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# Changes in STI and HIV testing and testing need among men who have sex with men during the UK's COVID-19 pandemic response

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## ABSTRACT

**Objectives** We examined the impact of COVID-19-related restrictions on sexual behaviours, STI and HIV testing and testing need among men who have sex with men (MSM) in the UK.

**Methods** We used social media and dating applications to recruit to three cross-sectional surveys (S1–S3) during the UK's pandemic response (S1: 23 June–14 July 2020; S2: 23 November–12 December 2020; S3: 23 March–14 April 2021). Surveys included lookback periods of around 3–4 months (P1–P3, respectively). Eligible participants were UK resident men (cisgender/transgender) and gender-diverse people assigned male at birth (low numbers of trans and gender-diverse participants meant restricting these analyses to cisgender men), aged ≥16 years who reported sex with men (cisgender/transgender) in the last year (S1: N=1950; S2: N=1463; S3: N=1487). Outcomes were: recent STI/HIV testing and unmet testing need (new male and/or multiple condomless anal sex partners without a recent STI/HIV test). Crude and adjusted associations with each outcome were assessed using logistic regression.

**Results** Participants' sociodemographic characteristics were similar across surveys. The proportion reporting a recent STI and/or HIV test increased between P1 and P2 (25.0% to 37.2% ( $p<0.001$ ) and 29.7% to 39.4% ( $p<0.001$ ), respectively), then stabilised in P3 (40.5% reporting HIV testing). Unmet STI testing need increased across P1 and P2 (26.0% to 32.4%;  $p<0.001$ ), but trends differed between groups, for example, unmet STI testing need was higher in bisexually-identifying (vs gay-identifying) MSM across periods (adjusted OR (aOR): P1=1.64; P2=1.42), but declined in HIV-positive (vs HIV-negative/unknown) MSM (aOR: P1=2.06; P2=0.68). Unmet HIV testing need increased across P1 and P2 (22.9% to 31.0%;  $p<0.001$ ) and declined in P3 (25.1%;  $p=0.001$ ). During P3, MSM reporting a low life-satisfaction level (vs medium–very high) had greater unmet need (aOR: 1.44), while from P2 onwards HIV pre-exposure prophylaxis users (vs non-users) had lower unmet need (aOR: P2=0.32; P3=0.50).

**Conclusion** Considerable unmet STI/HIV testing need occurred among MSM during COVID-19-related restrictions, especially in bisexually-identifying men and those reporting low life satisfaction. Improving access to STI/HIV testing in MSM is essential to prevent inequalities being exacerbated.

## KEY MESSAGES

- ⇒ There is currently little evidence on how the UK's fluctuating social restrictions in response to COVID-19 have impacted men who have sex with men (MSM)'s sexual behaviour and health.
- ⇒ From three large, community-based surveys of MSM, we identified factors associated with STI/HIV testing and testing need over the first year of the UK's COVID-19 response.
- ⇒ A sizeable portion of MSM reported STI/HIV risk during restrictions and unmet testing need was disproportionately found among groups who already experience poor sexual health.
- ⇒ These data complement national clinical data and help inform future sexual health policy and service delivery to address inequalities as COVID-19 restrictions have been eased.

## INTRODUCTION

In the UK, gay, bisexual and other men who have sex with men (MSM) bear a disproportionate burden of STIs including HIV. All sexually active MSM are advised to test for STIs and HIV annually.<sup>1</sup> Those practising behaviours with increased STI/HIV risk (referred hereafter for brevity as 'sexual risk behaviour'), for example, HIV pre-exposure prophylaxis (PrEP) users and those reporting multiple recent condomless anal sex (CAS) partners, are recommended to test quarterly.<sup>1</sup>

On 23 March 2020, the UK announced its first national lockdown in response to rising SARS-CoV-2 (COVID-19) diagnoses (online supplemental appendix 1).<sup>2</sup> Consequently, sexual health services (SHS) rapidly reconfigured: in-person asymptomatic screening and walk-in appointments were suspended and patients directed online.<sup>3</sup> While the introduction of social restrictions during the first national lockdown<sup>4,5</sup> led to reductions in sexual risk behaviours for MSM (eg, one UK study of MSM found 47% reported new recent sex partners March–June/July 2020, a substantial decrease from 71% in a comparative 2017 sample),<sup>6</sup> they continued to be reported by a high proportion.<sup>6–8</sup>

Social restrictions eased July–September 2020,<sup>9</sup> and sexual risk behaviour among MSM seemed to increase compared with the first national lockdown. A London-based study including MSM found 34% reported physical sexual contact March–April/May

2020,<sup>10</sup> increasing to 68% by August–November 2020, among whom 71% reported sex with casual partners outside their household.<sup>11</sup> From September 2020 onwards, restrictions were gradually re-introduced until a second national lockdown during November 2020. A further brief easing of national restrictions during December was followed by a third national lockdown January–March 2021, whereafter restrictions were gradually eased leading to full removal from late July.

It is important to understand how these rapid changes in social restrictions influenced sexual behaviours as well as STI/HIV testing and need, especially in the context of the reconfigured SHS. We used data from large, community-based cross-sectional surveys conducted across three periods between March 2020–April 2021 to identify factors associated with STI and HIV testing and testing need among MSM over the first year of the UK's COVID-19 pandemic response.

## METHODS

### Study design

The 'Reducing inequalities in Sexual Health' (RiiSH)-COVID surveys are repeat, cross-sectional online community surveys, each fielded for 2–3 weeks during different stages of the pandemic (online supplemental appendix 1): 23 June–14 July 2020 (survey (S1)); then 23 November–12 December 2020 (S2); and 23 March–14 April 2021 (S3).

### Setting and sampling

Participants were recruited from social networking sites (Facebook, Twitter, Instagram) and geospatial dating applications (Grindr: S1–S3; Hornet: S1–S2). Adverts on these sites and applications directed individuals to the anonymous online survey. The first questions assessed eligibility, defined as: UK resident; aged  $\geq 16$  years; men (cisgender/transgender), transwomen or gender-diverse people assigned male at birth (AMAB); reporting sex in the past year with a man (cisgender/transgender) or gender-diverse person AMAB. The survey took on average 10 minutes to complete. Online consent was obtained from all participants. No financial incentive was offered.

### Data collection

The RiiSH-COVID survey was adapted from a survey conducted in 2017<sup>12 13</sup> and was administered using SNAPSurvey software. The survey included questions on STI/HIV testing, PrEP use, SHS use, sexual relationships and behaviour, use of chemsex drugs (crystal methamphetamine, mephedrone, gamma-hydroxybutyrate/gamma-butyrolactone), personal well-being (using the Office for National Statistics' well-being measures<sup>14</sup>) and COVID-19 experience (eg, infection, testing and self-reported symptoms). Questions about the last occurrence of behaviours referred to lookback periods which related to around 3–4 months prior to the survey. These lookback periods (P1–P3, for S1–S3, respectively) roughly correspond to:

- P1: from the beginning of the first national lockdown (23 March 2020) until June/July 2020.
- P2: from when the first lockdown restrictions were eased to minimal restrictions (July 2020) until November/December 2020.
- P3: from the beginning of the third national lockdown (from late December 2020) until March/April 2021.

The questionnaires are given in online supplemental appendices 2a, 2b and 2c.

### Data analysis

The data were checked and 14 duplicate entries removed, leaving a total of 5066 participants (S1: N=2018; S2: N=1522;

S3: N=1526). The analyses were restricted to data from 4900 cisgender MSM participants (S1: N=1950; S2: N=1463; S3: N=1487), as few transgender and gender-diverse people AMAB participated. The denominator for the HIV testing analyses was further restricted to cisgender MSM reporting a HIV-negative/unknown status (S1: N=1753; S2: N=1308; S3: N=1330). Due to relatively small numbers of participants from ethnic minority groups, we grouped participants by whether they identified as white or not (hereafter: 'all other ethnic groups'). We did not collect data on STI testing in S3, therefore, analyses of this outcome are limited to S1 and S2. STATA V.16.1 was used for analyses.

