
'Hepatitis' is an inflammation of the liver (n=2,079, missing n=4)	1,245 (59.9)	834 (40.1)
Most hepatitis is caused by viruses (n=2,077, missing n=6)	1,379 (66.4)	698 (33.6)
There are several types of hepatitis viruses, named after the letters of the alphabet (n=2,079, missing n=4)	1,784 (85.8)	295 (14.2)
Vaccines exist for both hepatitis A and hepatitis B (n=2,079, missing n=4)	1,608 (77.3)	471 (22.7)
Doctors recommend men who have sex with men are vaccinated against both hepatitis A and hepatitis B viruses (n=2,079, missing n=4)	1,301 (62.6)	778 (37.4)

6.8 Needs by key characteristics

This section reports how needs of MSM were distributed across several characteristics: age, employment status and HIV testing history. The likelihood that differences among individuals in different groups were due to chance was established using chi-squared analysis (χ^2) for continuous variables and independent t-test or ANOVA for categorical variables. If the significance value was ≤0.05, there was deemed to be a significant difference between the groups.

Table 6.9 shows the breakdown of needs by age group. Men in the youngest age group (17-24 years) and in the oldest age group (≥55 years) reported higher frequencies of not being able to say no to unwanted sex compared to other age groups. Similarly, 20% of both 17-24 year olds and ≥55s were unaware of PrEP. Forty-eight percent of men aged 55 and over knew that a person on effective HIV treatment cannot pass HIV on during sex. This is compared to 59% of the overall sample. Fifty-six percent of 17-24 year olds who have never tested for HIV did not know where to test for HIV (Table 6.9).

Unemployed men reported the lowest average score for social integration and reliable alliance compared to other employment categories. Furthermore, a quarter of unemployed men who indicated they had taken drugs were worried about their drug use. This is compared to the overall average of 11% (Table 6.10).

Men who had never tested for HIV reported a higher internalised homonegativity score than men who had tested for HIV. Men who had never tested for HIV reported lower knowledge compared to those who had ever tested; 32% were unaware of PrEP; only 39% knew that a person on effective HIV treatment cannot pass on HIV during sex; and half did not know where to get hepatitis A or B vaccination. Men who had been diagnosed with HIV reported with higher frequency that the sex they have is not always as safe as they want it to be (26% compared to 16% in the overall sample) (Table 6.11).

Table 6.9 Needs by age group

Age groups (n=2,083)	17-24 (n=469)	25–39 (n=968)	40-54 (n=484)	≥55 (n=162)	All*	p value
Needs						
Average social integration† (out of 16)	13.0	12.9	12.6	12.6	12.8	0.388
Average reliable alliance† (out of 16)	13.7	13.9	13.4	13.4	13.7	0.049
Average internalised homonegativity † (out of 6)	1.4	1.2	1.3	1.6	1.3	0.062
% Sex not as safe as I want it to be	14.3	16.6	14.1	22.2	16.0	0.161
% Did not find it easy to say 'no' to unwanted sex	14.7	11.9	8.3	14.2	11.9	<0.001
% CAI because lacked condom, last 12 months	29.8	27.4	22.3	24.2	26.5	0.050
Mean number of 7 HIV/STI transmission facts already known	6.0	6.5	6.4	6.1	6.3	<0.001
% Concerned about drug use‡	6.8	12.5	10.3	7.3	10.4	0.096
% Unaware of PrEP	19.9	8.5	15.8	20.1	13.7	<0.001
Average number of 3 PEP facts already known	1.5	2.1	1.9	1.6	1.9	<0.001
Average number of 3 PrEP facts already known	1.3	1.7	1.4	1.2	1.5	<0.001
Average number of 6 HIV test and treat facts already known	4.9	5.5	5.3	5.0	5.3	<0.001
% Knew a person with undetectable viral load cannot pass on HIV	54.1	65.2	55.9	47.5	59.2	<0.001
% Did not know where to test for HIV◆	56.0	39.4	34.2	27.3	45.4	<0.001
Average number of 5 hepatitis facts already known	3.0	3.6	3.8	3.6	3.5	<0.001
% Did not know where to get hepatitis A vaccination if not immune/vaccinated∞	50.0	38.6	30.9	28.0	39.7	<0.001
% Did not know where to get hepatitis B vaccination if not immune/vaccinated∞	47.9	36.1	29.8	28.0	38.1	<0.001

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

†Subset of respondents were asked either the lack of social integration and reliable alliance questions OR the internalised homonegativity questions

Social Integration – 17-24 years n=227, 25–39 years n=493, 40–54 years n=242, ≥55 years n=78

Reliable Alliance – 17-24 years n=221, 25–39 years n=483, 40–54 years n=240, ≥55 years n=77

Internalised homonegativity – 17-24 years n=213, 25–39 years n=435, 40–54 years n=223, ≥55 years n=76

‡ Of those who indicated drug use in last 12 months – 17-24 years n=278, 25–39 years n=654, 40–54 years n=302, ≥55 n=99

◆ Of those never tested for HIV – 17-24 years n=218, 25–39 years n=142, 40–54 years n=76, ≥55 years n=33

∞ Of those who are not naturally immune/not already vaccinated –

Hepatitis A – 17-24 years n=306, 25–39 years n=389, 40–54 years n=201, ≥55 years n=75

Hepatitis B – 17-24 years n=290, 25–39 years n=344, 40–54 years n=168, ≥55 years n=75

Table 6.10 Needs by employment status

Employment status (n=2,073, missing n=10)	Employed (n=1,505)	Unemployed (n=94)	Student (n=373)	Other (n=101)	All*	p value
Needs						
Average social integration† (out of 16)	12.8	12.1	13.2	12.4	12.8	0.033
Average reliable alliance† (out of 16)	13.8	12.6	13.8	13.6	13.7	0.018
Average internalised homonegativity † (out of 6)	1.3	1.4	1.4	1.5	1.3	0.284
% Sex not as safe as I want it to be	16.0	17.2	15.0	18.8	16.0	0.934
% Did not find it easy to say 'no' to unwanted sex	10.8	16.0	15.3	11.9	11.9	<0.001
% CAI because lacked condoms, last 12 months	27.2	28.0	26.6	15.8	26.6	0.095
Average number of 7 HIV/STI transmission facts already known	6.4	6.0	6.1	6.3	6.3	<0.001
% Concerned about drug use‡	10.1	25.5	8.6	9.4	10.5	0.007
% Unaware of PrEP	11.7	17.4	17.7	23.0	13.6	<0.001
Average number of 3 PEP facts already known	2.0	1.7	1.6	1.6	1.9	<0.001
Average number of 3 PrEP facts already known	1.6	1.4	1.4	1.2	1.5	0.003
Average number of 6 HIV test and treat facts already known	5.4	5.2	5.1	5.0	5.3	<0.001
% Knew a person with undetectable viral load cannot pass on HIV	59.8	60.6	59.0	46.5	59.1	0.071
% Did not know where to test for HIV◆	41.4	41.9	52.1	39.1	45.2	0.164
Average number of 5 hepatitis facts already known	3.6	3.1	3.2	3.5	3.5	<0.001
% Did not know where to get hepatitis A vaccination if not immune/vaccinated∞	37.7	45.1	45.9	32.7	39.8	0.002
% Did not know where to get hepatitis B vaccination if not immune/vaccinated∞	34.3	44.9	47.2	35.9	38.1	0.020

