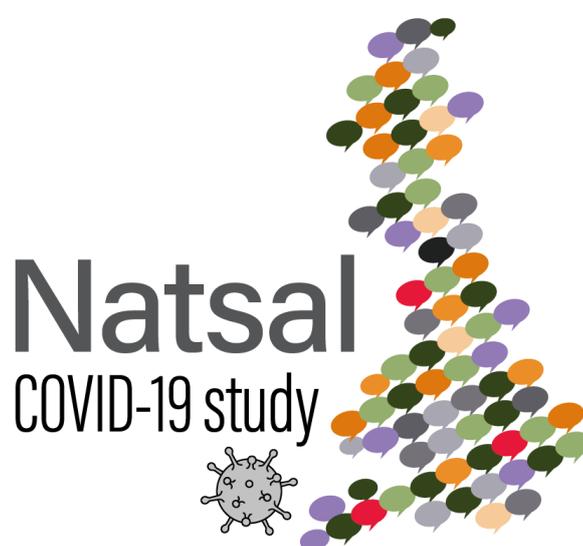


# Sexual and reproductive health in Scotland during the first year of the COVID pandemic (March 2020-March 2021)

National Study of Health and Relationships during COVID-19



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<https://www.natsal.ac.uk/natsal-covid-study>

January 2022



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## EXECUTIVE SUMMARY

- Sexual and reproductive health (SRH) and services remain essential during a pandemic. In Scotland, as elsewhere, the COVID-19 pandemic led to redeployment of SRH staff, repurposing of laboratory facilities, and contraction/pausing of some services, particularly testing and prevention. At the same time many services rapidly pivoted to telehealth (remote service delivery) primarily by phone and, to a lesser extent, online provision.
- The Government recovery plan, Reset and Rebuild<sup>1</sup>, outlines key early impacts of the pandemic including: near cessation of very long acting methods of contraception (vLARC) insertions; reduction in HIV testing across specialist sexual health services; complete cessation of outreach blood-borne virus (BBV) testing in the community; and reduction in HIV PrEP (HIV Pre-exposure Prophylaxis) prescription. Public health data collection and surveillance were also affected, for example, national Sexual Health & BBV (SHBBV) epidemiological data were not collected from December 2019, which means the impact of service contraction on testing and diagnosis of BBV is not known.
- Better understanding of the impact of the pandemic requires population-level behavioural data, since the impact depends in part on changes in partner mixing and sexual behaviour.
- This report provides Scotland-specific data on sexual behaviour, and sexual and reproductive health during the first year of the COVID pandemic. It contributes population-level evidence to support the process of rebuilding sexual and reproductive health services in Scotland and planning ahead to the next Sexual Health Framework. The data are from the Natsal-COVID study.

### Natsal COVID study - methods

- Data come from survey wave 2 of Natsal-COVID study, an online web-panel survey of 6,658 participants across Britain.
- The study was led by the team responsible for the British National Surveys of Sexual Attitudes and Lifestyles ([www.natsal.ac.uk](http://www.natsal.ac.uk)). Fieldwork for the fourth Natsal survey was paused in 2020 because of the pandemic and an online survey – Natsal COVID – was launched specifically to understand the impact of COVID on sexual behaviour, relationships and service use. 573 participants were from Scotland and are the focus of this report.
- Data were collected between 27 March and 26 April 2021, one year following the start of the first lockdown (announced 23rd March 2020). Quotas and weighting were used to achieve a quasi-representative sample of the British general population. Eligible participants were resident in Britain, aged 18-59 years, and both samples included a boost (n=500) of those aged 18-29.

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<sup>1</sup> [Reset and Rebuild - sexual health and blood borne virus services: recovery plan](#)

- Questions covered participants' sexual behaviour, relationships, and SRH service use. Questionnaires for wave 1 and wave 2 are available here: [Natsal-COVID Study | Natsal](#).

## **Key findings**

- 573/6,658 wave 2 participants were living in Scotland. This group was broadly similar to participants in living in England/Wales, except they were more likely to be of white ethnicity, and more educated, but less likely to be employed.

### ***Sexual Behaviour in the first year of the COVID pandemic***

- Most participants reported being sexually active during the pandemic and, in Scotland, about 1 in 5 participants reported at least one new partner in the first year of the COVID pandemic.
- Among sexually-experienced participants, 87% reported physical sexual behaviour in the past four months (December 2020 to March 2021), while 56% reported at least one virtual sexual behaviour (including watching pornography). Excluding pornography, 28% of participants reported virtual sexual behaviour in past four months. More men reported virtual sexual behaviours (77% including watching pornography, 34% excluding watching pornography) than women (36% including watching pornography, 24% excluding watching pornography). Those in a steady relationship were more likely to report partnered physical sexual behaviours than those not in a steady relationship, regardless of gender (Appendix 4).
- Sexually active participants were more likely to be satisfied with their sex life, less likely to report worry or distress about their sex life and reported similar levels of sexual difficulties compared with sexually inactive participants.
- Just over half (54%) of participants in Scotland rated their sexual health as important over the first year of the pandemic. Those in steady relationships were more likely to report their sexual health as being very or somewhat important, regardless of gender.

### ***Service use in the first year of the COVID pandemic***

- In Scotland, 28% of sexually-experienced participants aged 18-44 reported accessing a SRH service during the year following the first lockdown (Appendix 6).
- Of those living in Scotland, 5% of men and 9% of women reported trying but being unable to access a SRH service at least once during the year following the first lockdown.
- Participants living in Scotland were less likely to report difficulty accessing condoms because of the pandemic (4%) than those in England and Wales (8%). Across Britain those aged 18-29 were more likely to report difficulty accessing condoms than those aged 30-44, and young men who have sex with men (MSM) were particularly likely to report this.
- Of sexually-experienced participants living in Scotland, 3% reported a chlamydia test in the past year. In England/Wales 6% did so but the difference between nations was not statistically significant. Among participants living in Scotland, 4% reported having an HIV test in the past year. In England/Wales, 8% did so. After adjusting for age, women remained less likely to report

an HIV test in the past year than women in England/Wales, but there was no significant difference by region for men.

- In a typical year, around 18% of participants registered as female at birth and in the eligible age range would be expected to attend cervical screening. But in the first year of the COVID pandemic, only 7% did so in Scotland.

## **Conclusions**

- These data provide strong evidence of the need to maintain SRH services throughout the pandemic. This population evidence is particularly important because of the sustained gap in collection of national surveillance data. Our findings additionally suggest the need for catch-up initiatives to address a likely backlog of unmet need. Innovative and intelligent use of online and telehealth provision may support this catch-up, while mitigating risks of digital exclusion of more vulnerable people, and of relegating needs that require face-to-face treatment.
- We found evidence that sexual behaviours, sexual health service use, unmet need and chlamydia and HIV testing were similar across the nations of Britain. People in Scotland were less likely to report difficulty accessing condoms, and initiatives promoting access to free or low-cost condoms should be promoted as an effective, inexpensive, and often acceptable primary prevention tool.

## **Strengths and limitations**

- A strength of the Natsal COVID study is the large overall sample. The study used quota sampling and post-hoc weighting adjustment to provide a quasi-representative sample. The study design was as rigorous as possible under constraints imposed by the COVID pandemic but falls short of the rigorous probability sampling method employed by the decennial Natsal surveys. In particular, web panel surveys have known and expected biases, including that they exclude people without internet access. This is an important limitation because of the overlap between social, health and digital exclusion. Data presented in this report should also be interpreted with caution due to the small sample size for Scotland.
- It is also not possible to know whether differences identified between regions are due to differences occurring before the pandemic or emerging during the pandemic or a combination of these factors.

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### **[Additional data \(available in separate Excel file\)](#)**

- Appendix 1.0: Demographics by region
- Appendix 1.1: Demographics by gender among those living in Scotland
- Appendix 2.0: Sexual behaviours by gender among those living in Scotland
- Appendix 3.0: Sexual behaviours by age among those living in Scotland
- Appendix 4.0: Sexual behaviours, perception of porn, sexual contact outwith household and sexual function by gender and relationship status among those living in Scotland
- Appendix 5.0: Contraception use by region
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- Appendix 5.3: Reasons for change in contraception use by age (all regions)
- Appendix 6.0: Service use by gender by region
- Appendix 6.1: Service use by region by age

## **Acknowledgements**

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**January 2022:** These data are not yet published and are therefore NOT FOR WIDER CIRCULATION at this time.