Pearson's  $\chi^2$  test was used to examine differences in proportions between surveys in sociodemographic, health, sexual behavioural factors and the two primary outcomes, each considered separately for STIs and HIV:

- Accessing testing, defined as reporting a test in the lookback period either in-person or through an online self-sample testing service.
- Unmet testing need, defined as reporting one or more new sex partners and/or multiple CAS partners in the lookback period without testing during that period.<sup>1</sup>

Binary logistic regression was used to examine associations between sociodemographic, health and sexual behavioural variables and these outcomes. Explanatory variables that were statistically significant ( $p < 0.05$ ) in binary regression were included in multivariable logistic regression models to identify independent associations. We re-ran the multivariable regression models including interaction terms to assess whether the magnitude of the effect of an explanatory variable on the outcome changed significantly across surveys.

## RESULTS

### Participants' characteristics

In each survey, over half of participants were recruited via a dating application (S1=53.0%; S2=62.3%; S3=58.5%;  $p < 0.001$ ), with the remainder recruited through social media. There was little difference across surveys in the profile of participants (table 1; online supplemental appendix 3). Participants had a median age of 40 years (IQR: 30–51; range: 16–81) across surveys. The majority identified as white (88.8%), gay (84.7%), resident in England (84.9%), with around three-quarters (77.9%) born in the UK. More than half (57.5%) reported having a degree, and a majority (76.6%) reported having some form of employment, including those on 'furlough' (where the UK government paid 80% of the salary of those unable to work due to COVID-19 restrictions).<sup>15</sup> Around one-third (35.2%) of participants lived alone and another third (31.1%) lived with their partner(s). One in 10 (10.4%) participants reported living with HIV.

### Changes in well-being, PrEP use and sexual behaviour over time

Around one-third (31.2%) of MSM reported a low level of life satisfaction in P1. This decreased to one-quarter (24.4%) during P2 and remained at this level during P3 (24.7%,  $p < 0.001$ ) (tables 1 and 2; online supplemental appendix 3). Reported PrEP use in the lookback period increased from 13.6% during P1 to 23.1% and 20.7% in P2 and P3 ( $p < 0.001$ ), respectively.

Reporting  $\geq 1$  new physical sex partners increased between P1 and P2 (37.1% to 61.7%), with a slight drop in P3 (51.8%,  $p < 0.001$ ) (online supplemental appendix 4). Similar trends were seen for other risk behaviours, for example, reporting  $\geq 5$  new

**Table 1** Sociodemographic characteristics, health-related factors and sexual behaviours associated with reporting testing for STIs during two periods of the first year of the UK's pandemic response

March–June/July 2020 (P1)				July–November/December 2020 (P2)								
Lookback period (period number)	Sample composition, col % (n)	(Row) % reporting a recent STI test (n)	uOR (95%CI) for reporting a recent STI test	P value	aOR (95% CI)* for reporting a recent STI test	P value	Sample composition, col % (n)	(Row) % reporting a recent STI test (n)	uOR (95% CI) for reporting a recent STI test	P value	aOR (95% CI)* for reporting a recent STI test	P value
All†	100.0 (1950)	25.0 (487)	–	–	–	–	100.0 (1463)	37.2 (544)	–	–	–	–
Sociodemographic characteristics												
Age (years)												
Under 30	24.6 (479)	28.8 (138)	1	<0.001	1	0.001	26.5 (388)	39.2 (152)	1	0.005	1	0.136
30–44	35.3 (688)	28.3 (195)	0.98 (0.76 to 1.27)		0.82 (0.61 to 1.10)		37.8 (553)	40.9 (226)	1.07 (0.82 to 1.40)		0.79 (0.57 to 1.09)	
45 and over	40.2 (783)	19.7 (154)	0.60 (0.46 to 0.79)		0.58 (0.43 to 0.79)		35.7 (522)	31.8 (166)	0.72 (0.55 to 0.95)		0.71 (0.50 to 1.00)	
Sexual identity												
Gay	86.1 (1678)	26.5 (444)	1	<0.001	1	0.003	83.4 (1220)	39.3 (479)	1	<0.001	1	0.235
Bisexual‡	14.0 (272)	15.8 (43)	0.52 (0.37 to 0.74)		0.58 (0.40 to 0.83)		16.6 (243)	26.8 (65)	0.56 (0.42 to 0.77)		0.80 (0.56 to 1.15)	
Ethnicity												
White§	88.6 (1728)	24.5 (424)	1	0.219	–	n.a.	87.8 (1284)	36.7 (471)	1	0.290	–	n.a.
All other ethnic groups¶	11.4 (222)	28.4 (63)	1.22 (0.89 to 1.66)		–		12.2 (179)	40.8 (73)	1.19 (0.86 to 1.64)		–	
Country of residence in the UK												
England	86.1 (1679)	27.0 (454)	1	<0.001	1	<0.001	84.3 (1233)	39.9 (491)	1	<0.001	1	<0.001
Outside England	13.9 (271)	12.2 (33)	0.37 (0.26 to 0.55)		0.37 (0.25 to 0.55)		15.7 (230)	23.0 (53)	0.45 (0.33 to 0.63)		0.53 (0.36 to 0.78)	
Born in the UK												
Yes	78.1 (1523)	24.2 (368)	1	0.121	1	0.588	76.9 (1125)	33.9 (381)	1	<0.001	1	0.003
No	21.9 (427)	27.9 (119)	1.21 (0.95 to 1.54)		0.93 (0.71 to 1.22)		23.1 (338)	48.2 (163)	1.82 (1.42 to 2.33)		1.58 (1.17 to 2.14)	
Highest educational qualification												
Degree or higher	59.0 (1149)	27.1 (311)	1	0.011	1	0.065	57.4 (840)	42.0 (353)	1	<0.001	1	0.029
Below degree	41.1 (800)	22.0 (176)	0.76 (0.61 to 0.94)		0.80 (0.64 to 1.01)		42.6 (623)	30.7 (191)	0.61 (0.49 to 0.76)		0.75 (0.57 to 0.97)	
Employed (inc furlough**)††												
Yes	77.2 (1497)	25.3 (378)	1	0.656	–	n.a.	74.9 (1095)	37.9 (415)	1	0.327	–	n.a.
No	22.8 (442)	24.2 (107)	0.95 (0.74 to 1.21)		–		25.2 (368)	35.1 (129)	0.88 (0.69 to 1.13)		–	
Health-related factors												
HIV status												
Negative/Unknown	89.9 (1753)	25.2 (442)	1	0.462	1	0.753	89.4 (1308)	36.0 (471)	1	0.008	1	<0.001
Positive	10.1 (197)	22.8 (45)	0.88 (0.62 to 1.25)		1.06 (0.72 to 1.56)		10.6 (155)	47.1 (73)	1.58 (1.13 to 2.21)		2.88 (1.94 to 4.28)	