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

†Subset of respondents were asked either the lack of social integration and reliable alliance questions OR the internalised homonegativity questions

Social Integration – employed n=764, unemployed n=47, student n=176, other n=49

Reliable Alliance – employed n=748, unemployed n=47, student n=172, other n=51

Internalised homonegativity – employed n=682, unemployed n=44, student n=174, other n=44

‡ Of those who indicated drug use in last 12 months – employed n=988, unemployed n=57, student n=223, other n=58

◆ Of those never tested for HIV – employed n=244, unemployed n=31, student n=167, other n=23

∞ Of those who are not naturally immune/not already vaccinated –

Hepatitis A – employed n=637, unemployed n=51, student n=233, other n=49

Hepatitis B – employed n=560, unemployed n=49, student n=214, other n=53

Table 6.11 Needs by HIV testing history

HIV testing history (n=2,071, missing n=12)	Never tested (n=470)	Last test negative (n=1,459)	Diagnosed positive (n=142)	All*	p value
Needs					
Average social integration† (out of 16)	12.8	12.9	12.6	12.8	0.644
Average reliable alliance† (out of 16)	13.6	13.8	13.4	13.7	0.360
Average internalised homonegativity† (out of 6)	1.7	1.2	1.2	1.3	<0.001
% Sex not as safe as I want it to be	11.4	16.6	26.1	16.1	<0.001
% Did not find it easy to say 'no' to unwanted sex	11.1	11.7	16.2	11.9	0.222
% CAI because lacked condoms, last 12 months	25.3	26.9	25.3	26.4	0.757
Average number of 7 HIV/STI transmission facts already known	5.8	6.4	6.6	6.3	<0.001
% Concerned about drug use‡	8.9	12.9	10.5	10.4	0.596
% Unaware of PrEP	31.8	9.0	2.1	13.7	<0.001
Average number of 3 PEP facts already known	1.1	2.0	2.6	1.9	<0.001
Average number of 3 PrEP facts already known	1.0	1.6	2.1	1.5	<0.001
Average number of 6 HIV test and treat facts already known	4.6	5.4	5.9	5.3	<0.001
% Knew a person with undetectable viral load cannot pass on HIV	39.2	62.1	93.0	59.0	<0.001
Average number of 5 hepatitis facts already known	2.6	4.2	3.7	3.5	<0.001
% Did not know where to get hepatitis A vaccination if not immune/vaccinated◆	51.1	34.2	9.7	39.8	<0.001
% Did not know where to get hepatitis B vaccination if not immune/vaccinated◆	50.0	31.8	3.2	38.1	<0.001

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

† Subset of respondents were asked either the lack of social integration and reliable alliance questions OR the internalised homonegativity questions

Social Integration – Never tested n=238, last test negative n=721, diagnosed positive n=76

Reliable Alliance – Never tested n=235, last test negative n=708, diagnosed positive n=72

Internalised homonegativity – Never tested n=201, last test negative n=678, diagnosed positive n=62

‡ Of those who indicated drug use in last 12 months – Never tested n=230, last test negative n=974, diagnosed positive n=120

◆ Of those who are not naturally immune/not already vaccinated –

Hepatitis A – Never tested n=370, last test negative n=568, diagnosed positive n=31

Hepatitis B – Never tested n=354, last test negative n=491, diagnosed positive n=31

Chapter 7
Interventions

Chapter 7 Interventions

To intervene is to participate in an activity so as to alter a course of events, usually to make something less or more likely to occur. This chapter is aimed at those who plan, deliver and evaluate interventions and outlines the types of interventions that can influence needs such as homophobic abuse or access to services.

EMIS-2017 asked about the following interventions:

- Homophobic abuse: intimidation, insults, and violence
- Access to condoms
- Substance use services
- PrEP services
- HIV/STI education services
- HIV testing and HIV cascade of care
- Viral hepatitis vaccination
- STI testing services
- Partner notification for syphilis and gonorrhoea diagnoses.

7.1 Homophobic abuse: intimidation, insults, and violence

Information on mental health indicators is covered in section 4.1. Social integration, reliable alliance and internalised homonegativity of respondents are covered in section 6.1.

All men were asked about the last time they were stared at, had verbal insults directed at them or were physically assaulted because someone knew, or presumed, they were attracted to men.

Table 7.1 shows the recency of homophobic abuse as indicated by respondents. One in five men had ever been physically assaulted because someone had known, or presumed, they were attracted to men, with 3% having been being assaulted in the last 12 months. Seventy percent of men had been verbally insulted because someone had known, or presumed, they were attracted to men, and 28% of men had experience of this in the last 12 months.

Table 7.1 Recency of homophobic abuse

	Stared at/intimidated (n=2,079, missing n=4)		Verbally insulted (n=2,078, missing n=5)		Physically assaulted (n=2,077, missing n=6)	
	n	Cumulative %	n	Cumulative %	n	Cumulative %
Last 4 weeks	307	14.8	172	8.3	11	0.5
Last 6 months	220	25.3	201	17.9	25	1.7
Last 12 months	223	36.1	199	27.5	30	3.2
Last 5 years	362	53.5	434	48.4	108	8.4
Ever*	313	68.5	442	69.7	285	22.1

**Ever in this circumstance is cumulative percentage of any homophobic abuse ranging from last 24 hours to more than 5 years ago*

7.2 Access to condoms

Condom distribution is a key intervention for increasing access to condoms, and condom packs often carry health promotion information on and in their packaging.

All men were asked 'Where have you got condoms from in the last 12 months?' and were asked to tick as many as apply to them from the range of sources. Table 7.2 shows the responses given by respondents.

Fifteen percent of all men did not access condoms in the last 12 months. Of men who got condoms in the last 12 months (n=1,756), the single most common source for condoms was buying them from a physical shop (51%). The remainder relied on a range of sources, 14% had gotten them free from clinics and 12% had gotten them free from gay clubs or bars.

Among those who accessed condoms in the last 12 months, 56% of respondents had accessed free condoms from a clinic or gay bars/clubs or saunas or gay/HIV community organisations.

Table 7.2 Source of condoms in the last 12 months among those who got condoms

	Condom access in last 12 months (n=1,756, missing n=0)		Single most common source of condoms (n=1,752, missing n=4)	
	n	%	n	%
Bought at a shop	1,110	63.2	888	50.7
Free from clinics	574	32.7	245	14.0
Free from gay bars or clubs	573	32.6	208	11.9
From friends or sex partners	352	20.0	78	4.4
Free from sauna	314	17.9	92	5.2
Free from gay or HIV community organisations	302	17.2	78	4.4
Bought online	141	8.0	90	5.1
Bought from a vending machine	116	6.6	31	1.8
Other answer	63	3.6	42	2.4
Accessed free condoms*	987	56.2		

**Free condoms from clinics or gay bars/clubs or saunas or gay/HIV community organisations*

7.3 Substance use services

All men were asked three questions on consulting substance services: 'Have you ever consulted a health professional for your alcohol use concerns?', 'Have you ever consulted a health professional for your drug use concerns?' and 'Have you ever attended a self-help group, harm reduction programme or counsellor about your drug use?' Two percent of all respondents consulted a health professional about their alcohol use and 3% about their drug use in the last 12 months. Half of the men who consulted a health professional about their drug use also attended a self-help group, harm reduction programme or counsellor.