## 1.0 Introduction

Sexual and reproductive health (SRH) and services remain essential during a pandemic. In Scotland, as elsewhere, the COVID-19 pandemic led to redeployment of SRH staff, repurposing of laboratory facilities, and contraction/pausing of some services, particularly testing and prevention. At the same time many services rapidly pivoted to telehealth, primarily service provision by phone and, to a lesser extent, online provision. The Government recovery plan, Reset and Rebuild<sup>2</sup>, outlines key early impacts of the pandemic, including: near cessation of very long acting methods of contraception (vLARC) insertions; reduction in HIV testing across specialist sexual health services; complete cessation of outreach blood-borne virus (BBV) testing in the community; and reduction in HIV PrEP (HIV Pre-exposure Prophylaxis) prescription. Routine surveillance (including on HIV, viral hepatitis and STIs regarding diagnosis and testing) was paused due to staff redeployment and was still not reinstated at time of completing this report (January 2022). This means we do not know the impact of service contraction on testing and diagnosis of BBV. Population-level behavioural data is important since the impact depends in part on changes in partner mixing and sexual behaviour.

This report provides Scotland-specific data on sexual behaviour, and sexual and reproductive health during the first year of the COVID pandemic. It contributes population-level evidence to support the process of rebuilding sexual and reproductive health services in Scotland and planning for the next Sexual Health Framework.

Data come from wave 2 of the Natsal COVID study, a web-based panel survey of 6,658 participants across Britain. The study was led by the team responsible for the British National Surveys of Sexual Attitudes and Lifestyles ([www.natsal.ac.uk](http://www.natsal.ac.uk)). Fieldwork for the fourth Natsal survey was paused in 2020 because of the pandemic and an online survey – Natsal COVID – was launched specifically to understand the impact of COVID on sexual behaviour, relationships and service use. Of the study sample, 573 participants were from Scotland and are the focus of this report.

## 2.0 Objectives of Natsal-COVID

1. Rapidly understand how sexual and reproductive health (SRH) in Britain has been affected by the COVID-19 pandemic, covering three main topics:
  - Sexual activities and behaviours
  - Relationship and sexual difficulties (including violence)
  - SRH service use and uptake of interventions
2. Disseminate data to inform SRH service design and provision during and after the COVID-19 pandemic

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<sup>2</sup> [Reset and Rebuild - sexual health and blood borne virus services: recovery plan](#)

## 3.0 Methods

### 3.1 Sampling

Data come from survey wave 2 of the Natsal-COVID study, an online web-panel survey carried out by Ipsos MORI on behalf of the Natsal team. Wave 2 data captures sexual behaviour and SRH outcomes one year following the first national lockdown in Britain. For the second wave, the sample was drawn first from those participants who participated in wave 1 (longitudinal sample) and agreed to be re-contacted for future waves of the survey. No quotas were set for this group. To complete the sample, new participants were sampled from Ipsos MORI's online panel using quotas for gender, age, region, and social grade. Data were collected between 27 March and 26 April 2021.

First wave data were collected from the 29<sup>th</sup> of July to the 10<sup>th</sup> of August 2020, approximately four months after the announcement of Britain's first national lockdown (23/03/2020).

In both first and second survey waves, eligible participants were resident in Britain, aged 18-59 years, and the sample included a boost of those aged 18-29. Quotas (age, gender, region, and social grade) and weighting were used to achieve a quasi-representative sample of the British general population. There was also a boost sample of 500 participants aged 18-29 representative of the population aged 18-29, ensuring a total sample of 2000 participants at this age.

The methods in wave 1 and wave 2 were similar. Wave 1 methods are described in full elsewhere<sup>3</sup>.

### 3.2 Questionnaire

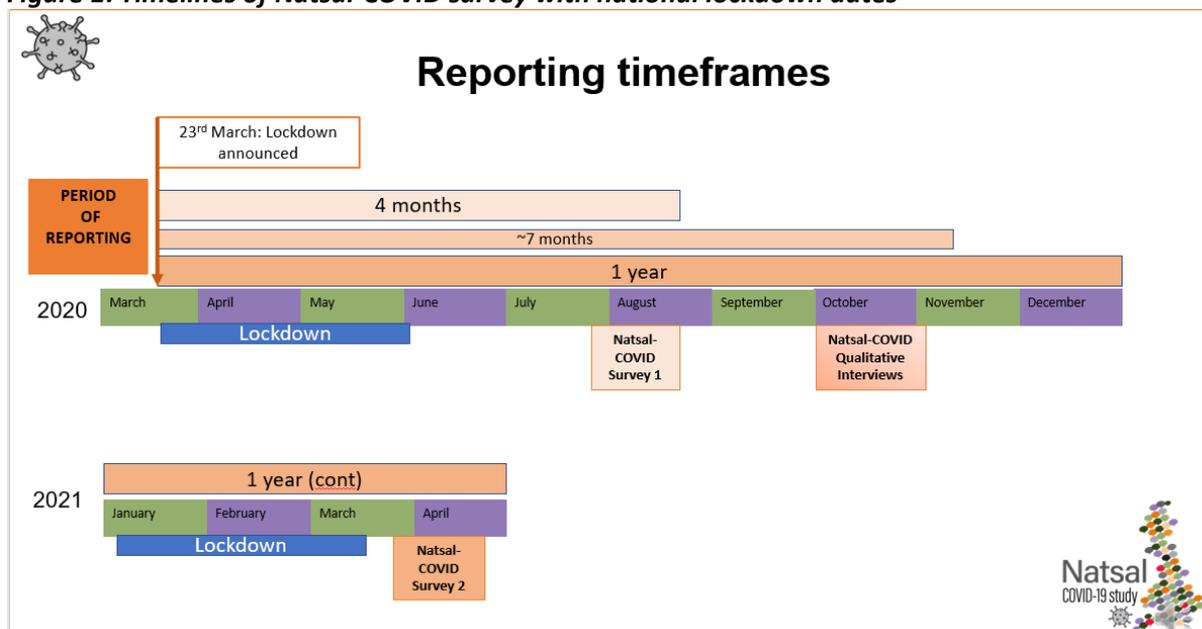
This was an online web-panel survey administered by survey research company, Ipsos MORI. Questions covered participants' sexual behaviour, relationships, and SRH service use. The Natsal-COVID Wave 2 questionnaire was adapted from the Wave 1 questionnaire. The questionnaires are available here: [Natsal-COVID Study | Natsal](https://www.natsal.org.uk/natsal-covid-study).

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<sup>3</sup> Dema et al. Methodology of Natsal-COVID Wave 1: a large, quasi-representative survey with qualitative follow-up measuring the impact of COVID-19 on sexual and reproductive health in Britain <https://wellcomeopenresearch.org/articles/6-209>

### 3.3 Reporting timeframes

Figure 1: Timelines of Natsal-COVID survey with national lockdown dates



Both survey waves took place following a 3-month period of full lockdown (represented by the blue blocks on figure 1) and were separated by 8 months of tightening and loosening restrictions. This report focuses on the second survey wave.

### 3.4 Description of Sample: Scottish data

Of the 6,658 wave 2 participants, 573 were living in Scotland (~50% men; 50% women). Scottish participants were broadly similar to those living in England and Wales, with several differences: Scottish participants were more likely to be of white ethnicity, more likely to have higher educational qualifications, but less likely to be employed (Table 1). Among the Scottish participants, 94% reported ever having any kind of sexual experience and this mirrored the proportion across the study sample (see section 7.0, table 3 for definitions). See Appendix 1.0 and 1.1 for full demographic details.

Table 1: Key demographics of those living in Scotland and those living in England/ Wales

	Scotland (n=573)	England/Wales (n=6085)
Ethnicity (white)*	93.8%	85%
Heterosexual/ Straight	95%	96%
Educated to at least degree level*	52%	44%
Employed or self-employed*	63%	70%
In a steady relationship	62%	68%
Lived in an urban location	85%	85%
Symptoms of depression (PHQ2)	36%	32%
Symptoms of anxiety (GAD2)	35%	31%
Ever reported any kind of sexual experience	94%	94%
Ever reported same sex partners	6%	6%

\* significant difference at  $p < 0.01$  level.

### 3.5 Notes on interpretation of data

Data are presented for Scotland except where the denominator is less than 30 or where there was no difference between regions. Where this occurs, data are presented for Scotland, England and Wales combined.

Natsal-COVID was inclusive in its approach to gender. Where data are presented for men and women, estimates include trans men and trans women respectively. Participants identifying as non-binary are excluded from gender stratified analyses but included elsewhere.

Sexual experience was defined as those reporting at least one sexual partner of any gender ever, or vaginal, anal or oral (VAO) sex or other contact with someone's genital area ever. We use the term 'sexually-experienced' to describe participants who met this definition.

Sexual activity was defined as those reporting at least one partner in the year since 23<sup>rd</sup> March 2020.

A list of key variables and definitions used within the current analysis can be found in section 7.0.