Continued

Table 1 Continued

Lookback period (period number)	March–June/July 2020 (P1)				July–November/December 2020 (P2)			
	Sample composition, col % (n)	(Row) % reporting a recent STI test (n)	uOR (95% CI) for reporting a recent STI test	P value	Sample composition, col % (n)	(Row) % reporting a recent STI test (n)	uOR (95% CI) for reporting a recent STI test	P value
PrEP use (in the lookback period)								
No	86.4 (1677)	19.9 (333)	1	<0.001	77.0 (1125)	25.2 (284)	1	<0.001
Yes	13.6 (264)	57.2 (151)	5.39 (4.11 to 7.08)		23.1 (337)	77.2 (260)	10.0 (7.50 to 13.33)	
Life satisfaction level								
Medium–very high	68.8 (1340)	24.4 (327)	1	0.368	75.6 (1106)	37.1 (410)	1	0.875
Low	31.2 (608)	26.3 (160)	1.11 (0.89–1.38)		24.4 (357)	37.5 (134)	1.02 (0.80 to 1.31)	
Sexual behaviour (in the lookback period)								
No. of CAS partners								
None	62.1 (1211)	18.9 (229)	1	<0.001	43.2 (632)	21.0 (133)	1	<0.001
One	20.4 (398)	27.9 (111)	1.66 (1.28 to 2.16)		23.7 (346)	30.6 (106)	1.66 (1.23 to 2.23)	
Multiple	17.5 (341)	43.1 (147)	3.25 (2.51 to 4.21)		33.2 (485)	62.9 (305)	6.36 (4.87 to 8.29)	
* Adjusting for: age; sexual identity; country of residence; born in the UK; education; living with partner; HIV status; PrEP use; CAS.								
† Cisgender MSM.								
‡ Including 'Bisexual' (S1: n=220; S2: n=179); 'Other' (S1: n=44; S2: n=50); 'Straight' (S1: n=8; S2: n=14).								
§ Including 'White British' (S1: n=1426; S2: n=1045); 'White Irish' (S1: n=75; S2: n=55); 'White other' (S1: n=227; S2: n=184).								
¶ Including 'Black' (S1: n=31; S2: n=41); 'Asian' (S1: n=101; S2: n=63); 'Mixed or other' (S1: n=90; S2: n=75).								
** The UK government paid 80% of the salary of those who were unable to work due to COVID-19 restrictions. <sup>15</sup>								
aOR, adjusted OR; CAS, condomless anal sex; CI, confidence interval; MSM, men who have sex with men; n.a., not applicable; PrEP, pre-exposure prophylaxis; uOR, unadjusted OR.								

**Table 2** Sociodemographic, health-related factors and sexual behaviours associated with reporting testing for HIV during three periods of the first year of the UK's pandemic response

March–June/July 2020 (P1)				July–November/December 2020 (P2)				December 2020–March/April 2021 (P3)								
Lookback period (period number)	Sample composition, col % (n)	(Row) % reporting a recent HIV test (n)	uOR (95% CI) for reporting a recent HIV test (n)	aOR (95% CI)* for reporting a recent HIV test (n)	P value	Sample composition, col % (n)	(Row) % reporting a recent HIV test (n)	uOR (95% CI) for reporting a recent HIV test (n)	aOR (95% CI)* for reporting a recent HIV test (n)	P value	Sample composition, col % (n)	(Row) % reporting a recent HIV test (n)	uOR (95% CI) for reporting a recent HIV test (n)	aOR (95% CI)* for reporting a recent HIV test (n)	P value	
		(Row) % reporting a recent HIV test (n)	uOR (95% CI) for reporting a recent HIV test (n)	aOR (95% CI)* for reporting a recent HIV test (n)			(Row) % reporting a recent HIV test (n)	uOR (95% CI) for reporting a recent HIV test (n)	aOR (95% CI)* for reporting a recent HIV test (n)							
All†	100.0 (1753)	29.7 (521)	–	–	–	100.0 (1308)	39.4 (515)	–	–	–	100.0 (1330)	40.5 (538)	–	–	–	
Sociodemographic characteristics																
Age (years)																
Under 30	26.7 (468)	35.3 (165)	1	<0.001	1	<0.001	28.9 (378)	41.0 (155)	1	<0.001	1	0.311	44.6 (153)	1	<0.001	1
30–44	35.5 (623)	32.6 (203)	0.89 (0.69 to 1.14)	0.77 (0.58 to 1.01)		37.7 (493)	44.6 (220)	1.16 (0.88 to 1.52)	0.95 (0.68 to 1.32)		35.1 (466)	45.9 (214)	1.05 (0.80 to 1.40)	0.97 (0.71 to 1.33)	0.024	
45 and over	37.8 (662)	23.1 (153)	0.55 (0.42 to 0.72)	0.54 (0.40 to 0.72)		33.4 (437)	32.0 (140)	0.68 (0.51 to 0.90)	0.77 (0.54 to 1.10)		39.1 (520)	32.9 (171)	0.61 (0.46 to 0.81)	0.68 (0.49 to 0.94)		
Sexual identity																
Gay	85.1 (1492)	31.4 (469)	1	<0.001	1	0.002	82.4 (1078)	42.0 (453)	1	<0.001	1	0.086	42.6 (472)	1	<0.001	1
Bisexual‡	14.9 (261)	19.9 (52)	0.54 (0.39 to 0.75)	0.59 (0.42 to 0.82)		17.6 (230)	27.0 (62)	0.51 (0.37 to 0.70)	0.72 (0.50 to 1.05)		16.6 (221)	29.9 (66)	0.57 (0.42 to 0.78)	0.69 (0.49 to 0.98)	0.036	
Ethnicity																
White§	88.5 (1552)	29.6 (460)	1	0.836	–	n.a.	87.2 (1141)	39.3 (448)	1	0.833	–	n.a.	40.3 (482)	1	0.683	–
All other ethnic groups¶	11.5 (201)	30.4 (61)	1.03 (0.75 to 1.42)	–	–	12.8 (167)	40.1 (67)	1.04 (0.74 to 1.44)	–	–	10.0 (133)	42.1 (56)	1.08 (0.75 to 1.55)	–	n.a.	
Country of residence in the UK																
England	85.5 (1499)	31.1 (466)	1	0.002	1	0.009	83.4 (1091)	41.9 (457)	1	<0.001	1	0.008	41.7 (462)	1	0.043	1
Outside England	14.5 (254)	21.7 (55)	0.61 (0.45 to 0.84)	0.64 (0.46 to 0.90)		16.6 (217)	26.7 (58)	0.51 (0.37 to 0.70)	0.60 (0.41 to 0.88)		16.6 (221)	34.4 (76)	0.73 (0.54 to 0.99)	0.76 (0.54 to 1.07)	0.114	
Born in the UK																
Yes	78.3 (1373)	29.0 (398)	1	0.205	1	0.742	76.3 (998)	34.9 (348)	1	<0.001	1	<0.001	38.2 (399)	1	0.002	1
No	21.7 (380)	32.4 (123)	1.17 (0.92–1.50)	0.96 (0.73–1.25)		23.7 (310)	53.9 (167)	2.18 (1.68 to 2.82)	1.95 (1.42 to 2.67)		21.5 (286)	48.6 (139)	1.53 (1.17 to 1.99)	1.24 (0.92 to 1.68)	0.156	
Highest educational qualification																
Degree or higher	58.9 (1031)	30.8 (317)	1	0.268	1	0.791	58.8 (769)	43.8 (337)	1	<0.001	1	0.199	44.1 (330)	1	0.002	1
Below degree	41.2 (721)	28.3 (204)	0.89 (0.72–1.10)	0.97 (0.77–1.22)		41.2 (539)	33.0 (178)	0.63 (0.50 to 0.79)	0.83 (0.63 to 1.10)		43.8 (582)	35.7 (208)	0.70 (0.56 to 0.88)	0.85 (0.66 to 1.10)	0.223	
Employed (inc. furlough**)																