7.4 PrEP services

7.4.1 Speaking to MSM about PrEP

Among men without diagnosed HIV (n=1,929), 18% indicated someone in the Irish health service had spoken to them about PrEP. Those men were asked 'Which health service has spoken to you about PrEP?' The responses are shown in Table 7.3.

Table 7.3 Health services where respondents were spoken to about PrEP (n=356, missing n=1)

Which health service has spoken to you about PrEP?	n	%
Hospital or clinic as an out-patient	210	59.1
Community service or drop-in	121	34.1
General practitioner/family doctor	29	8.2
Doctor in private practice	27	7.6
Other answer	17	4.8

7.4.2 Consulting a healthcare professional before using PrEP

Among men who had ever taken PrEP (n=89, section 5.2.2), 71% of men had spoken to a healthcare professional before taking PrEP.

7.4.3 Prescribing PrEP

Among men who had ever taken PrEP (n=89), 30% had received a medical prescription for PrEP. The majority (74%) of those men were prescribed it in a hospital/clinic as an outpatient.

7.4.4 Source of PrEP

Men who had ever taken PrEP (n=89) were asked 'Where have you got your PrEP pills from?' Table 7.4 shows the breakdown of responses given for all men who had taken PrEP and men who had taken PrEP with and without a prescription.

Table 7.4 Source of PrEP pills in men who had ever taken PrEP

Source of PrEP pills	Men who had ever taken PrEP (n=89) n (%)	With no prescription (n=62) n (%)	With prescription (n=27) n (%)
From an online pharmacy	49 (55.1)	42 (67.7)	7 (25.9)
At a hospital or clinic	20 (22.5)	11 (17.7)	9 (33.3)
In a research study	9 (10.1)	4 (6.4)	5 (18.5)
From a pharmacy	7 (7.9)	0 (0.0)	7 (25.9)
Other answer	4 (4.5)	4 (6.4)	0 (0.0)
General practitioner/family doctor	2 (2.2)	2 (3.2)	0 (0.0)
A doctor in private practice	2 (2.2)	1 (1.6)	1 (3.7)
I used PEP pills as PrEP	3 (3.4)	1 (1.6)	2 (7.4)
I used someone else's ART pills as PrEP	2 (2.2)	2 (3.2)	0 (0.0)
At a community service or drop-in	1 (1.1)	0 (0.0)	1 (3.7)

7.5 HIV/STI education services

All men were asked 'When was the last time you saw or heard any information about HIV or STIs specifically for men who have sex with men?' The majority of men (91%) had seen MSM-specific information about HIV or STIs in the last 12 months and 64% had done so in the last 4 weeks.

7.6 HIV testing and monitoring services

7.6.1 HIV test offers by health services

As stated in section 4.2.1, 23% of men (n=470) had never tested for HIV. Men who had never tested for HIV were asked 'Have you ever been offered an HIV test by a health service?'

Nine percent of those men had ever been offered an HIV test by someone in the Irish health service and 88% indicated they had not (remainder indicated they did not know).

7.6.2 Settings for HIV testing and diagnoses

Table 7.5 shows the settings where respondents were initially diagnosed with HIV. The majority (39%) were initially diagnosed at a hospital/clinic as an outpatient, followed by at a community health service or drop-in service (19%).

Table 7.5 Settings for HIV diagnosis (n=142, missing n=0)

Settings for HIV diagnosis	n	%
At a hospital or clinic as an out-patient	55	38.7
At a community health service or drop-in	27	19.0
General practitioner/family doctor	26	18.3
At a hospital as an in-patient	17	12.0
A doctor in private practice	13	9.1
At a blood bank, while donating blood	1	0.7
Self-testing kit	1	0.7
Bar/pub, club or sauna	1	0.7
Elsewhere	1	0.7

Men whose last test was negative were asked 'Where did you go for your last HIV test?' Table 7.6 shows the responses given by respondents. The majority (41%) got their last HIV test in a hospital/clinic as an outpatient, followed by at a community health service or drop-in clinic (23%).

Table 7.6 Settings for last HIV test where it was negative

Settings for HIV testing (n=1,456, missing n=3)	n	%
At a hospital or clinic as an out-patient	602	41.3
At a community health service or drop-in	337	23.1
General practitioner/family doctor	224	15.4
A doctor in private practice	151	10.4
Bar/pub, club or sauna	47	3.2
At a hospital as an in-patient	22	1.5
Self-sampling kit	21	1.4
At a blood bank, while donating blood	14	1.0
Elsewhere	15	1.0
Self-testing kit	13	0.9
Mobile testing unit	10	0.7

7.6.3 Acceptability of post-HIV diagnosis support and information

Men with diagnosed HIV were asked 'When you were diagnosed HIV positive, how satisfied were you with the support and information you received?'

The distributions of responses are shown in Table 7.7. Ninety-four percent of men diagnosed with HIV stated they got some form of support or information after their diagnosis. Twenty-two percent of men were dissatisfied with the support or information received.

Table 7.7 Acceptability of post-HIV diagnosis support

	Diagnosed HIV (n=142, missing n=0)	
	n	%
Did not receive any support or information	4	2.8
Very satisfied	46	32.4
Satisfied	57	40.1
Dissatisfied	16	11.3
Very dissatisfied	15	10.6
I don't remember/I did not think about it	4	2.8

7.6.4 Satisfaction with post HIV test support by the setting in which HIV diagnosis occurred

The setting for HIV diagnosis was compared to the level of post-HIV test support received by respondents.

Table 7.8 shows the settings for HIV positive diagnosis compared to satisfaction with information received. Overall, respondents who were diagnosed with HIV in a community health service/drop-in clinic were most satisfied with the support and information they received compared to other settings. Respondents who were diagnosed in a hospital/clinic as an outpatient and those who were diagnosed in a GP facility were least satisfied with the level of support they received post-HIV diagnosis.

Table 7.8 Settings for HIV positive diagnosis by satisfaction with information received

Settings for HIV diagnosis (n=142, missing n=0) n (%)	Satisfied with information received	Dissatisfied with information received	Did not receive any information	Don't remember
At a hospital or clinic as an out-patient (n=55)	37 (67.3)	14 (25.5)	2 (3.6)	2 (3.6)
At a community health service or drop-in (n=27)	23 (85.2)	3 (11.1)	0 (0.0)	1 (3.7)
General practitioner/family doctor (n=26)	15 (57.7)	9 (34.6)	1 (3.9)	1 (3.9)
At a hospital as an in-patient (n=17)	14 (82.4)	3 (17.6)	0 (0.0)	0 (0.0)
A doctor in private practice (n=13)	10 (76.9)	2 (15.4)	1 (7.7)	0 (0.0)
Others (n=4)	4 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)

7.6.5 HIV continuum of care

As mentioned previously (Section 4.2.1), 142 respondents were diagnosed HIV positive. Of these men, 100% had their HIV ever medically monitored, and 99% had their HIV medically monitored in the last 6 months. Of those men, 94% were currently taking ART and of those men, 97% indicated they had an undetectable viral load at their last check-up.