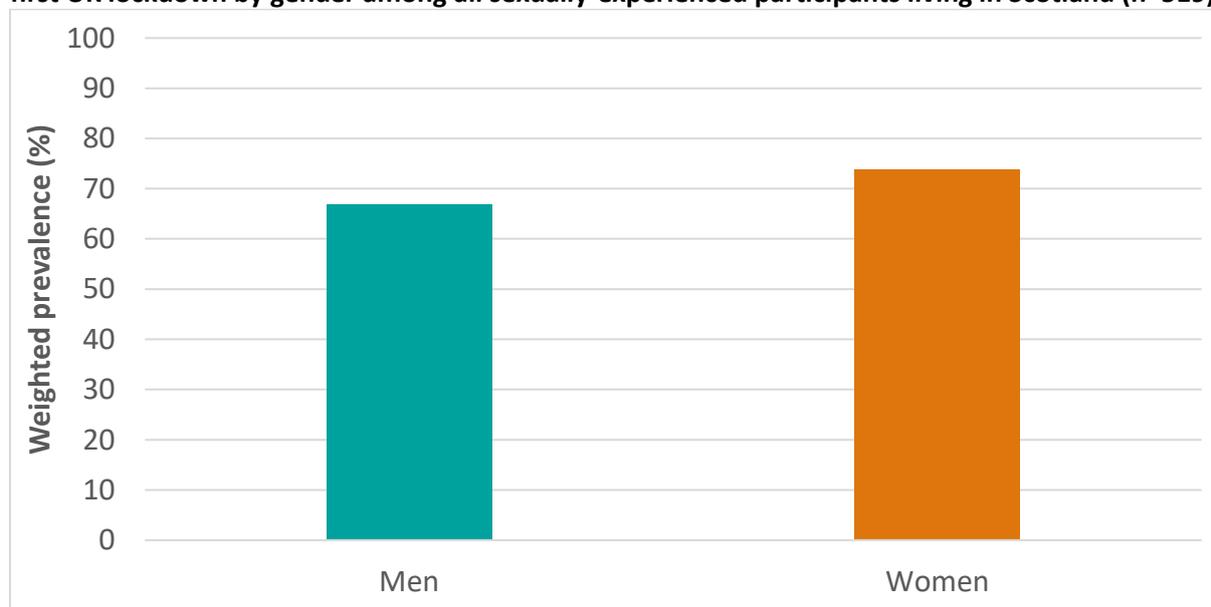
Throughout the report, a threshold of  $p < 0.01$  has been used to determine statistical significance. Where error bars are presented, these depict 95% Confidence Intervals.

## 4.0 Results

### 4.1 Sexual partners and condomless sex in the year following the first lockdown

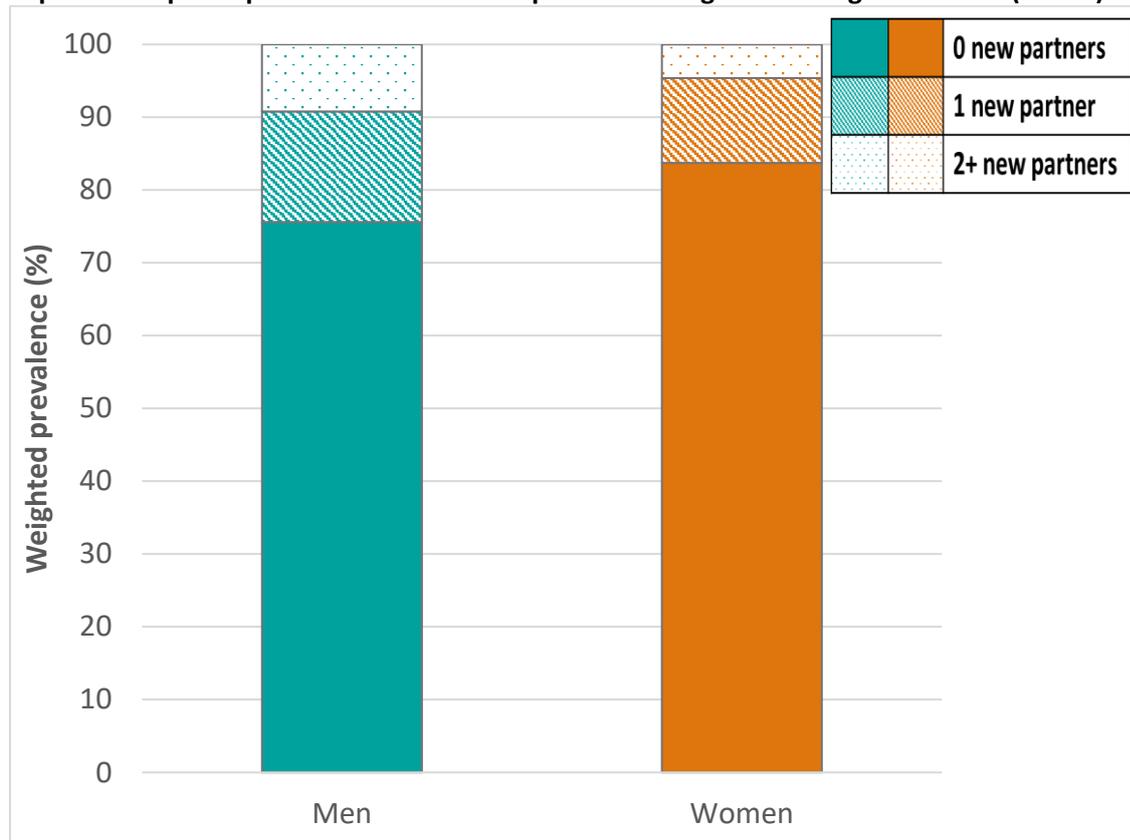
Sexually-experienced participants reported numbers of sexual partners, new sexual partners, and new sexual partners with whom they did not use a condom on first occasion of sex (vaginal or anal; herein called 'new condomless partners'), all in the past year from March 2020. Further data on sexual partners can be found in appendices 2.0 and 3.0.

**Figure 2: Participants reporting at least one sexual partner during the year from the start of the first UK lockdown by gender among all sexually-experienced participants living in Scotland (n=519)**



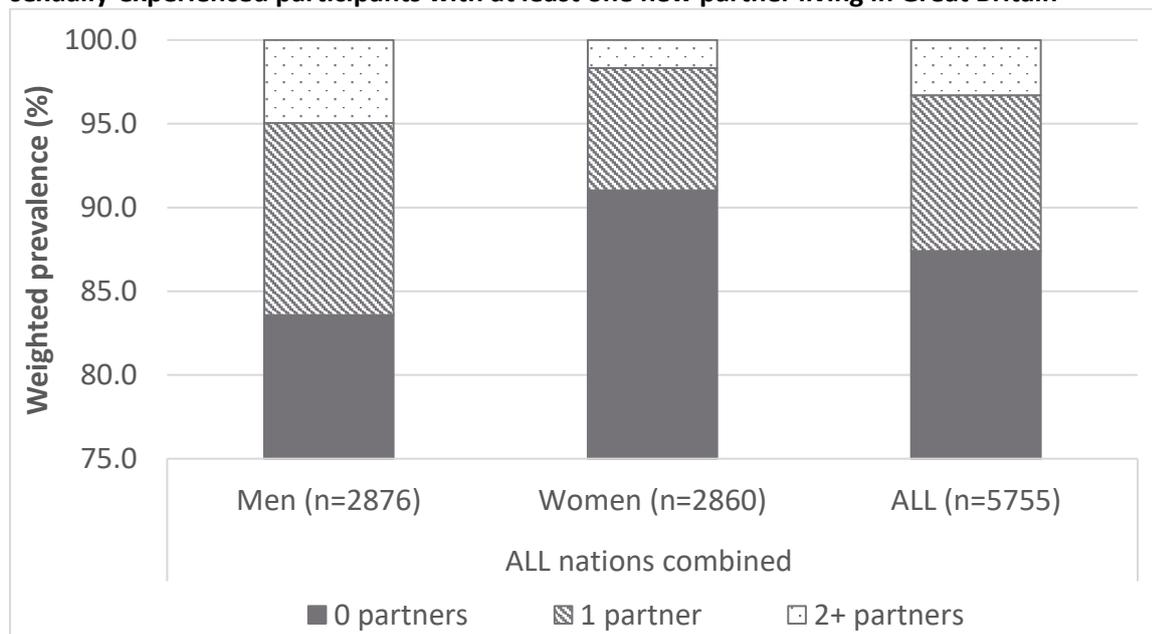
66% of men and 73% of women in Scotland reported at least one sexual partner during the year from the first lockdown. There was no significant difference between genders within Scotland and no significant difference between Scotland and England/Wales.

**Figure 3: Reported number of new sexual partners in the past year by gender among sexually-experienced participants with at least one partner among those living in Scotland (n=347)**



Among sexually-experienced Scottish participants who reported having at least one partner in the past year (n=347), 20% had at least one new partner in the past year. There were no significant differences between genders within Scotland and no significant difference between Scotland and England/Wales overall.