Continued



Table 2 Continued

March–June/July 2020 (P1)			July–November/December 2020 (P2)			December 2020–March/April 2021 (P3)					
Lookback period (period number)	Sample composition, col % (n)	(Row) % reporting a recent HIV test (n)	uOR (95% CI) for reporting a recent HIV test (n)	P value	aOR (95% CI)* for reporting a recent HIV test (n)	P value	Sample composition, col % (n)	(Row) % reporting a recent HIV test (n)	uOR (95% CI) for reporting a recent HIV test (n)	aOR (95% CI)* for reporting a recent HIV test (n)	P value
Yes	77.7 (1355)	30.2 (409)	1	0.549	–	0.372	78.0 (1037)	41.6 (431)	1	0.119	n.a.
No	22.3 (388)	28.6 (111)	0.93 (0.72–1.19)	–	–	–	22.0 (293)	36.5 (107)	0.81 (0.62 to 1.06)	–	–
Health-related factors											
PrEP use (in the lookback period)											
No	84.9 (1481)	24.4 (362)	1	<0.001	1	<0.001	76.8 (1022)	29.5 (301)	1	<0.001	<0.001
Yes	15.1 (264)	59.5 (157)	4.54 (3.45 to 5.96)	3.56 (2.62 to 4.83)	7.70 (5.51 to 10.76)	11.64 (8.60 to 15.76)	23.2 (308)	77.0 (237)	8.00 (5.94 to 10.76)	5.71 (4.12 to 7.91)	–
Life satisfaction level											
Medium–very high	69.0 (1208)	29.1 (351)	1	0.382	–	0.430	75.2 (998)	41.5 (414)	1	0.223	n.a.
Low	31.0 (543)	31.1 (169)	1.10 (0.88 to 1.37)	–	–	1.12 (0.86 to 1.43)	24.8 (329)	37.7 (124)	0.85 (0.66–1.10)	–	–
Sexual behaviour (in the lookback period)											
No. of CAS partners											
None	63.0 (1105)	23.3 (257)	1	<0.001	1	<0.001	50.0 (665)	30.2 (201)	1	<0.001	<0.001
One	20.8 (364)	33.8 (123)	1.68 (1.30 to 2.18)	1.64 (1.24 to 2.17)	1.77 (1.26 to 2.49)	1.91 (1.42 to 2.57)	24.7 (329)	37.4 (123)	1.38 (1.04 to 1.82)	1.21 (0.89 to 1.64)	–
Multiple	16.2 (284)	49.7 (141)	3.25 (2.48 to 4.27)	2.07 (1.52 to 2.81)	3.00 (2.16 to 4.17)	5.92 (4.47 to 7.83)	25.3 (336)	63.7 (214)	4.05 (3.07 to 5.34)	2.10 (1.52 to 2.89)	–
* Adjusting for: age; sexual identity; country of residence; born in the UK; education; living with partner; PrEP use; CAS.											
† Cisgender MSM that report a negative or unknown HIV status.											
# Including 'Bisexual' (S1: n=210; S2: n=169; S3: n=171); 'Other' (S1: n=43; S2: n=47; S3: n=44); 'Straight' (S1: n=8; S2: n=14; S3: n=6).											
§ Including 'White British' (S1: n=1288; S2: n=924; S3: n=1000); 'White Irish' (S1: n=64; S2: n=50; S3: n=42); 'White other' (S1: n=200; S2: n=167; S3: n=155).											
¶ Including 'Black' (S1: n=24; S2: n=38; S3: n=22); 'Asian' (S1: n=98; S2: n=61; S3: n=52); 'Mixed or other' (S1: n=79; S2: n=68; S3: n=59).											
** The UK government paid 80% of the salary of those who were unable to work due to COVID-19 restrictions. <sup>19</sup>											
aOR, adjusted OR; CAS, condomless anal sex; CI, confidence interval; MSM, men who have sex with men; n.a., not applicable; PrEP, pre-exposure prophylaxis; uOR, unadjusted OR.											

\*Adjusting for: age; sexual identity; country of residence; born in the UK; education; living with partner; PrEP use; CAS.

†Cisgender MSM that report a negative or unknown HIV status.

#Including 'Bisexual' (S1: n=210; S2: n=169; S3: n=171); 'Other' (S1: n=43; S2: n=47; S3: n=44); 'Straight' (S1: n=8; S2: n=14; S3: n=6).

§Including 'White British' (S1: n=1288; S2: n=924; S3: n=1000); 'White Irish' (S1: n=64; S2: n=50; S3: n=42); 'White other' (S1: n=200; S2: n=167; S3: n=155).

¶Including 'Black' (S1: n=24; S2: n=38; S3: n=22); 'Asian' (S1: n=98; S2: n=61; S3: n=52); 'Mixed or other' (S1: n=79; S2: n=68; S3: n=59).

\*\*The UK government paid 80% of the salary of those who were unable to work due to COVID-19 restrictions.<sup>15</sup>

aOR, adjusted OR; CAS, condomless anal sex; CI, confidence interval; MSM, men who have sex with men; n.a., not applicable; PrEP, pre-exposure prophylaxis; uOR, unadjusted OR.

physical sex partners (P1: 8.1%; P2: 21.8%; P3: 14.4%,  $p<0.001$ ); multiple CAS partners (P1: 17.5%; P2: 33.2%; P3: 27.6%,  $p<0.001$ ); and use of chemsex drugs (P1: 3.7%; P2: 6.0%; P3: 3.8%,  $p=0.002$ ).

### Changes in STI/HIV testing over time

Among all participants, 25.0% reported STI testing in P1, increasing to 37.2% by P2 ( $p<0.001$ ) (table 1; online supplemental appendix 5). Among those reporting a recent STI test in P1, around one-third (34.5%) tested in-person at a healthcare facility, with this almost doubling (69.9%) in P2. Among HIV-negative/unknown participants, 29.7% reported recent HIV testing in P1, increasing to 39.4% during P2 and 40.5% during P3 ( $p<0.001$ ) (table 2; online supplemental appendix 5). Among those reporting recent HIV testing in P1, only one-quarter (26.3%) tested in-person in a healthcare facility, compared with 53.8% in P2 and 44.6% in P3 (online supplemental appendix 5).

### STI testing

Adjusting for variables associated with recent STI testing, we found that in P1, bisexually-identifying (vs gay-identifying) MSM were less likely to report recent testing (aOR: 0.58 (95% CI 0.40 to 0.83),  $p<0.001$ ). MSM living in UK countries outside England (vs those living in England) were less likely to test during both P1 (aOR: 0.37 (95% CI 0.25 to 0.55),  $p<0.001$ ) and P2 (aOR: 0.53 (95% CI 0.36 to 0.78),  $p<0.001$ ). In contrast, PrEP users (vs non-PrEP users) were more likely to test during P1 (aOR: 4.23 (95% CI 3.10 to 5.76),  $p<0.001$ ) and P2 (aOR: 7.83 (95% CI 5.65 to 10.86),  $p<0.001$ ). HIV-positive (vs HIV-negative/unknown) MSM were also more likely to test during P2 (aOR: 2.88 (95% CI 1.94 to 4.28),  $p<0.001$ ), but not during P1.

When an interaction term for survey period was included, the likelihood of STI testing was significantly greater in P2 versus P1 for those born outside the UK (aOR: 1.58 (95% CI 1.06 to 2.34),  $p=0.023$ ); living with HIV (aOR: 2.58 (95% CI 1.53 to 4.34),  $p<0.001$ ); using PrEP (aOR: 1.90 (95% CI 1.25 to 2.88),  $p=0.003$ ) and reporting multiple CAS partners (aOR: 2.20 (95% CI 1.47 to 3.31),  $p<0.001$ ).

### HIV testing

Adjusting for variables associated with recent HIV testing, we found trends largely followed those of STI testing. Bisexually-identifying (vs gay-identifying) MSM were less likely to test for HIV during both P1 (aOR: 0.59 (95% CI 0.42 to 0.82),  $p=0.002$ ) and P3 (aOR: 0.69 (95% CI 0.49 to 0.98),  $p=0.036$ ). PrEP users (vs non-PrEP users) were more likely to test during P1 (aOR: 3.56 (95% CI 2.62 to 4.83),  $p<0.001$ ), P2 (aOR: 7.70 (95% CI 5.51 to 10.76),  $p<0.001$ ) and P3 (aOR: 5.71 (95% CI 4.12 to 7.91),  $p<0.001$ ).

When an interaction term for survey period was included, the likelihood of HIV testing was significantly greater in P2 versus P1 for those born outside the UK (aOR: 1.98 (95% CI 1.32 to 2.96),  $p=0.001$ ); using PrEP (aOR: 2.66 (95% CI 1.74 to 4.07),  $p<0.001$ ) and reporting multiple CAS partners (aOR: 1.89 (95% CI 1.26 to 2.83),  $p=0.002$ ). The likelihood of HIV testing was significantly greater in P3 versus P2 for participants reporting PrEP use (aOR: 1.91 (95% CI 1.25 to 2.91),  $p=0.003$ ).

### Unmet STI testing need

Among all participants, 26.0% had unmet STI testing need during P1, increasing to 32.4% during P2 ( $p<0.001$ ) (table 3).