The overall proportion of MSM with diagnosed HIV with an undetectable viral load was 91%.

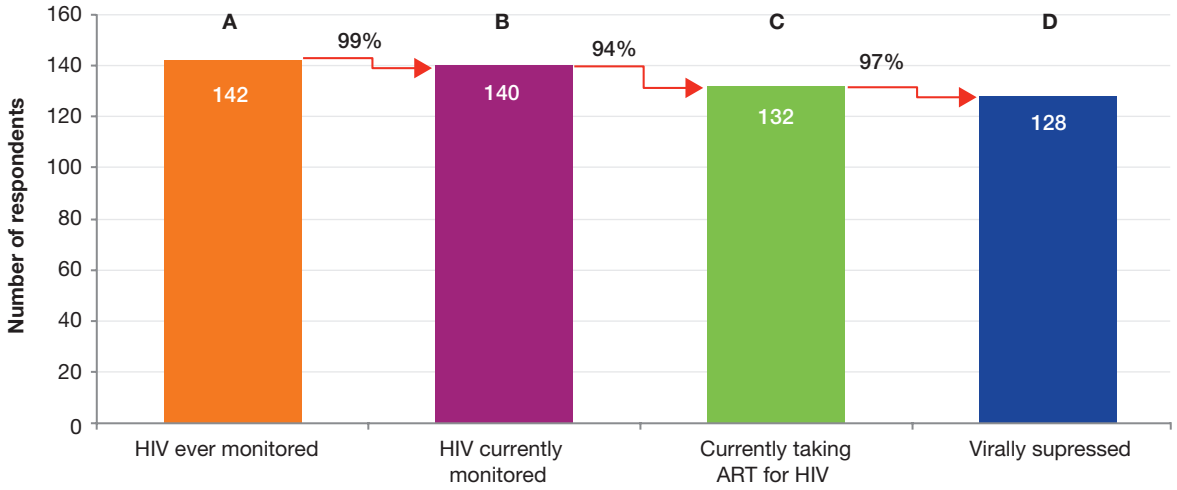


Figure 7.1 Continuum of care for men diagnosed with HIV

B is a subset of A, C is a subset of B and D is a subset of C.

7.7 Offers of hepatitis vaccination

All men were asked 'Have you ever been offered any hepatitis vaccination by a health service?' Overall, 65% of men had been offered vaccination against hepatitis by someone in the Irish health service, 31% indicated that they had not and the remaining indicated that they did not know.

7.8 STI testing services

All men were asked 'When did you last have a test for STIs other than HIV?' Table 7.9 shows the recency of STI testing in respondents. Fifty-five percent of respondents had an STI test in the last 12 months. Eighty-four percent of men who had an STI test in the last 12 months were asymptomatic on that occasion.

Table 7.9 Recency of STI testing in respondents who had previously had an STI test (n=2,035, missing n=48)

	n	%	Cumulative %
Last 4 weeks	288	14.1	14.1
Last 6 months	554	27.2	41.4
Last 12 months	273	13.4	54.8
Last 5 years	301	14.8	69.6
Ever	124	6.1	75.7
Never	495	24.3	

7.8.1 Awareness of clients' sexuality among STI test providers

The majority (89%) of respondents who had an STI test in the last 12 months indicated that their health care provider definitely knew they had sex with men.

7.8.2 Comprehensive STI screening

Men who had an STI test in the last 12 months (n=1,115) were asked about what elements of an STI screening they had experienced in the last 12 months. Table 7.10 shows the responses given by respondents.

Table 7.10 Elements of STI screening experienced by respondents in the last 12 months

Elements of STI screening experienced	Yes n	Yes %
Blood test (n=1,108, missing n=7)	1,068	96.4
Urine sample (n=1,105, missing n=10)	1,017	92.0
Urethral swab (n=1,080, missing n=35)	418	38.7
Penis examination (n=1,089, missing n=26)	592	54.4
Anal swab (n=1,102, missing n=13)	833	75.6
Anus examination (n=1,091, missing n=24)	465	42.6
Full STI screen* (Blood test, anal swab + urine sample) (n=1,086, missing n=29)	796	73.3

**A full STI screen recommended for MSM in Ireland is: blood test, anal swab, pharyngeal swab, urine sample. However, it was not asked if a pharyngeal swab was taken at their last STI screen.*

7.9 Partner notification for syphilis and gonorrhoea diagnoses

Men who had been diagnosed with either syphilis (n=61, 3% of total sample) or gonorrhoea (n=179, 9% of total sample) in the last 12 months were asked if they (or their healthcare provider) had informed their recent sexual partners of their diagnosis. Eighteen percent and 21% told none of their sexual partners they were diagnosed with syphilis or gonorrhoea, respectively. Thirty-six percent and 40% of men notified all of their sexual partners and 46% and 39% notified some of their sexual partners when they were diagnosed with syphilis or gonorrhoea, respectively.

7.10 Interventions by key characteristics

This section reports how interventions for MSM were distributed across several characteristics: age, employment status and HIV testing history. The likelihood that differences among individuals in different groups were due to chance was established using chi-squared analysis (χ^2) for continuous variables and independent t-test or ANOVA for categorical variables. If the significance value was ≤0.05, there was deemed to be a significant difference between the groups.

Forty four percent of men aged 17-24 years reported being verbally insulted because someone assumed or knew they were attracted to men. Nearly half of 17-24 year olds reported never testing for HIV and over half reported not testing for an STI (other than HIV) in the last 12 months. Across all age groups there was a high percentage of men who saw or heard information about HIV or STIs for MSM in the last 12 months. In those who had tested for an STI in the last 12 months, the majority got a full STI screen (blood test, anal swab and urine sample) across all age groups (Table 7.11)

Forty two percent of men who were students reported being verbally insulted because someone assumed or knew they were attracted to men. Seventy-eight percent of unemployed men saw or heard information about HIV or STIs for MSM in the last 12 months; this is compared to 91% in the overall sample. Forty-five percent of students had never tested for HIV and 53% had not tested for an STI in the last 12 months (Table 7.12).

Men who never tested for HIV reported consistently low numbers of engagement in interventions. Three percent of men who never tested for HIV had been spoken to about PrEP at a health service, compared to 23% of men whose last HIV test was negative and 19% who were HIV positive. Twenty-three percent of men who had never tested for HIV were offered a hepatitis vaccination compared to 75% of those whose last test was negative and 89% of men who were HIV positive. Nine percent of men who never tested for HIV had an STI test (other than HIV) in the last 12 months and, of those, only 32% reported a full STI screen (Table 7.13).