**Figure 4: Reported number of new condomless sex partners in the past year by gender among sexually-experienced participants with at least one new partner living in Great Britain**

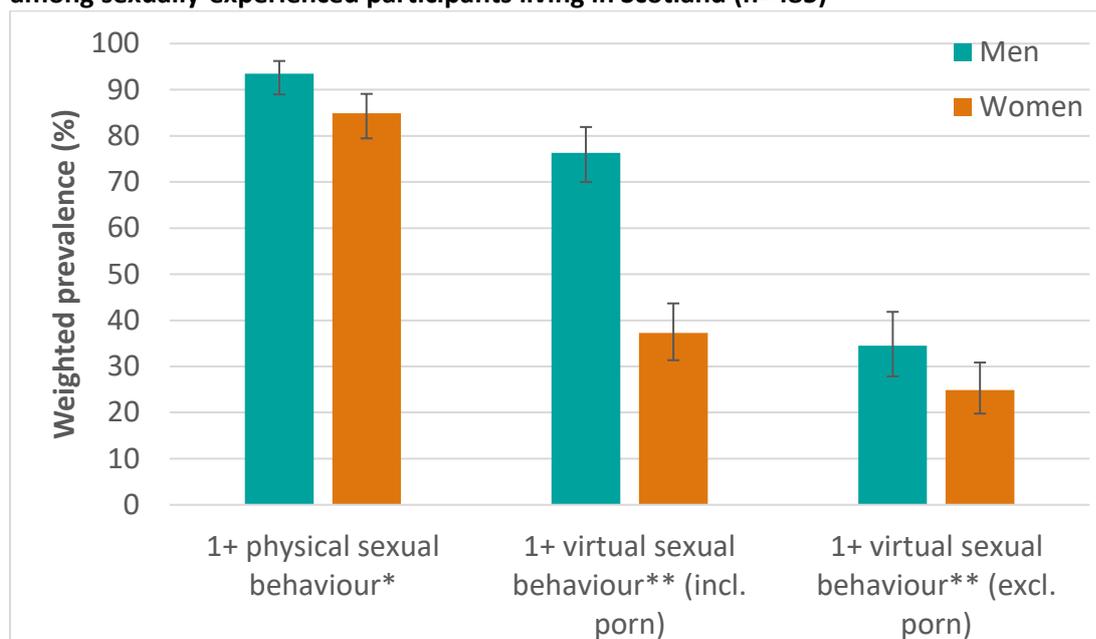


Overall, 65.5% of participants with at least one new partner in the past year, reported a new condomless partner (67% in men and 62% in women). There was no significant difference between Scotland and England/Wales in the proportion of participants reporting new condomless partners.

#### 4.2 Sexual behaviours in past 4 months (December 2020-March 2021)

Participants were asked about sexual behaviours in the past four months (December 2020-March 2021). Further data on sexual behaviours can be found in appendices 2.0, 3.0 and 4.0.

**Figure 5: Reported sexual behaviour in the past 4 months (December 2020-March 2021) by gender among sexually-experienced participants living in Scotland (n=485)**



*\*Physical sexual Behaviour: reported at least one of the following at least once in the past 4 months: vaginal, anal or oral sex, other contact with someone's genital area, masturbating, using sex toys (by yourself or with someone else)*

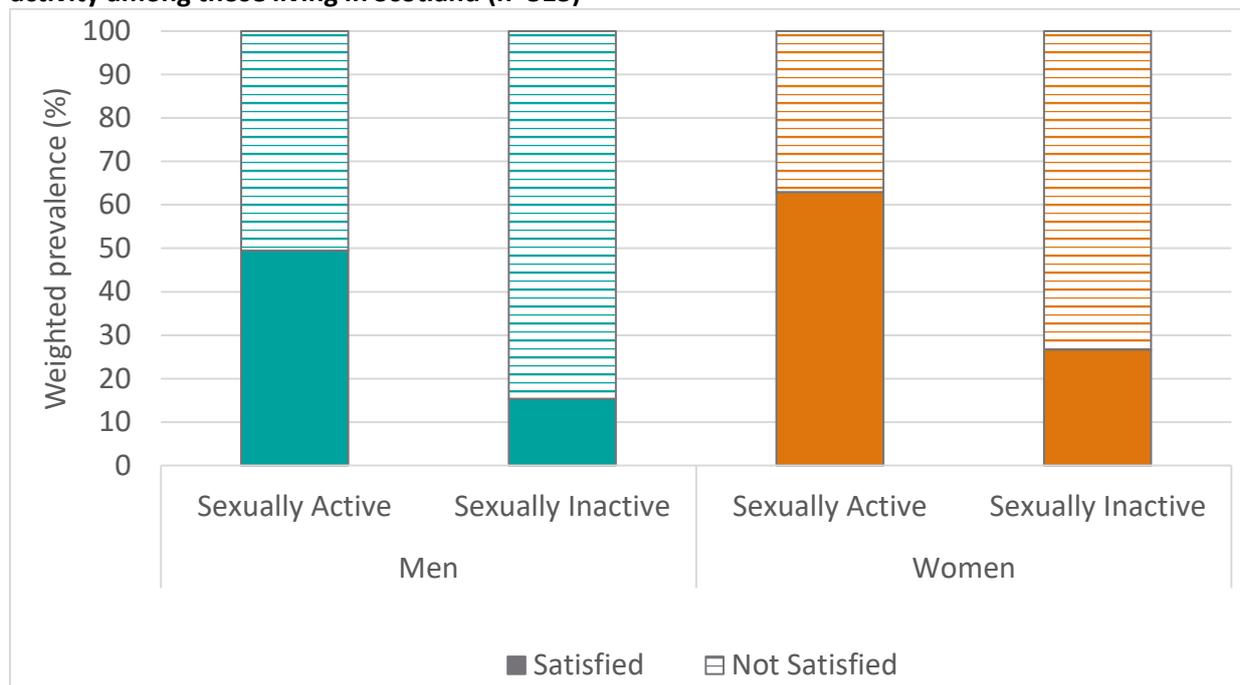
*\*\*Virtual sexual behaviours: reported at least one of the following at least once in the past 4 months: Messaging via dating apps/online, sexting (images or recorded videos), using video or voice calls to interact with someone sexually, paying for online sexual services (e.g. live streaming), looking at pornography*

Overall, reported sexual activity in the past four months was similar between nations.

In Scotland, 87% of participants reported at least one physical behaviour (including both solo and partnered behaviours; 93% of men and 81% of women) (Appendix 2.0). Virtual sexual behaviours (including pornography) were less common. They were reported by 56% of participants (77% of men, 36% of women). Excluding pornography, 28% reported any virtual behaviour (34% of men, 24% of women). Older participants were less likely to report virtual behaviours (Appendix 3.0).

### 4.3. Self-appraisal of sex life in year since first lockdown

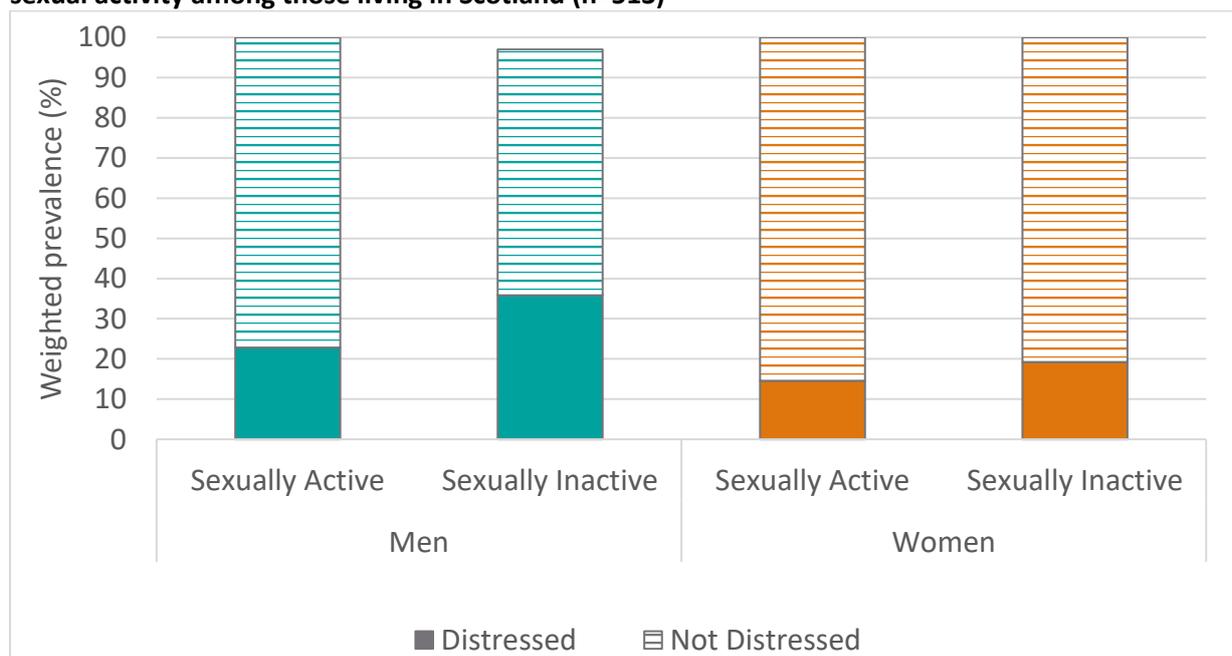
**Figure 6: Self-reported satisfaction with sex life in year since first lockdown by gender and sexual activity among those living in Scotland (n=513)**



Overall, 38% of men and 53% of women living in Scotland reported that they were satisfied with their sex lives. This was higher in women than men (women 63% and men 49% among those sexually active; and women 27% and men 15% among sexually inactive participants).