After adjustments, all other ethnic groups (vs white ethnicity) had greater unmet STI testing need, although just in P1 (aOR:

1.44 (95% CI 1.05 to 1.98),  $p=0.023$ ). Those living in UK countries outside England (vs those living in England; aOR: 1.71 (95% CI 1.29 to 2.27),  $p<0.001$ ) and HIV-positive (vs HIV-negative/unknown) MSM (aOR: 2.06 (95% CI 1.48 to 2.86),  $p<0.001$ ) also had greater unmet testing need during P1, although these associations were not seen in P2. Bisexually-identifying (vs gay-identifying) MSM were found to have greater unmet testing need during P1 (aOR: 1.64 (95% CI 1.23 to 2.18),  $p=0.001$ ) and P2 (aOR: 1.42 (95% CI 1.06 to 1.90),  $p=0.019$ ), whereas PrEP users (vs non-PrEP users) had less unmet testing need during P2 (aOR: 0.38 (95% CI 0.28 to 0.52),  $p<0.001$ ).

When an interaction term for survey period was included, the likelihood of having unmet STI testing need was significantly greater in P2 versus P1 for those unemployed (aOR: 1.51 (95% CI 1.05 to 2.17),  $p=0.025$ ) and significantly lower for those reporting living with HIV (aOR: 0.42 (95% CI 0.26 to 0.68),  $p<0.001$ ) and PrEP users (aOR: 0.36 (95% CI 0.23 to 0.55),  $p<0.001$ ).

### Unmet HIV testing need

Among all HIV-negative/unknown MSM, 22.9% had unmet HIV testing need during P1, increasing to 31.0% during P2, before declining during P3 (25.1%;  $p<0.001$ ) (table 4).

Bisexually-identifying (vs gay-identifying) MSM had greater unmet HIV testing need during P1 (aOR: 1.65 (95% CI 1.23 to 2.22),  $p=0.001$ ) and P3 (aOR: 1.84 (95% CI 1.34 to 2.52),  $p<0.001$ ), as did MSM living in countries outside England (vs those living in England) (P1=aOR: 1.48 (95% CI 1.10 to 2.01),  $p=0.011$ ; P3=aOR: 1.41 (95% CI 1.02 to 1.95),  $p=0.035$ ). MSM reporting low life satisfaction (vs medium-very high) levels were more likely to have unmet testing need during P3 (aOR: 1.44 (95% CI 1.08 to 1.91),  $p=0.012$ ). PrEP users (vs non-PrEP users) were less likely to have unmet HIV testing need during P2 (aOR: 0.35 (95% CI 0.25 to 0.48),  $p<0.001$ ) and P3 (aOR: 0.55 (95% CI 0.39 to 0.77),  $p<0.001$ ).

When an interaction term for survey period was included, the likelihood of having unmet HIV testing need was significantly greater in P3 versus P2 for those reporting a low level of life satisfaction (aOR: 1.70 (95% CI 1.17 to 2.47),  $p=0.005$ ). The likelihood of having unmet HIV testing need was significantly lower in P2 versus P1 and in P3 versus P2 for PrEP users (aOR: 0.23 (95% CI 0.15 to 0.36),  $p<0.001$ ; aOR: 0.37 (95% CI 0.24 to 0.58),  $p<0.001$ , respectively).

## DISCUSSION

Large, community-based surveys of MSM living across the UK show a sizeable portion of participants engaged in STI/HIV risk behaviours during the UK's first national lockdown. The prevalence of risk behaviours increased as restrictions eased and did not decline when restrictions were reinstated in late 2020. Testing for STIs and HIV mirrored these trends, as did having unmet need for testing. Unmet testing need was more common among bisexually-identifying MSM, UK residents living outside England, MSM reporting a low level of life satisfaction and all other ethnic groups except white, at least in the case of STI testing.

Howarth *et al*<sup>6</sup> found a significant drop in sexual risk behaviours reported by MSM during the UK's first national lockdown in comparison to pre-pandemic (eg, CAS in the last 3 months; 36.6% vs 55.7%, respectively),<sup>6 13</sup> although a sizeable proportion continued to report risk behaviour (eg, new male partners in the last 3 months; 46.8% vs 71.1%, respectively). We have observed that as restrictions eased from July 2020, the

**Table 3** Sociodemographic characteristics and health-related factors associated with having unmet STI testing need during two periods of the first year of the UK's pandemic response

Lookback period (period number)	March–June/July 2020 (P1)				July–November/December 2020 (P2)			
	Sample composition, col % (n)	(Row) % have unmet STI testing need (n)	uOR (95% CI) have unmet STI testing need	P value	Sample composition, col % (n)	Row % have unmet STI testing need (n)	uOR (95% CI) have unmet STI testing need	P value
All†	100.0 (1950)	26.0 (499)	–	–	100.0 (1463)	32.4 (474)	–	–
Sociodemographic characteristics								
Age (years)								
Under 30	24.6 (479)	25.3 (121)	1	0.001	26.5 (388)	36.9 (143)	1	0.094
30–44	35.3 (688)	27.5 (189)	1.12 (0.86 to 1.46)		37.8 (553)	30.7 (170)	0.76 (0.58 to 1.00)	0.86 (0.64 to 1.15)
45 and over	40.2 (783)	24.1 (189)	0.94 (0.72 to 1.22)		35.7 (522)	30.8 (161)	0.76 (0.58 to 1.01)	0.82 (0.61 to 1.09)
Sexual identity								
Gay	86.1 (1678)	24.3 (408)	1	0.002	83.4 (1220)	30.5 (372)	1	0.001
Bisexual‡	14.0 (272)	33.5 (91)	1.56 (1.19 to 2.06)		16.6 (243)	42.0 (102)	1.65 (1.24 to 2.19)	1.42 (1.06 to 1.90)
Ethnicity								
White§	88.6 (1728)	24.8 (428)	1	0.023	87.8 (1284)	32.2 (414)	1	0.733
All other ethnic groups¶	11.4 (222)	32.0 (71)	1.43 (1.06 to 1.93)		12.2 (179)	33.5 (60)	1.06 (0.76 to 1.48)	1.06 (0.75 to 1.51)
Country of residence in the UK								
England	86.1 (1679)	24.3 (408)	1	0.002	84.3 (1233)	31.0 (382)	1	0.008
Outside England	13.9 (271)	33.6 (91)	1.57 (1.20 to 2.07)		15.7 (230)	40.0 (92)	1.49 (1.11 to 1.99)	1.34 (0.99 to 1.81)
Born in the UK								
Yes	78.1 (1523)	25.1 (382)	1	0.335	76.9 (1125)	32.8 (369)	1	0.549
No	21.9 (427)	27.4 (117)	1.13 (0.88–1.44)		23.1 (338)	31.1 (105)	0.92 (0.71 to 1.20)	–
Highest educational qualification								
Degree or higher	59.0 (1149)	25.2 (290)	1	0.660	57.4 (840)	30.5 (256)	1	0.068
Below degree	41.1 (800)	26.1 (209)	1.05 (0.85 to 1.29)		42.6 (623)	35.0 (218)	1.23 (0.98 to 1.53)	–
Employed (inc. furlough**)								
Yes	77.2 (1497)	26.9 (403)	1	0.012	74.9 (1095)	31.8 (348)	1	0.385
No	22.8 (442)	21.0 (93)	0.72 (0.56 to 0.93)		25.2 (368)	34.2 (126)	1.12 (0.87 to 1.44)	1.02 (0.78 to 1.33)
Health-related factors								
HIV status								
Negative/Unknown	89.9 (1753)	24.5 (429)	1	0.001	89.4 (1308)	33.0 (432)	1	0.130
Positive	10.1 (197)	35.5 (70)	1.70 (1.25 to 2.32)		10.6 (155)	27.1 (42)	0.75 (0.52 to 1.09)	0.68 (0.46 to 1.00)
PrEP use (in the lookback period)								
No	86.4 (1677)	25.4 (426)	1	0.607	77.0 (1125)	36.7 (413)	1	<0.001
Yes	13.6 (264)	26.9 (71)	1.08 (0.81 to 1.45)		23.1 (337)	18.1 (61)	0.38 (0.28 to 0.52)	0.38 (0.28 to 0.52)
Life satisfaction level								