Table 7.11 Interventions by age group

Age groups (n=2,083)	17-24 (n=469)	25–39 (n=968)	40-54 (n=484)	≥55 (n=162)	All*	p value
Interventions						
% Verbal insults, because attracted to men in the last 12 months	44.1	28.2	15.3	12.3	27.5	<0.001
% Accessed free condoms, last 12 months†	57.5	57.5	53.9	51.1	56.2	0.374
% Spoke to someone about drug use concerns	2.4	2.5	2.5	5.0	2.6	0.293
% Spoken to about PrEP at health service	15.2	22.0	15.5	14.8	18.4	0.001
% Saw or heard information about HIV or STIs for MSM last 12 months	85.4	93.0	93.0	93.9	91.4	<0.001
% Never tested for HIV	46.6	14.7	16.1	20.9	22.7	<0.001
% Used community-based HIV testing at last test	13.7	25.4	17.7	16.8	20.3	<0.001
% Ever been offered any hepatitis vaccination	46.3	73.6	66.3	57.5	64.6	<0.001
% Tested for STI last 12 months	46.3	60.3	52.4	53.3	54.8	<0.001
% Full STI screen last 12 months‡	71.8	74.5	73.8	66.7	73.3	0.498

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

†Among those who got condoms in the last 12 months – 17-24 years n=393, 25–39 years n=842, 40–54 years n=382, ≥55 years n=139

‡Among those who had an STI test in the last 12 months – 17-24 years n=213, 25–39 years n=561, 40–54 years n=237, ≥55 years n=75

Table 7.12 Interventions by employment status

Employment status (n=2,073, missing n=10)	Employed (n=1,505)	Unemployed (n=94)	Student (n=373)	Other (n=101)	All*	p value
Interventions						
% Verbal insults, because attracted to men in the last 12 months	25.1	28.7	41.5	11.9	27.6	<0.001
% Accessed free condoms, last 12 months†	55.2	56.3	59.6	57.1	56.1	0.572
% Spoke to someone about drug use concerns	2.1	9.6	2.2	5.9	2.6	<0.001
% Spoken to about PrEP at health service	19.7	15.0	16.4	9.9	18.5	0.079
% Saw or heard information about HIV or STIs for MSM last 12 months	93.4	78.4	86.6	92.2	91.4	<0.001
% Never tested for HIV	16.4	33.3	44.8	23.0	22.6	<0.001
% Used community-based HIV testing at last test	23.2	8.2	12.2	20.9	20.4	<0.001
% Ever been offered any hepatitis vaccination	69.7	51.1	50.3	53.5	64.6	<0.001
% Tested for STI last 12 months	57.6	49.4	47.1	47.9	54.9	0.001
% Full STI screen last 12 months ‡	74.2	72.7	72.2	59.1	73.2	0.172

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

†Among those who got condoms in the last 12 months – employed n=1,277, unemployed n=71, student n=319, other n=84

‡Among those who had an STI test in the last 12 months – employed n=826, unemployed n=44, student n=169, other n=44

Table 7.13 Interventions by HIV testing history

HIV testing history (n=2,071, missing n=12)	Never tested (n=470)	Last test negative (n=1,459)	Diagnosed positive (n=142)	All*	p value
Interventions					
% Verbal insults, because attracted to men in the last 12 months	29.3	27.7	19.7	27.5	0.077
% Accessed free condoms, last 12 months†	32.7	61.4	68.1	56.1	<0.001
% Spoke to someone about drug use concerns	1.9	2.7	4.2	2.6	0.313
% Spoken to about PrEP at health service	2.6	23.2	19.1	18.2	<0.001
% Saw or heard information about HIV or STIs for MSM last 12 months	78.9	95.0	95.2	91.3	<0.001
% Used community-based HIV testing at last HIV test	-	27.0	16.7	20.4	<0.001
% Ever been offered any hepatitis vaccination	23.1	75.4	88.6	64.4	<0.001
% Tested for STI last 12 months	8.8	66.2	85.7	54.7	<0.001
% Full STI screen last 12 months‡	32.4	74.8	72.2	73.1	<0.001

** 'All' are the results of cross-tab analysis between two variables, and as a result the figure may differ slightly than what was reported in the previous sections due to variance in numbers*

†Among those who got condoms in the last 12 months – never tested n=349, last test negative n=1,279, diagnosed HIV positive n=116

‡Among those who got an STI test in the last 12 months – never tested n=37, last test negative n=926, diagnosed HIV positive n=115

Chapter 8
Discussion

Chapter 8 Discussion

The overall aim of EMIS-2017 was to generate data useful for planning HIV and STI prevention and care programmes and to monitor progress in this area. This report offers an up-to-date picture of the sexual health and wellbeing of MSM and the needs and behaviour of MSM in Ireland. It provides valuable information for a number of audiences, including the MSM community, policy makers and those planning and delivering sexual health and wellbeing interventions for MSM.

Overall, EMIS-2017 recruited 137,000 men from 50 countries, of whom 2,083 lived in Ireland. With a crude response rate of 13.5 per 10,000 male population aged 15–65 years, Ireland was in the top five countries for the highest response in EMIS-2017.[23] Men in EMIS-2017 Ireland had a median age of 33 years (range 17–74 years). Not all men identified as gay; 13% identified as bisexual. Half of respondents were out to all or almost all people who knew them. A quarter of men were not born in Ireland, of those 40% had lived here for more than ten years, with work and study the most common reasons for migration into Ireland. Of those not born in Ireland, nearly two-thirds were from other European countries, and almost one-fifth were from Latin America.

Mental health

Using validated screening tools, 11% had scores indicating a red flag for anxiety and 8% had scores indicating a red flag for depression. In this context, a red flag indicates a need for further assessment and diagnosis of anxiety or depression. A higher proportion of red flags for anxiety were indicated in 17-24 year olds (16%) compared to other age groups. Twenty-three percent of men had considered hurting themselves or thought they would be better off dead in the past two weeks; this again was higher in 17-24 year olds (30%) compared to other age groups. 17-24 year olds also reported the highest prevalence of being verbally insulted because of assumed attraction to men (44%) compared to other age groups, and compared to the overall prevalence (28%). A similar trend was observed in the overall European report, where 37% of younger men reported being verbally insulted compared to the overall prevalence of 21% [23].

Sexual assertiveness

Sexual assertiveness is the ability to negotiate safer sex. Sixteen percent stated that the sex they had wasn't always as safe as they would like it to be and 12% of men stated they did not find it easy to say 'no' to unwanted sex. Similar findings have been observed in previous surveys.[7, 8, 9] Since 2000, the Gay Health Network along with the Gay Men's Health Service has addressed the issue of sexual consent with provision of personal development courses. These courses are provided by Outhouse for MSM aged ≥25 years and by BeLonG To Youth Service for MSM aged ≤24 years. Information on what to do if there was no consent during sex is also available on man2man.ie (http://man2man.ie/what-to-do-if/what-to-do-if-there-was-no-consent/). Additionally, work has been ongoing in universities to identify sexual assault and the negotiation of sexual consent. A report published by the National University of Ireland, Galway, has proven that educational campaigns are possible in this area.[24] While this work is extremely valuable, the majority of the campaigns are heteronormative, and additional work is required to tailor campaigns to the MSM population, with involvement of the MSM community and NGOs.