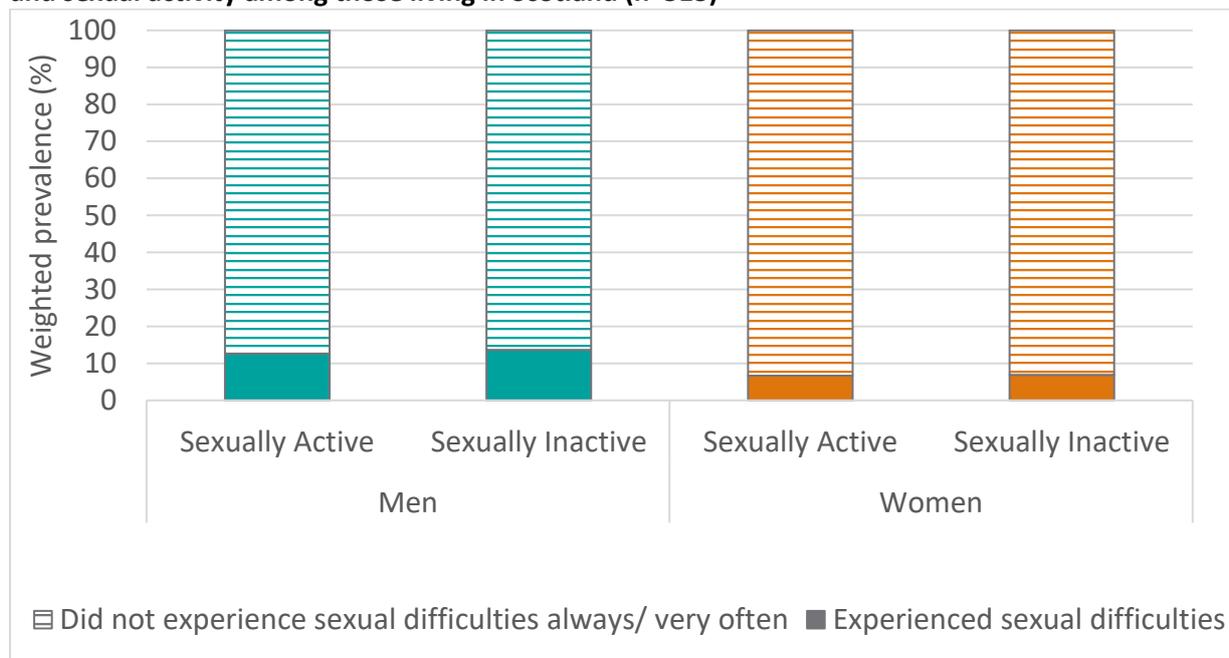
Those in a steady relationship were more likely to feel satisfied than those not in a steady relationship (Appendix 4.0).

**Figure 7: Self-reported distressed/worried about sex life in year since first lockdown by gender and sexual activity among those living in Scotland (n=513)**



Overall, 27% of men and 17% of women living in Scotland reported that they were feeling distressed or worried about their sex lives. This was higher in men than women (men 23% and 15% women among those sexually active; and men 36% and women 19% among sexually inactive participants). Those in a steady relationship were less likely than those not in a steady relationship to report distress (Appendix 4.0).

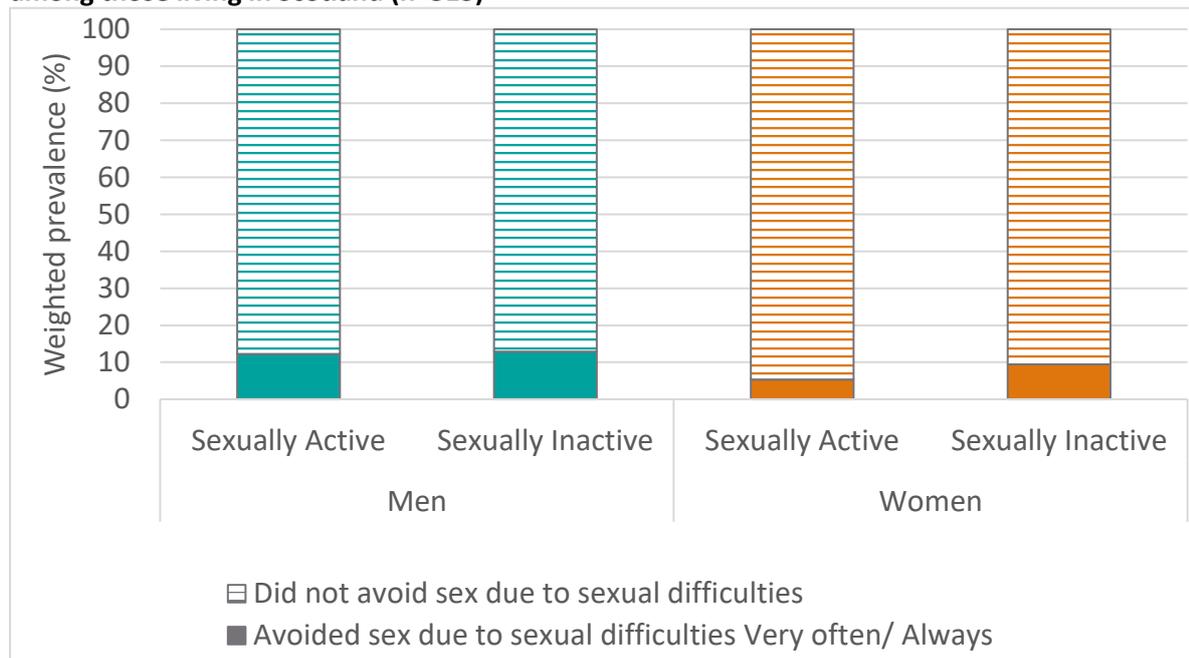
**Figure 8: Self-reported experience of difficulties with sex in year since first lockdown by gender and sexual activity among those living in Scotland (n=513)**



Participants were also asked if they had experienced any sexual difficulties since the first lockdown. This included anxiety about sex, pain, vaginal dryness, difficulty getting an erection/aroused, difficulty reaching climax (orgasm) or reaching climax too soon. The proportion reporting difficulties in the past year was similar for sexually active and inactive participants (10% and 9% respectively).

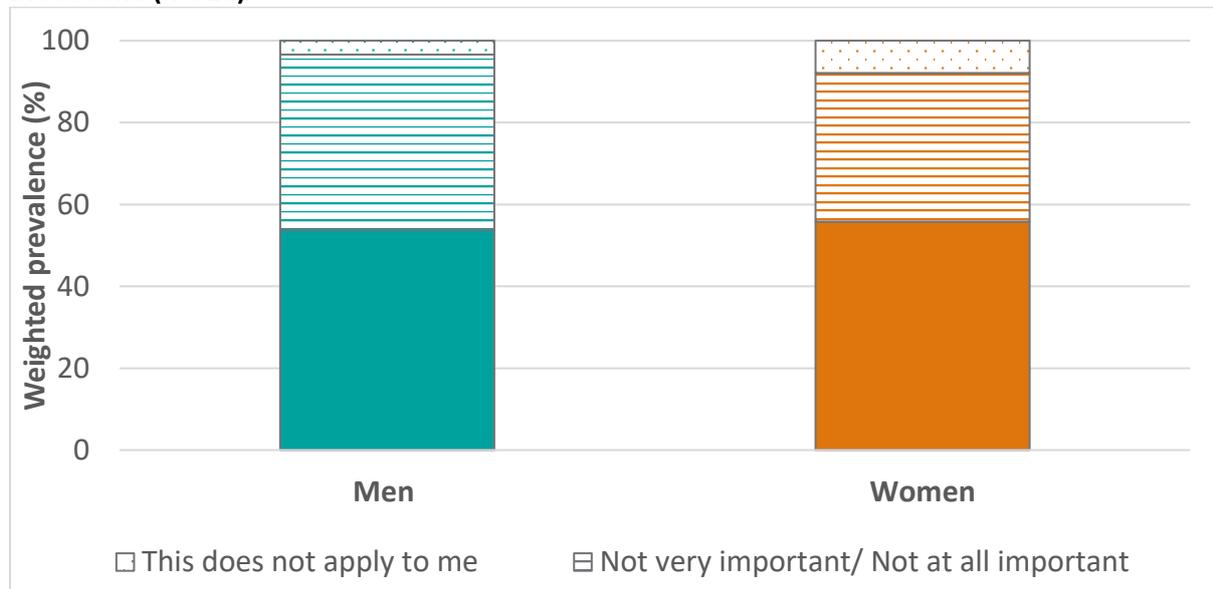
Among participants in Scotland, men were more likely to report experiencing difficulties with sex than women (13% sexually active and 14% sexually inactive men versus 7% sexually active and 7% sexually inactive women). There were no statistically significant differences between those living in Scotland and those living in England/Wales.