Continued



Table 3 Continued

Lookback period (period number)	March–June/July 2020 (P1)				July–November/December 2020 (P2)			
	Sample composition, col % (n)	(Row) % have unmet STI testing need (n)	uOR (95% CI) have unmet STI testing need	P value	Sample composition, col % (n)	Row % have unmet STI testing need (n)	uOR (95% CI) have unmet STI testing need	P value
Medium–very high	68.8 (1340)	26.6 (357)	1	0.104	75.6 (1106)	31.2 (345)	1	0.085
Low	31.2 (608)	23.2 (141)	0.83 (0.66 to 1.04)	–	24.4 (357)	36.1 (129)	1.25 (0.97 to 1.60)	–
Unmet STI testing need, defined as reporting one or more new sex partners and/or multiple CAS partners in the lookback period without testing for STIs during the same period.								
*Adjusting for: age; sexual identity; ethnicity; country of residence; employment status; HIV status; PREP use.								
† Cisgender MSM.								
‡ Including 'Bisexual' (S1: n=220; S2: n=179); 'Other' (S1: n=44; S2: n=50); 'Straight' (S1: n=8; S2: n=14).								
§ Including 'White British' (S1: n=1426; S2: n=1045); 'White Irish' (S1: n=75; S2: n=55); 'White other' (S1: n=227; S2: n=184).								
¶ Including 'Black' (S1: n=31; S2: n=41); 'Asian' (S1: n=101; S2: n=63); 'Mixed or other' (S1: n=90; S2: n=75).								
** The UK government paid 80% of the salary of those who were unable to work due to COVID-19 restrictions. <sup>15</sup>								
aOR, adjusted OR; CAS, condomless anal sex; CI, confidence interval; MSM, men who have sex with men; n.a., not applicable; PREP, pre-exposure prophylaxis; uOR, unadjusted OR.								

proportion of MSM reporting risk behaviours increased significantly such that prevalence was returning to prepandemic levels as restrictions eased during summer 2020.<sup>13</sup> However, although participants' sociodemographic profiles are largely comparable, the prepandemic 2017 survey sample may have disproportionately recruited those engaged in risk behaviour, given their recruitment through applications primarily used to meet sex partners, possibly overestimating risk behaviour among MSM.<sup>16</sup> In contrast, the RiSH-COVID surveys recruited more broadly so perhaps more indicative of behaviour in the general MSM population. In terms of other evidence, it is worth noting that another UK study reported similarly large increases in sexual risk behaviour among MSM as restrictions were eased in summer 2020,<sup>11</sup> and a Dutch study observed that in the 2 months after the first Dutch lockdown, the proportion of participants reporting CAS had rebounded to prepandemic levels.<sup>17</sup>

STI testing positivity (excluding chlamydia) among those aged  $\geq 25$  years increased between 2019 and 2020,<sup>18</sup> suggesting ongoing STI transmission. Although national surveillance data only provide insight for those engaging with SHS or community-based chlamydia screening, our survey data suggest that unmet need for testing exceeded the rebound in STI/HIV testing after the first national lockdown. This was also found in a Dutch study where only 39% of participants reported catching-up with missed STI/HIV testing after the Netherlands' first lockdown.<sup>17</sup> The inability for SHS to meet testing need in the UK could also be due to changes in healthcare seeking behaviour as social restrictions fluctuated.

It is concerning that unmet need—particularly during the first lockdown—appeared to be disproportionately greater among bisexually-identifying MSM, those reporting a low level of life satisfaction and all other ethnic groups except white, who already experience disproportionate STI/HIV burden.<sup>13 19 20</sup> Previous research has linked low psychological well-being with greater participation in risk behaviour.<sup>21</sup> We found such an association during P3, with participants reporting poorer mental health more likely to have unmet HIV testing need, but no more likely to report HIV testing; this potentially reflects an impact on engaging in sexual risk behaviour after experiencing 'lockdown fatigue' and declining mental health resilience.<sup>22</sup>

We used the same study protocol and similar recruitment methods for each RiSH-COVID survey and an earlier survey undertaken in 2017, resulting in large samples with broadly comparable sociodemographic profiles, and enabling comparisons with a prepandemic 'benchmark'.<sup>12 13</sup> Our findings also complement national surveillance data on SHS attendees by providing community-recruited samples of MSM, thereby enabling comparisons on risk behaviours and testing need in MSM who do and do not access SHS.

However, there are limitations. As cross-sectional surveys, associations between variables can be bidirectional and therefore we cannot infer causality. We also acknowledge the issue of temporality in participants' behaviours. Additionally, the lookback periods in each round were of unequal length, varying by a few weeks, and thus providing participants in different rounds with greater (or lesser) opportunity to engage in risk behaviour and/or use services. This reflects the pragmatic nature of the surveys and the decision to prioritise lockdown 'milestones' (eg, the start of a full lockdown) rather than specific dates, which would be more burdensome for participants to recall, and because of differences between the UK's four nations in the exact date of these changes. However, the results from other studies suggest differences in lookback periods are unlikely to explain away our findings.<sup>11 17</sup> Recruitment through an online survey

**Table 4** Sociodemographic and health-related factors associated with having unmet HIV testing need during three periods of the first year of the UK's pandemic response

Lookback period (period number)	March–June/July 2020 (P1)				July–November/December 2020 (P2)				December 2020–March/April 2021 (P3)			
	Sample composition, col % (n)	uOR (95% CI) have unmet HIV testing need	P value	aOR (95% CI)* have unmet HIV testing need	Sample composition, col % (n)	uOR (95% CI) have unmet HIV testing need	P value	aOR (95% CI)* have unmet HIV testing need	Sample composition, col % (n)	% have unmet HIV testing need (n)	uOR (95% CI) have unmet HIV testing need	P value
All†	100.0 (1753)	22.9 (402)	–	–	100.0 (1308)	31.0 (405)	–	–	100.0 (1330)	25.1 (334)	–	–
Sociodemographic characteristics												
Age (years)												
Under 30	26.7 (468)	21.8 (102)	1	0.073	28.9 (378)	36.8 (139)	1	0.014	25.8 (343)	24.5 (84)	1	0.280
30–44	35.5 (623)	26.0 (162)	1.26 (0.95–1.67)	1.24 (0.92–1.65)	37.7 (493)	27.8 (137)	0.66 (0.50–0.88)	0.74 (0.55–1.00)	35.1 (466)	23.0 (107)	0.92 (0.66–1.27)	1.02 (0.73–1.43)
45 and over	37.8 (662)	20.9 (138)	0.94 (0.71–1.26)	0.97 (0.72–1.30)	33.4 (437)	29.5 (129)	0.72 (0.54–0.97)	0.76 (0.56–1.04)	39.1 (520)	27.3 (142)	1.16 (0.66–1.27)	1.23 (0.89–1.69)
Sexual identity												
Gay	85.1 (1492)	21.5 (321)	1	0.001	82.4 (1078)	29.0 (313)	1	0.001	83.4 (1109)	22.6 (251)	1	<0.001
Bisexual‡	14.9 (261)	31.0 (81)	1.64 (1.23–2.19)	1.65 (1.23–2.22)	17.6 (230)	40.0 (92)	1.63 (1.21–2.19)	1.35 (0.99–1.84)	16.6 (221)	37.6 (83)	2.06 (1.51–2.79)	1.84 (1.34–2.52)
Ethnicity												
White§	88.5 (1552)	22.0 (342)	1	0.016	87.2 (1141)	30.3 (346)	1	0.196	90.0 (1197)	25.0 (299)	1	0.737
All other ethnic groups¶	11.5 (201)	30.0 (60)	1.51 (1.09–2.08)	1.45 (1.03–2.04)	12.8 (167)	35.3 (59)	1.26 (0.89–1.77)	1.34 (0.93–1.93)	10.0 (133)	26.3 (35)	1.07 (0.71–1.61)	1.10 (0.72–1.68)
Country of residence in the UK												
England	85.5 (1499)	22.0 (330)	1	0.030	83.4 (1091)	29.6 (323)	1	0.018	83.4 (1109)	23.8 (264)	1	0.016
Outside England	14.5 (254)	28.4 (72)	1.40 (1.04–1.89)	1.48 (1.10–2.01)	16.6 (217)	37.8 (82)	1.44 (1.07–1.96)	1.35 (0.98–1.85)	16.6 (221)	31.7 (70)	1.48 (1.08–2.03)	1.41 (1.02–1.95)
Born in the UK												
Yes	78.3 (1373)	22.1 (304)	1	0.135	76.3 (998)	32.0 (319)	1	0.157	78.5 (1044)	24.8 (259)	1	0.626
No	21.7 (380)	25.8 (98)	1.22 (0.94–1.59)	–	23.7 (310)	27.7 (86)	0.82 (0.62–1.08)	–	21.5 (286)	26.2 (75)	1.08 (0.80–1.45)	–
Highest educational qualification												