Alcohol and other drug use

The prevalence of alcohol consumption in the last 12 months among men in EMIS-2017 Ireland (94%) slightly exceeded the European prevalence (91%).[23] The prevalence of possible alcohol dependency among men, which was determined using a validated screening tool, was considerably higher in Ireland (29%) compared to the overall European prevalence (18%). It has previously been reported that alcohol consumption is higher among MSM when compared to the general population.[25] Ireland has one of the highest rates of per capita consumption of alcohol in the world,[26] and it is concerning that MSM in Ireland appear to have a higher prevalence of alcohol consumption and possible alcohol dependency compared to MSM in other European countries.

The prevalence of illicit drug use (excluding poppers) in the previous 12 months was 41% among all respondents in EMIS-2017 Ireland. The most commonly used drugs over the last 12 months were cannabis (34%), cocaine (20%) and ecstasy pills (19%). The same drugs were most commonly reported in the overall European report, however, the use of these drugs was substantially lower compared to Ireland; cannabis (24%), cocaine (10%) and ecstasy pills (8%).[23] The use of nearly all drugs in EMIS-2017 Ireland was higher when compared to data from MISI-2015.[11]

Chemsex

The use of stimulant drugs to make sex last longer or more intense can be defined as 'chemsex'. The prevalence of stimulant drug use among MSM during or before sex (ever) was higher in Ireland (20%) compared to the overall European prevalence (15%).[23] Additionally, 72% of men who used stimulant drugs to make sex more intense or last longer had done so with more than one partner and this was also higher than the overall European proportion (66%). A study carried out in an Irish setting had similar findings to EMIS-2017 Ireland on the use of stimulant drugs during or before sex.[27]

Chemsex has been associated with increased HIV and STI transmission[27, 28] and it has also been observed that men who engage in chemsex were more likely to do things during chemsex that they wouldn't do when sober.[27] The National Drug Strategy for Ireland 'Reducing Harm, Supporting Recovery – a health-led response to drug and alcohol use in Ireland 2017–2025' included recommendations in relation to chemsex. The recommendations included the establishment of a chemsex working group that would examine the evidence in relation to early harm reduction responses and it also recommended that consideration needed to be given for specialist referral pathways for lesbian, gay, bisexual, transgender and intersex (LGBTI) people who use drugs and alcohol who may not otherwise engage in traditional addiction services.[29] A chemsex working group has been established and the aim of the group is to address the topic of chemsex as well as the harms associated with its related substance misuse by developing harm reduction and awareness campaigns. Information campaigns on the use of GHB/GBL (G) during chemsex have been developed and resources from this campaign include: a 'G Card', a G poster, information fact sheets/booklets and a G Harm Reduction video. Additionally, chemsex workshops, facilitated by GMHS and HIV Ireland, have provided information on chemsex to medical and psychiatric departments who may be in contact with men who engage in chemsex.

HIV testing

Twenty-three percent of men had never tested for HIV. While this is lower than previously reported in earlier surveys,[9, 10] continued and improved access to HIV testing is needed. Men aged 17-24 had the highest frequency of having never tested for HIV (47%) compared to other age groups. The lower prevalence of HIV and STIs in 17-24 year olds observed in EMIS-2017 Ireland may reflect the fact that this age group are not testing. A pilot study on monitoring of voluntary community-based HIV testing (VCBT) was recently conducted in Ireland. Overall

4,846 community-based HIV tests were carried out in 2018 and 29% of those were first time testers for HIV.[30] This shows the merit of community testing services in providing an important and accessible option where individuals can have an HIV test, particularly for those who have never tested for HIV. In June 2019, Dublin, Cork, Galway and Limerick joined the HIV Fast-Track Cities initiative. Funding of €450,000 has been provided by the Irish government for this initiative. It is envisaged that this funding will support community HIV awareness and community testing in Dublin, Cork, Limerick and Galway, as well as a national stigma reduction campaign [31]. It is hoped that this initiative will increase HIV testing among people most at risk for HIV infection.

Treatment as prevention for men living with HIV

Seven percent of all men reported that they were living with HIV, and this varied by age, with a prevalence of 17% among men 55 years and over. Almost all men with HIV were engaged in care (i.e. had their CD4 count and viral load count monitored every 3–6 months) and 94% of those were on ART. Of men on ART, 97% reported being virally supressed. In 2013, UNAIDS set a target with an aim of ending HIV transmission. The target (commonly known as 90-90-90) is that by 2020, 1) 90% of all people living with HIV will know their HIV status, 2) 90% of all people with diagnosed HIV infection will receive ART, 3) 90% of all people receiving ART will have sustained viral suppression and 4) there will be 0% tolerance of HIV stigma.[32] Data from EMIS-2017 Ireland suggest that MSM in Ireland achieved the second and third targets. The latest report on the HIV continuum of care in Ireland, where the number of people living in Ireland with HIV was estimated using modelling, demonstrated that Ireland has achieved the third target and is close to achieving the first and second.[33] It is hoped that the Fast-Tracks Cities initiative will help Ireland to achieve all three 90-90-90 targets and reduce stigma for those diagnosed with HIV.

It was observed that the length of time from diagnosis to treatment for HIV in Ireland has reduced substantially from an average of two years in 2006–2010 to three months in 2016–2017. In 2015, the Department of Health (DoH) launched their first national sexual health strategy to improve sexual health and wellbeing and reduce negative sexual health outcomes.[18] Part of this strategy included the use of ART for HIV prevention by treating those with established infection, known as Treatment as Prevention (TasP). In 2017, the DoH recommended that all people diagnosed with HIV in Ireland should be offered ART as soon as possible and informed of the benefits of ART in eliminating HIV transmission and improving their personal health.[18] The data from EMIS-2017 Ireland supports the findings from the first national audit of the HIV care continuum whereby people (including MSM) living with HIV are receiving ART promptly and achieving undetectable viral loads.

Almost 60% of men knew that a person with HIV, who is on effective treatment and has an undetectable viral load, cannot pass their virus to someone else during sex. This is slightly higher than the European proportion of 57%.[23] A landmark study, recently published in the Lancet Medical Journal, found that men whose HIV infection was fully suppressed by ART had effectively zero risk of transmitting HIV to their partner.[34] This was the first study to provide conclusive evidence that the risk of HIV transmission in gay couples through condomless sex, when HIV viral load is supressed, is effectively zero. It supports the message of U=U (undetectable=untransmittable).

PrEP

Despite there being no formal PrEP programme in place, there was a slightly higher prevalence of current use of PrEP (daily or event-based) in Ireland (4%) compared to the overall European average (3%).[23] A recent Health Technology Assessment (HTA) by the Health Information and Quality Authority (HIQA) found that a formal PrEP programme in Ireland would be safe, effective and cost saving.[35] Work is ongoing for a PrEP programme to be rolled out towards the latter part of 2019.