**Figure 9: Self-reported avoidance of sex in year since first lockdown by gender and sexual activity among those living in Scotland (n=513)**



In Scotland, men (12% among sexually active, 13% among sexually inactive) were more likely than women (5% among sexually active, 9% among sexually inactive) to report avoiding sex very often or always due to sexual problems. There was no statistically significant difference between those living in Scotland and those living in England/Wales.

**Figure 10: Self-reported importance of sexual health in the past year by gender among those living in Scotland (n=513)**



Sexual health was reported as important by 54% of participants living in Scotland over the first year of the pandemic. Overall, reporting sexual health as being very important or somewhat important was similar between men and women. Those in steady relationships were more likely to report their sexual health as being very or somewhat important than those not in steady relationships (61% steady relationships; 42% not in a steady relationship), regardless of gender (Appendix 4.0).

#### 4.4 Service Use

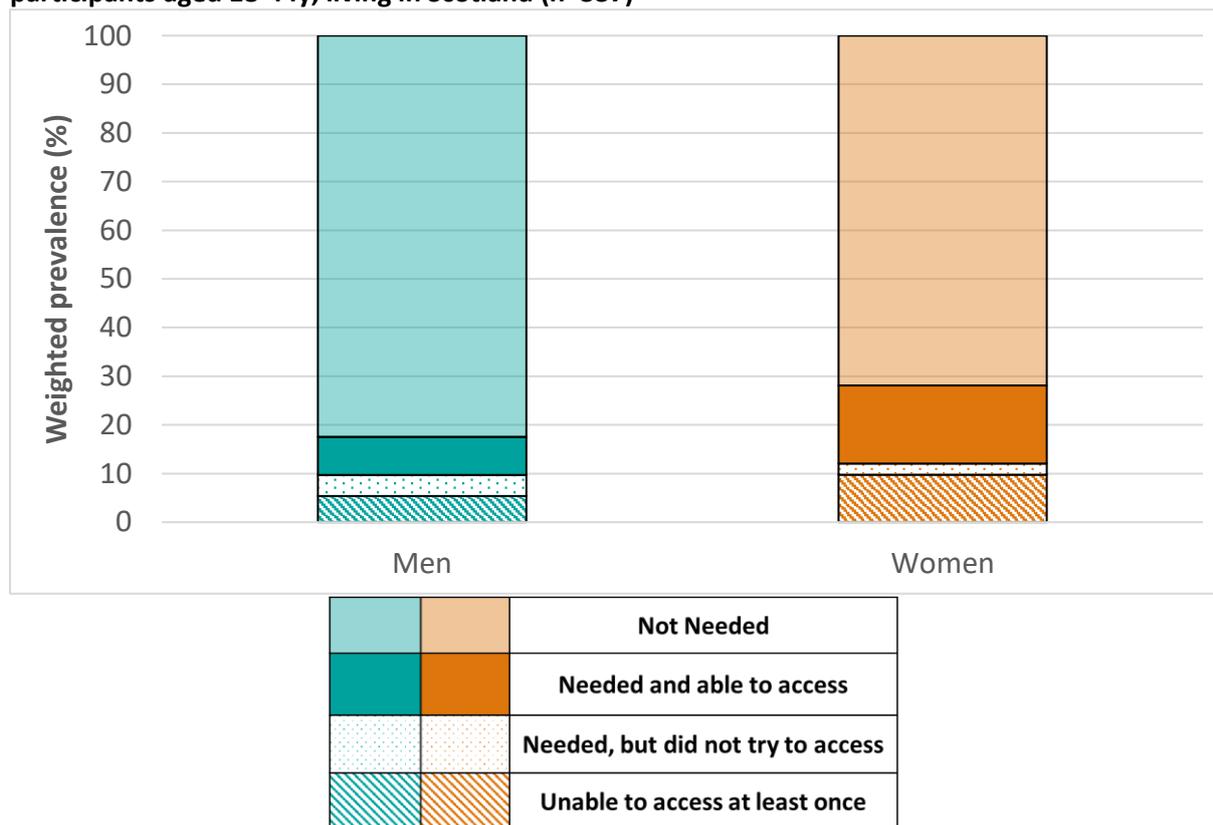
We investigated participants' reported use of SRH services during the pandemic among those aged 18-44 years. Participants aged 45-59 years were excluded from analysis of SRH service use due to low rates of SRH service use. Data relating specifically to contraception use can be found in appendices 5.0, 5.1, 5.2 and 5.3.

##### 4.4.1: Self-reported use of SRH services

We assessed reported use of and trying but not being able to use a comprehensive range of SRH services in the past year, including: contraception services, maternity services, abortion services, cervical screening, STI services, sexual difficulties and relationship support. Data relating to service use can be found in appendices 6.0 and 6.1.

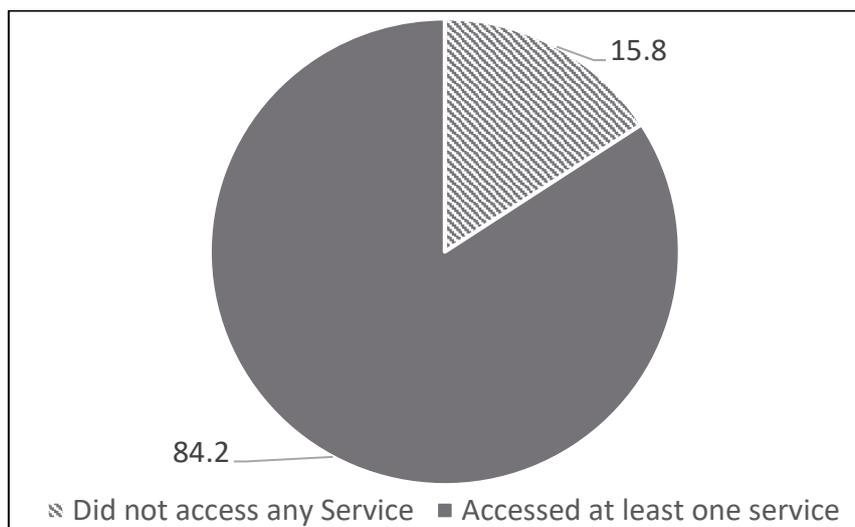
Overall, 28% of sexually-experienced respondents aged 18-44 living in Scotland reported accessing at least one SRH service during the year following the first lockdown, with women (40%) more likely to report this than men (15%). By individual service, 14% reported using contraception services or advice (24% women; 4% men) and 6% reported using an STI service (no differences between women and men).

**Figure 11: Self-reported SRH service use in the past year by gender among sexually-experienced participants aged 18-44y, living in Scotland (n=337)**



Of those living in Scotland, 5% of men and 9% of women reported being unable to access a SRH service at least once during the year following the first lockdown. There were no differences in access to SRH between regions of Great Britain.

**Figure 12: Reported access to SRH services among sexually-experienced participants aged 18-44 living in Great Britain among those who tried but were unable to access a service at least once (n=414)**



Across Britain, there were 414 participants who tried but were unable to access an SRH service at least once, and 84% of these participants also reported accessing at least one service. It is not possible to determine whether the unsuccessful attempt preceded or occurred after the successful attempt or whether it was related to the same expressed need (data for Scotland and England/Wales combined due to small numbers).

#### 4.4.2: Service access methods

Participants reporting STI testing service access were asked how they accessed these services (participants could select multiple methods), and we report this for all participants in Table 2. Around half reported using face to face services, while the remainder reported telephone or other online methods. Video appointments were reported least frequently.

**Table 2: Weighted prevalence [95 % CI] for reported method of accessing STI or contraception services among sexually-experienced participants aged 18-44 who reported use of these services in Great Britain**

Method of Access	STI testing services % [95% CI]	Contraception services % [95% CI]
Face to face appointments	46.2 [39.1, 53.6]	55.6 [51.3, 59.7]
Telephone appointments	35.6 [28.2, 42.9]	42.0 [37.8, 46.2]
Video appointments	13.1 [8.8, 19.0]	8.5 [6.3, 11.4]
Other online methods	36.8 [30.1, 44.2]	13.7 [11.0, 16.9]
<b>Denominators (weighted, unweighted)</b>	204, 231	544, 628

#### 4.3: Access to condoms

Participants were asked if they had needed to access condoms but were unable to do so because of the pandemic (herein called 'difficulty accessing condoms'). Scottish participants were less likely to report difficulty accessing condoms (4%) than those in England and Wales (8%). The age-adjusted odds of reporting difficulty accessing condoms among women living in Scotland compared with women in England/Wales was 0.36 (0.14-0.91),  $p=0.0310$ . The equivalent ratio for men was 0.38

(0.17-0.84),  $p=0.0173$ . However, there were no differences by region after adjusting for other potential confounders in a more complex model (data not presented here).