Continued

Table 4 Continued

Lookback period (period number)	March–June/July 2020 (P1)				July–November/December 2020 (P2)				December 2020–March/April 2021 (P3)			
	Sample composition, col % (n)	(Row) % have unmet HIV testing need (n)	uOR (95% CI) have unmet HIV testing need	P value	Sample composition, col % (n)	(Row) % have unmet HIV testing need (n)	uOR (95% CI) have unmet HIV testing need	P value	Sample composition, col % (n)	(Row) % have unmet HIV testing need (n)	uOR (95% CI) have unmet HIV testing need	P value
Degree or higher	58.9 (1031)	23.5 (242)	0.530	0.883	58.8 (769)	28.7 (221)	1	0.038	56.2 (748)	24.6 (184)	1	0.624
Below degree	41.2 (721)	22.2 (160)	0.93 (0.74–1.17)	0.98 (0.78–1.24)	41.2 (539)	34.1 (184)	1.29 (1.01–1.63)	1.13 (0.88–1.46)	43.8 (582)	25.8 (150)	1.06 (0.83–1.37)	0.95 (0.73–1.23)
Employed (inc. furlough**)												
Yes	77.7 (1355)	23.8 (322)	0.106	n.a.	75.4 (986)	30.2 (298)	1	0.311	78.0 (1037)	23.9 (248)	1	0.059
No	22.3 (388)	19.9 (77)	0.79 (0.60–1.05)	–	24.6 (322)	33.2 (107)	1.15 (0.88–1.50)	–	22.0 (293)	29.4 (86)	1.32 (0.99–1.76)	–
Health-related factors												
PrEP use (in the lookback period)												
No	84.9 (1481)	22.0 (326)	0.033	0.031	74.2 (970)	36.4 (353)	1	<0.001	76.8 (1022)	27.8 (284)	1	<0.001
Yes	15.1 (264)	28.0 (74)	1.38 (1.03–1.85)	1.40 (1.03–1.89)	25.8 (337)	15.4 (52)	0.32 (0.23–0.44)	0.35 (0.25–0.48)	23.2 (308)	16.2 (50)	0.50 (0.36–0.70)	0.55 (0.39–0.77)
Life satisfaction level												
Medium–very high	69.0 (1208)	23.8 (288)	0.190	0.128	75.5 (988)	30.6 (302)	1	0.586	75.2 (998)	23.2 (231)	1	0.006
Low	31.0 (543)	21.0 (114)	0.85 (0.66–1.08)	0.82 (0.64–1.06)	24.5 (320)	32.2 (103)	1.08 (0.82–1.41)	1.11 (0.84–1.47)	24.8 (329)	30.7 (101)	1.47 (1.12–1.94)	1.44 (1.08–1.91)
Unmet HIV testing need, defined as reporting one or more new sex partners and/or multiple CAS partners in the lookback period without testing for HIV during the same period.												
* Adjusting for: age; sexual identity; ethnicity; country of residence; education; PrEP use; life satisfaction.												
† Cisgender MSM that report a negative or unknown HIV status.												
‡ Including 'Bisexual' (S1: n=210; S2: n=169; S3: n=171); 'Other' (S1: n=43; S2: n=47; S3: n=44); 'Straight' (S1: n=8; S2: n=14; S3: n=6).												
§ Including 'White British' (S1: n=1288; S2: n=924; S3: n=1000); 'White Irish' (S1: n=64; S2: n=50; S3: n=42); 'White other' (S1: n=200; S2: n=167; S3: n=155).												
¶ Including 'Black' (S1: n=24; S2: n=38; S3: n=22); 'Asian' (S1: n=98; S2: n=61; S3: n=52); 'Mixed or other' (S1: n=79; S2: n=68; S3: n=59).												
** The UK government paid 80% of the salary of those who were unable to work due to COVID-19 restrictions. <sup>15</sup>												
aOR, adjusted OR; CAS, condomless anal sex; CI, confidence interval; MSM, men who have sex with men; n.a., not applicable; PrEP, pre-exposure prophylaxis; uOR, unadjusted OR.												

and through social media and dating applications will exclude MSM who do not use these platforms, are not seeking new sex partners and/or do not have internet access; potentially limiting the generalisability of our findings to all MSM. STI testing data were not available for P3 thereby limiting some comparisons. Nevertheless, guidelines state the importance of STI testing alongside HIV testing such that trends observed for HIV testing and unmet need during P3 may well reflect those for STIs.<sup>1 23</sup>

Given the small number of migrants and participants from ethnic minority groups (despite attempts to boost the number of participants from these groups by using different images and social media platforms to promote our survey), we needed to categorise country of birth and ethnicity as binary variables thereby overlooking substantive differences in sexual health within these groups.<sup>13 19</sup> Likewise, as the majority of participants were cisgender MSM, we were unable to make meaningful inferences on barriers to access and sexual health needs of gender minorities.<sup>24 25</sup> The variables we derived to try and capture unmet STI/HIV testing need were informed by national guidelines,<sup>1</sup> which advise quarterly STI and HIV testing in MSM engaging in certain risk behaviours. We acknowledge that this is a crude measure and does not take account of subjective risk, for example, participants needing to test for HIV if their partner has an undetectable HIV viral load,<sup>26</sup> but we were unable to measure this in our surveys.

The high proportion of MSM considered to have unmet STI/HIV testing need throughout the periods of social restrictions and reconfiguration of SHS provision should be of concern to sexual healthcare workers and policymakers, particularly its disproportionate impact on certain groups. There are many reasons why MSM may have been less likely to test and/or have postponed testing, including: considering it a lower priority in the context of the ongoing pandemic; wanting to avoid perceived potential for judgement by SHS; avoid potential COVID-19 transmission from attending SHS in-person; or being unable to adjust to SHS reconfiguration to remote services. Our observations suggest that for some men, such as those taking HIV PrEP (where we observed an almost doubling of reported use between P1 and P2 likely due to the introduction of routinely commissioned and available PrEP in the latter half of 2020<sup>27</sup>), SHS were able to meet their testing needs. In contrast, SHS may need to target testing campaigns and provision to those with relatively high unmet need, including bisexually-identifying MSM, ethnic minorities and those whose mental health has been most adversely affected by the pandemic. Ensuring flexible, equitable access to SHS is essential in meeting need and widening access to testing, and offers opportunities for proactive promotion of HIV PrEP services to those eligible.

There is evidence that sexual risk behaviour in MSM rebounded to prepandemic levels once restrictions were eased.<sup>11 17</sup> Given the ongoing COVID-19 pandemic, and with many countries implementing new restrictions towards the end of 2021,<sup>28</sup> there is a need for increased testing capacity in SHS and targeted testing campaigns to accommodate testing backlogs and to meet need related to rebounding risk behaviours and STI/HIV transmission as restrictions ease. To mitigate inequalities in access, ongoing surveillance and observational research can help identify whether newly reconfigured remote services are equitable and, indeed, whether, where and for whom in-person services must remain open.