Overall, there was a high awareness of PrEP at 86% and this was substantially higher than the European figure (63%). While overall awareness was high, it was lower in some groups such as men who had never tested for HIV (68%). Never testing for HIV appeared to be a proxy for a lack of engagement in services, as those who had never tested for HIV also had the lowest frequency of STI testing, hepatitis vaccination uptake, and PEP and PrEP use. It is noteworthy that in the first year of its PrEP programme, Scotland saw that one-fifth of its participants had no prior attendance at HIV/STI services.[36] It has been hypothesised that the freely accessible and highly advertised PrEP programme attracted people at risk of HIV who would not normally access sexual health services. As part of the Scottish PrEP programme roll-out, an education and awareness campaign was carried out. Resources for that campaign included a dedicated website about PrEP in Scotland and information booklets about PrEP for service providers and patients.

Condomless anal intercourse and STIs

Men in EMIS-2017 Ireland had a higher prevalence of CAI (54%) with non-steady partners compared to that reported in MISI-2015 (42%).[11] The high prevalence of CAI with non-steady partners was coupled with a higher prevalence of gonorrhoea (9%) and chlamydia (6%) diagnoses in the last 12 months compared to the European average (5% and 5%, respectively), but not syphilis, which was 3% in Ireland and 4% in the European report. This trend in increasing STI diagnoses is reflected in the surveillance data as discussed in Chapter 1. Further analyses of the MISI-2015 data observed that a number of factors were independently associated with an STI diagnosis (syphilis, chlamydia or gonorrhoea) including having two or more non-steady CAI partners in the previous 12 months.[37] This reiterates the importance of condom use for STI prevention. It is noted that the higher STI prevalence among HIV positive men may indicate that condoms are being primarily used as an HIV transmission prevention measure.

Twenty-seven percent of men in EMIS-2017 Ireland indicated they had CAI solely because they did not have a condom at that time; this is comparable to the overall European figure of 26%.[23] Interestingly, just 16% of MISI-2015 respondents reported having CAI solely because they did not have a condom. It should be noted that since the EMIS-2017 survey was carried out there has been a large increase in the availability of condoms in response to the increase of HIV and other STIs among MSM. The National Condom Distribution Service (NCDS), established in October 2015, distributes free condoms and lubricant sachets to HSE services and other organisations working directly with individuals and groups who may be at increased risk of negative sexual health outcomes. In 2018, 409,319 condoms were distributed to 16 statutory services, 26 student unions/student health services and 22 NGOs/community organisations.[38] The most commonly used services for obtaining condoms were GMHS and GHN Outreach, GMHS clinic and SHCPP Outreach, two of which are services exclusively for MSM.

Hepatitis A and B vaccinations

Ireland has a higher uptake of hepatitis A (48%) and B (53%) vaccinations compared to the overall European average (40% and 45% for hepatitis A and B, respectively).[23] This is in part due to the administration of hepatitis vaccinations as part of routine STI testing in HIV/STI clinics. However, while there was a relatively high uptake of vaccination among EMIS-2017 Ireland respondents, there was also a high percentage of respondents who did not know their immune status. In addition there was a relatively low level of general knowledge of hepatitis A and B among respondents in EMIS-2017 Ireland. Thirty-seven percent of all respondents did not know that doctors recommend MSM should be vaccinated against hepatitis A and B and this increased to 57% among non-vaccinated men.

Chapter 9

Conclusions and opportunities for action and research

Chapter 9 Conclusions and opportunities for action and research

There was a high response rate to EMIS-2017 among MSM in Ireland. This has allowed us to produce meaningful results that are essential to plan responses and interventions for MSM in Ireland.

Overall, the findings suggest that there has been some positive progress in the sexual health of MSM in recent years. The majority of men who were living with HIV were engaged in care, were virally supressed, had high rates of STI screening and hepatitis A and B vaccination uptake. Among all MSM, there has been an increase in HIV and STI testing compared to previous surveys and this is in some part due to the positive interventions carried out by stakeholders and the MSM community in response to findings from previous surveys. Some of these positive interventions in relation to HIV testing can also be attributed to the increased availability of community testing.

However, there is still room for improvement, mainly in the areas of risk behaviour relating to HIV and STI transmission. What is also of concern is the number of respondents indicating red flags for anxiety and depression, particularly younger MSM. Additional work is also required to better understand chemsex and how best to mitigate the negative outcomes associated with it.

It is now the task of stakeholders to act on these findings to improve the health and wellbeing of MSM in Ireland. It is envisaged that the findings contained in this report will be an important resource for stakeholders.

Opportunities for action and research

The following areas for action and research have been identified by the EMIS-2017 Ireland steering group as topics that are essential for improving the sexual health and wellbeing of MSM in Ireland.

Health promotion and improvement

- There is a need to do a feasibility study into the possibility of integrating the SAOR tool (a screening and brief intervention for problem alcohol and substance use) into routine STI screening.
- Further work is needed to develop specific health and wellbeing/health improvement messaging for MSM.
- There is a need to tailor existing training and information within the area of consent to the MSM population, particularly among younger MSM. It should also be considered how information on sexual consent can be introduced through the education system.
- An education and awareness campaign on PrEP, particularly trying to reach those who have not previously engaged with services, should be done as part of the roll-out of the PrEP programme as recommended by HIQA and the Gay Health Network. Within this campaign, men who are on PrEP and who are having sex with non-steady partners/non-exclusive partners, should be encouraged to use condoms to reduce the risk of acquiring an STI.
- There is a need for a campaign focused on the U=U message to encourage MSM with HIV to take up treatment and those not diagnosed to get tested.
- Health promotion messaging should be developed to encourage a culture among MSM to carry condoms for the purpose of reducing the risk of STI transmission as well as HIV.

- Campaigns concerning the awareness of hepatitis among MSM are currently ongoing and these should be continued and strengthened, particularly in light of ongoing outbreaks of hepatitis A among MSM in Europe.[39]
- Outreach to MSM who have migrated to Ireland needs to be further supported.

Clinical practice

- More MSM, particularly younger and older cohorts, need to be encouraged to get an HIV test and to have regular STI screening. In order to achieve this, current STI services should be expanded, and new models of STI and HIV testing explored.
- An adult immunisation register and electronic vaccination passport should be developed for both caregivers and individuals to know what vaccinations have been received by an individual. This is particularly important for MSM for whom several vaccinations are recommended to prevent hepatitis A, hepatitis B and human papillomavirus (HPV).
- In addition to traditional testing services and community testing, other models ought to be considered for MSM who do not engage with services, for example, home testing and home sampling.
- Harm reduction interventions for alcohol and drugs should continue to be supported and strengthened.
- Statutory health organisations and NGOs should continue to increase awareness of sexual consent and negotiation, particularly for those engaging in chemsex.
- Caregivers involved in the wellbeing of MSM should ensure they have consistently up-to-date pathways in place for referral in cases of substance misuse, drugs, alcohol and sexual abuse and that these are updated periodically.