**Figure 13: Self-reported 'needing to but unable to access condoms' in the past year among all sexually-experienced participants aged 18-44 years, by age and gender living in Great Britain**

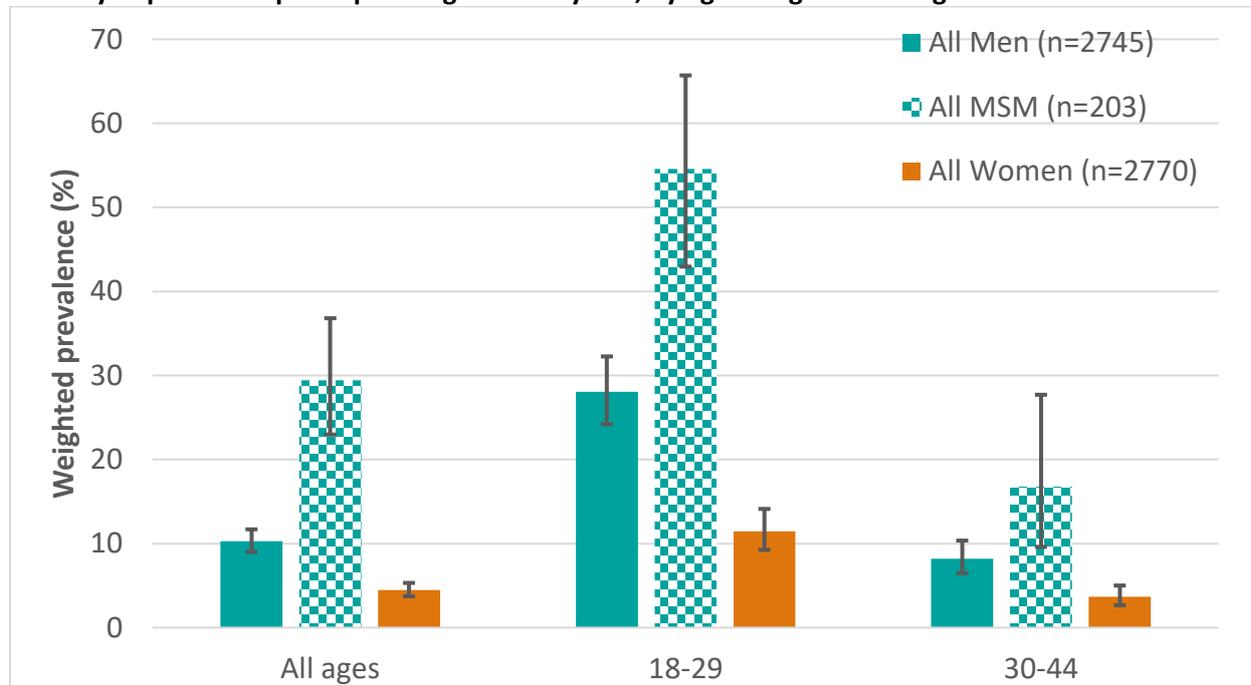
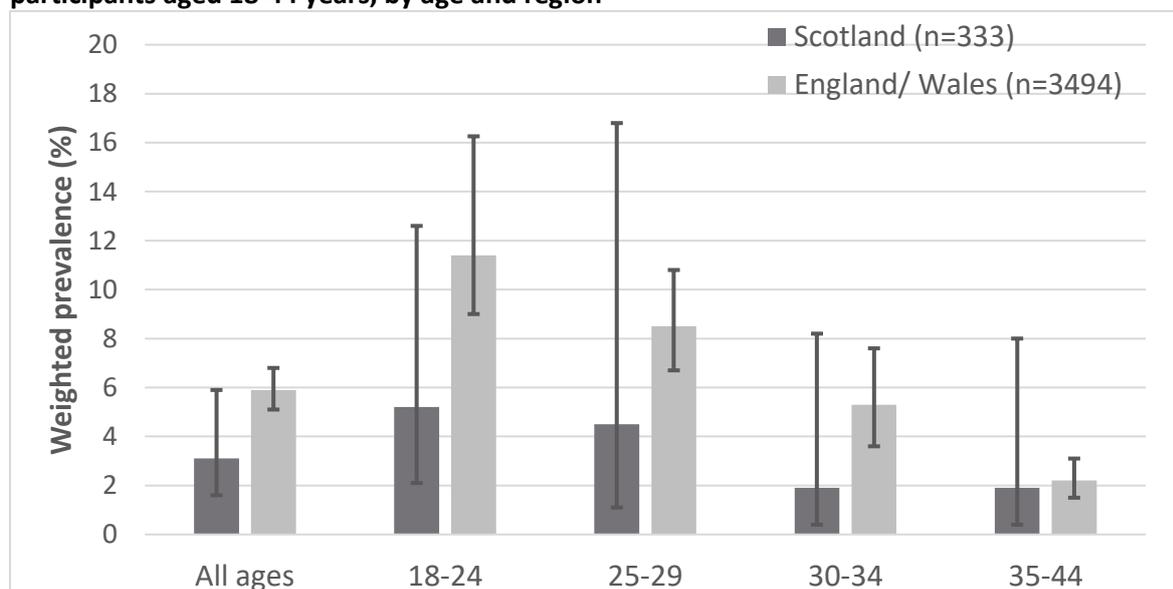


Figure 13 shows the proportions who reported difficulty accessing condoms by age (all regions combined). Men who have sex with men (MSM) were more likely to report difficulty accessing condoms (29%) than men overall (10%) and women overall (4%). We also found evidence of a significant difference by age within MSM, with MSM aged 18-29 more likely to report difficulty accessing condoms (55%) than MSM aged 30-44 (17%).

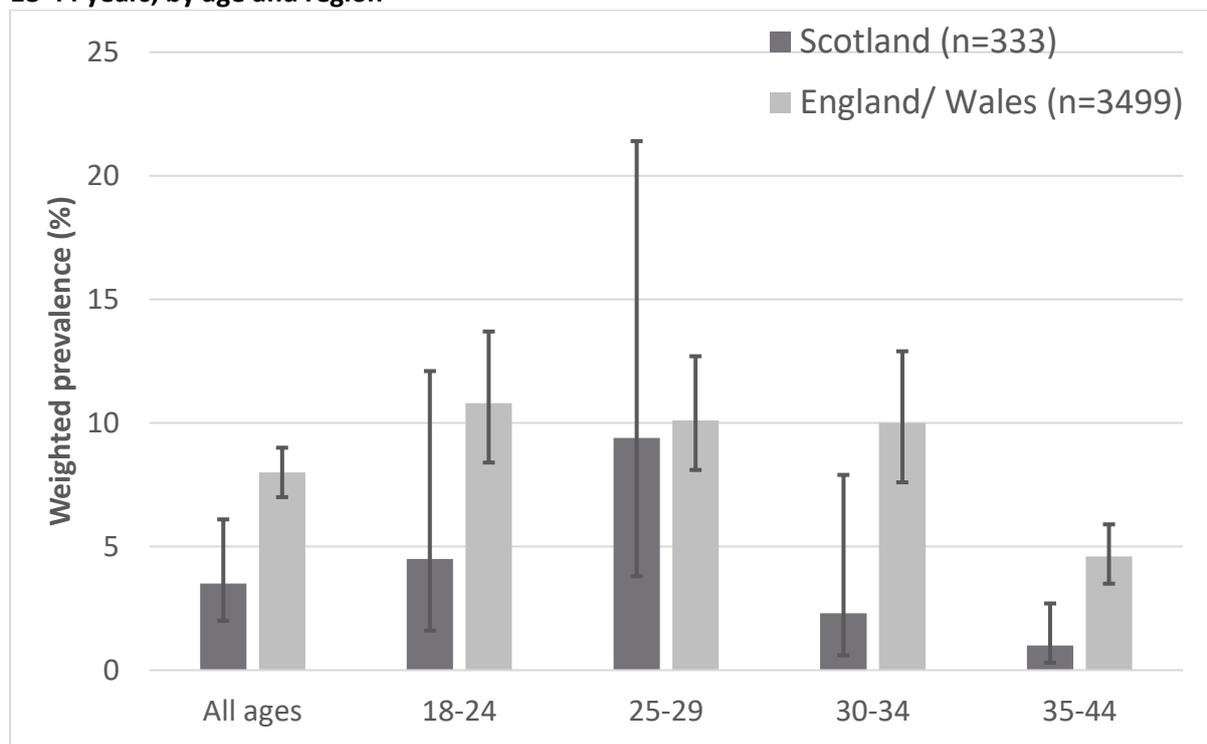
#### 4.4.4 Chlamydia and HIV testing

**Figure 14: Self-reported chlamydia testing in the past year among sexually-experienced participants aged 18-44 years, by age and region**



Of sexually-experienced participants living in Scotland, 3% reported a chlamydia test in the past year compared with 6% in England/Wales. After adjusting for age, there was no difference in the likelihood of reporting a chlamydia test in the past year between men and women living in Scotland and those living in England/Wales (men AOR= 0.46 (0.12-1.68) (p=0.2375) and women AOR= 0.50 (0.22-1.16) (p=0.1060)). Across Britain, younger participants and women were more likely to report chlamydia testing than older participants and men (Appendix 6.0 and 6.1).

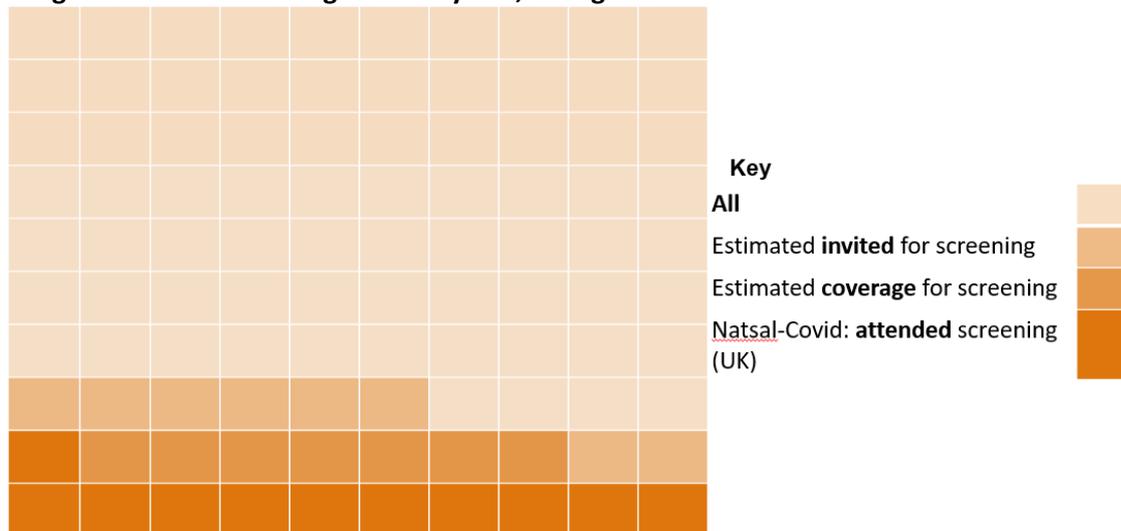
**Figure 15: Self-reported HIV testing in the past year among sexually-experienced participants aged 18-44 years, by age and region**



Among participants living in England/Wales, 8% reported an HIV test in the past year compared with 4% among those living in Scotland. Across Britain, (Scotland, England and Wales combined) HIV testing decreased with age (Appendix 6.0 and 6.1). After adjusting for age, women remained less likely to report an HIV test in the past year than women in England/Wales, but there was no significant difference by region for men (men AOR= 0.48 (0.18-1.27) (p=0.1403); women (AOR= 0.37 (0.18-0.77) (p<0.01)).

#### 4.4.5 Cervical cancer screening

**Figure 16: Reported use of cervical cancer screening services in the past year among participants assigned female at birth aged 25-59 years, all regions**



Taking 100 females in a typical year, it is estimated that 26 would be *invited* to attend cervical screening and 18 would be expected to *attend* cervical screening in a typical (non-pandemic) year (estimate based on surveillance data). However, in our British sample of participants assigned female at birth, aged 25-59 years, 11 out of every 100 (11%) reported attending cervical screening in the year since the start of lockdown (7 less than expected).

In Scotland, 7 out of every 100 (7%) reported attending cervical screening in the year since the start of lockdown, but this was not significantly lower than England/Wales.

## 5.0 Implications for Reset and Recovery

- In the first year of the pandemic, one in five participants in Scotland reported a new sexual partner, just under a third reported using an SRH service and half rated their sexual health as important. A significant minority (27% men and 17% women) reported being distressed about their sex lives. This provides strong evidence of the need to maintain SRH services throughout the pandemic. This population evidence is particularly important because of the sustained gap in collection of national surveillance data.
- Our data suggest that in Scotland, a lower number than expected attended cervical screening and that there were low levels of reported testing for chlamydia and HIV. We also found that 5% of men and 9% of women in Scotland reported being unable to access a SRH service at least once. Taken together, these data support the need for catch-up initiatives to address a likely backlog of unmet need. Innovative and intelligent use of online and telehealth provision may support this catch-up, while mitigating risks of digital exclusion of more vulnerable people, and risk of relegating needs that require face-to-face treatment.
- We found evidence that sexual behaviours and sexual health service use were similar across the nations of Britain. Reported sexual health service access and unmet need were similar, as were chlamydia and HIV testing. People in Scotland were less likely to report difficulty accessing condoms, and initiatives promoting access to free or low-cost condoms should be promoted as an effective, inexpensive, and often acceptable primary prevention tool.

## 6.0 Strengths and limitations

- A strength of the Natsal COVID study is the large overall sample. The study used quota sampling and post-hoc weighting adjustment to provide a quasi-representative sample. The study design was as rigorous as possible under constraints imposed by the COVID pandemic but falls short of the rigorous probability sampling method employed by the decennial Natsal surveys.
- Web panel surveys have known and expected biases, including that they exclude people without internet access. This is an important limitation because of the overlap between social, health and digital exclusion. Our findings likely under-represent the experience of some of the most vulnerable communities.
- This report provides headline data for Scotland for the purpose of understanding sexual behaviour and sexual and reproductive health during the first year of the pandemic. It presents a descriptive analysis and with few stated exceptions, does not take into account confounders. Some of the significant differences we report may not be present in fully-adjusted analyses.
- It is also not possible to know whether differences identified between regions are due to differences occurring before the pandemic or emerging during the pandemic or a combination of these factors.
- Data presented in this report should be interpreted with caution due to the small sample size for Scotland.

## 7.0 Technical note

Throughout this report, statistical significance is defined as  $p < 0.01$

The following is a list of key variables and definitions that have been used within the analysis for this report.

**Table 3: List of variables and definitions used within analysis**

Measure	Variable name	Definition
Gender	D_GenSelfID_analysis_w2	Gender of respondent Men includes trans men Women includes trans women All includes those who define gender in another way/ non-binary
Assigned sex at birth	Sexbirth_w2	Respondent's assigned sex at birth Male (includes cis men, trans women, and non-binary people) Female (includes cis women, trans men, and non-binary people)
Sexually-experienced	D_AnySex_w2	Defined as at least one partner of any gender OR VAO reported ever OR other genital contact reported ever (D_AnySex_w2=1)
1+ Physical sexual behaviour	D_AnyPhyBehExKiss4m_w2	Self report of at least one of the following reported in the past 4 months: Vaginal, Anal or Oral sex, Other contact with someone's genital area, Masturbating, Using sex toys (by yourself or with someone else)
1+ Virtual sexual behaviour (incl. porn)	D_AnyVirtBeh4m_w2	Self report of at least one of the following reported in the past 4 months: Messaging via dating apps/online, Sexting (images or recorded videos), Using video or voice calls to interact with someone sexually, Paying for online sexual services (e.g. live streaming), Looking at pornography
1+ Virtual sexual behaviour (excl. porn)	D_AnyVirtBehExPorn4m_w2	Self report of at least one of the following reported in the past 4 months: Messaging via dating apps/online, Sexting (images or recorded videos), Using video or voice calls to interact with someone sexually, Paying for online sexual services (e.g. live streaming),
Sexually active within the past year	D_TotSLCat2_w2	Reported at least one partner since lockdown (D_TotSLCat2_w2=1)

Access to Sexual and Reproductive Health Service in the past year	ServTry1_w2=1	Not needed to access at least one service
	ServTry2_w2=1	Needed and able to access at least one service
	ServTry3_w2=1	Needed, but did not try to access at least one service
	D_ServTryAny_w2	Unable to access at least one of the following: Sexual and Reproductive health services: Contraception services/advice Fertility services/advice Maternity/antenatal services Abortion/Pregnancy termination services Cervical screening (smear test/pap test) STI (Sexually Transmitted Infection) testing STI follow-up care HIV testing Advice or counselling for sexual problems Relationship support services/advice Sexual assault/rape support services or helplines Other type of sexual or reproductive health service/advice
Method of access for those who accessed STI testing (D_STIAcc_w2=1)	D_HowSTItstF2F_w2 =1	Accessed STI service face-to-face
	D_HowSTItstTele_w2 =1	Accessed STI service via telephone
	D_HowSTItstVideo_w2 =1	Accessed STI service via online video
	D_HowSTItstOtherOL_w2 =1	Accessed STI service via other online
Method of access for those who accessed STI testing (ServAcc2=1)	D_HowContrF2F_w2	Accessed Contraception service face-to-face
	D_HowContrTele_w2	Accessed Contraception service via telephone
	D_HowContrVideo_w2	Accessed Contraception service via online video
	D_HowContrOtherOL_w2	Accessed Contraception service via other online
All MSM	D_MenCat_w2	If D_GenSelfID_analysis_w2==1 (man) & GeniSS_w2==1 (At least one same sex partner)