Future research

Further research is required to qualitatively and quantitatively explore the results of EMIS-2017 Ireland. Further studies could consider the following areas:

- The mental health of MSM, particularly younger MSM, as this may impact on the general health and wellbeing of MSM as well as their sexual health. It has been ten years since Supporting LGBT Lives was published [40], a similar national LGBT mental health survey would help further our understanding of this.
- The context of alcohol consumption among MSM and the association of alcohol consumption with the sexual and mental health of MSM.
- Chemsex including
  - demographic, behavioural factors and ill health associated with its use. This is important for the further development of information resources, support and referral pathways and infrastructure for those engaging in chemsex. Mental health aspects of chemsex, particularly in men where consent was compromised during chemsex.
  - The effectiveness of providing party packs to men who engage in chemsex, particularly multiple partner chemsex,
- The causative factors behind MSM reporting condomless anal intercourse due to not having a condom.
- The profile of men who are availing of PrEP in Ireland and why they use PrEP. This research could also investigate the profile of men who are eligible for PrEP but not availing of it. This could help inform the planned roll-out of PrEP in Ireland.

- Research with MSM who identify as bisexual or who are having regular sex with women is warranted as they are an understudied population group who may have specific health and wellbeing needs.
- The association of minority stress on MSM health and wellbeing and the impact minority stress has on access to care.
- Men who are not born in Ireland and who are HIV positive, to establish if they are receiving treatment for HIV and their ability to access services.
- A latent class analysis (analysis of subgroups) of EMIS-2017 Ireland data which could help inform health promotion and policy.
- A formal trend analysis across EMIS-2010, MISI-2015 and EMIS-2017. This information would allow for the monitoring of national progress in sexual health and wellbeing of MSM in Ireland.

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Appendix A Comparisons between EMIS-2017 Ireland, MISI-2015 and EMIS-2010 Ireland

EMIS-2010

EMIS-2010 was a multi-country, cross-sectional survey of MSM. It involved 38 countries, including Ireland.[10] A total of over 180,000 men were recruited, with Ireland contributing 2,303 respondents .The survey was available in 25 languages and was promoted using a number of dating websites where direct messages were sent to their members to complete the survey. In addition, promotional campaigns were organised in most participating countries via Facebook. The final report (including Irish specific data) can be found here: https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/EMIS-2010-european-men-who-have-sex-with-men-survey.pdf.

MISI-2015

MISI 2015 was a cross-sectional survey of MSM living in Ireland carried out in 2015 and included 3,090 men in the analysis.[11] The survey was available in English only and was promoted on gay community and health promotion websites, through social media sites and promotional cards for social and community venues and services. To mark the start of the survey, a launch party was held and a press release was issued. The final report can be found here: https://www.hpsc.ie/a-z/specificpopulations/menwhohavesexwithmenmsm/msminternetsurvey2015/misi2015reportandexecutivesummary/File,15696,en.pdf

EMIS-2010, MISI 2015 and EMIS-2017 data were independent, cross-sectional surveys and cannot be directly compared without accounting for differences in the ages of respondents, their country of birth, and recruitment methods in the different surveys. Any comparison of the reported prevalence of risks, behaviours and interventions needs to take these differences into consideration.

Comparison of EMIS-2010, MISI 2015 and EMIS-2017 surveys

	EMIS-2010[1] n=2,303	MISI 2015[2] n=3,090	EMIS-2017 n=2,083
	(%)	(%)	(%)
Demographic profile			
Median age (years)	31	30	33
Respondents aged <25 years	24	31	23
Resides in Dublin	46	49	57
Living in a city >500,000 inhabitants	50	-	48
Born outside of Ireland	23	14	25
Unemployed	9	7	5
Steady relationship with a man	29	39	31
Steady relationship with woman	7	8	3
Identify as gay/homosexual	78	79	81
Out to all or almost all	40	51	51

1 Data taken directly from the EMIS 2010 report
2 Data taken directly from the MISI 2015 report

Paid for sex in last 12 months	5	-	6
Been paid for sex in last 12 months	4	-	4
Reported ill health in MSM			
Positive HIV diagnosis (whole sample)	6	5	7
Positive HIV diagnosis (among those tested)	10	8	9
Positive HIV diagnosis in last 12 months	3	1	1
Diagnosed any STI in last 12 months (whole sample)*	9	9	14
Diagnosed any STI among those tested in last 12 months	21	21	26
Syphilis diagnosis in last 12 months (whole sample)	2	-	3
Gonorrhoea diagnosis in last 12 months (whole sample)	2	-	9
Chlamydia diagnosis in last 12 months (whole sample)	3	-	6
First diagnosis of anal/genital warts in last 12 months	3	-	1
Risk and precautionary behaviour			
Currently on ART (for those HIV positive)	75	79	94
Ever used PEP (for those not HIV positive)	-	4	10
Currently use PrEP (either daily or event-based) (for those not HIV positive)	-	2	4
Ever had anal intercourse with a man (among men who had sex with men)	94	88	93
Sex with women in last 12 months	14	14	9
CAI with a steady male partner in last 12 months (among men who had sex with a steady partner in the last 12 months)	66	68	75
CAI with a non-steady male partner last 12 months (among men who had sex with a non-steady partner in the last 12 months)	40	42	55
History of drug injecting (drugs and/or anabolic steroids)†	3	2	4
% Alcohol consumed in last 24hrs‡	41	-	40
% Tobacco consumed in last 24 hours‡	36	-	26
% Poppers use in last 12 months◆	-	33	46
% Cannabis use in last 12 months◆	-	28	34
% Ecstasy use in last 12 months◆	-	17	19
% Cocaine use in last 12 months◆	-	13	20
Needs			
Internalised homonegativity score (average)	2	-	1
CAI because no condom in last 12 months	16	16	27
Concerned about drug use (among men who took drugs in the last 12 months)	6	-	8
Interventions			
Verbally insulted in last 12 months because someone knew/thought you were attracted to men	33	-	28
Accessed free condoms last 12 months	-	39	56

Seen HIV/STI information specifically for MSM in last 12 months	85	-	91
Never tested for HIV	37	37	23
HIV ever monitored	-	99	100
HIV monitored in the past 6 months	93	93	99
Receiving ART (among those whose HIV was monitored past 6 months)	75	85	95
Undetectable viral load (among those on ART)	80	91	97
Full course of hepatitis B vaccination	48	-	53
STI test in last 12 months	38	39	55

**Any STI in MISI 2015 and EMIS-2017 was defined as syphilis, gonorrhoea and/or chlamydia. EMIS-2010's definition is not clear and may include all of the above and anal/genital warts.*

† EMIS-2010 only asked about self-injecting. MISI 2015 and EMIS-2017 asked about self-injecting or someone injected you.

‡ MISI 2015 asked about daily use of alcohol and tobacco. EMIS-2010 and 2017 asked about alcohol and tobacco consumption in the last 24 hours.

◆ MISI 2015 respondents were asked to tick from a list of drugs they had used in the last 12 months. EMIS-2010 and 2017 asked about each drug separately and asked about their recency of use (i.e. last 24 hours, last 6 months, last 12 months, ever). Ecstasy use in EMIS-2017 refers to ecstasy pills.

Percentages are rounded in the table.

Sláinte Ghnéis &
Clár um Thoirchis Ghéarchéime
Sexual Health &
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