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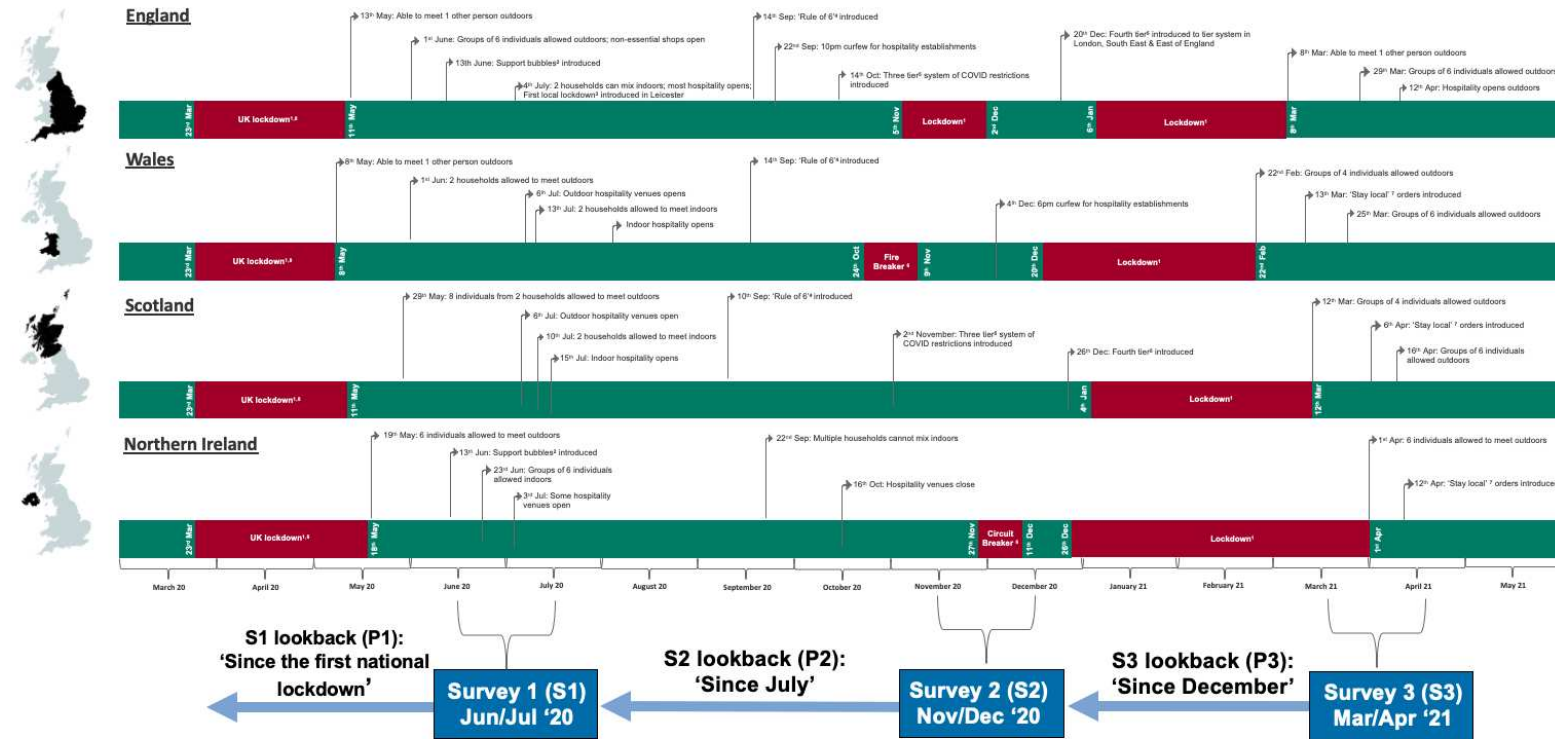
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## Appendix 1 Timeline of RiISH-COVID surveys in relation to COVID-19 social restrictions during the first year of the UK's pandemic response



1 'Stay at home' orders implemented across the country, these include: Only leaving home for food, medical reasons, exercise or work; Working from home unless you are unable to do so; Essential shops can remain open.

2 'Support bubbles': Individuals living alone, households with one adult, households with children under the age of one, households with children who have a disability, aged 16 or 17 living without an adult, can join no more than one other household to form a 'bubble' under which they are essentially classed as one household.

3 'Local lockdown': stay at home orders<sup>1</sup> continue to be in force in some local authorities across the UK. Individuals are discouraged from travelling from/to these areas.

4 'Rule of 6': Apart from in work and school environments, any social gatherings of more than 6 individuals is against the law

5 'Tier system': Differing levels of social restrictions, categorised into tiers 1-4 are introduced and can be implemented at local authority levels. Descriptions of tiers can be found here: <https://www.gov.uk/government/publications/tier-posters-medium-high-and-very-high>

6 'Fire/circuit breaker': a short period of stay at home (lockdown) orders to limit rising infections

7 'Stay local': Restrictions on non-essential travel across local authority boundaries remains in place, individuals encouraged to stay within their local council boundaries for non-essential shopping etc.

8 'Social distancing': Across the UK, individuals were encouraged to keep a 2 meter distance from other people. This was later adapted to 1 meter plus, which included keeping a 1 meter distance from other people in addition to taking another precaution, these included: wearing a face covering; separated by plastic screens; being outdoors.

**Appendix 3** Sociodemographic and health-related characteristics reported by participants in the RiISH-COVID surveys conducted during three periods of the first year of the UK's pandemic response

Survey	RiiSH-COVID survey 1 (S1)	RiiSH-COVID survey 2 (S2)	RiiSH-COVID survey 3 (S3)	p-value (overall difference across surveys)
	Column % (n)	Column % (n)	Column % (n)	
Participants’ characteristics ¶				
Socio-demographics				
Age (years)	N=1950	N=1463	N=1486	
Under 30	24.6 (479)	26.5 (388)	23.8 (353)	0.040
30-44	35.3 (688)	37.8 (553)	35.5 (528)	
45 and over	40.2 (783)	35.7 (522)	40.7 (605)	
Sexual identity	N=1950	N=1463	N=1487	
Gay	86.1 (1678)	83.4 (1220)	84.2 (1252)	0.083
Bisexual §	14.0 (272)	16.6 (243)	15.8 (235)	
Ethnicity	N=1950	N=1463	N=1487	
White	88.6 (1728)	87.8 (1284)	90.0 (1338)	0.058
Black	1.6 (31)	2.8 (41)	1.8 (27)	
Asian	5.2 (101)	4.3 (63)	3.6 (54)	
Mixed or other	4.6 (90)	5.1 (75)	4.6 (68)	
Country of residence in the UK	N=1950	N=1463	N=1487	
England	86.1 (1679)	84.3 (1233)	83.8 (1246)	0.097
Scotland	7.4 (144)	9.8 (144)	9.4 (139)	
Wales	4.2 (82)	4.3 (63)	4.9 (73)	
Northern Ireland	2.3 (45)	1.6 (23)	2.0 (29)	
Born in the UK	N=1950	N=1463	N=1487	
Yes	78.1 (1523)	76.9 (1125)	78.8 (1171)	0.467
Highest educational qualification	N=1949	N=1463	N=1487	
Degree or higher	59.0 (1149)	57.4 (840)	55.6 (827)	0.146
Employed (inc. furlough*)	N=1939	N=1463	N=1487	
Yes	77.2 (1497)	74.9 (1095)	77.6 (1154)	0.154
Living with partner(s)	N=1950	N=1463	N=1487	
Yes	31.0 (604)	29.5 (432)	32.8 (488)	0.153

Health related factors				
<b>HIV status</b>	N=1950	N=1463	N=1487	
Positive	10.1 (197)	10.6 (155)	10.6 (157)	0.868
<b>Currently on anti-retroviral therapy for HIV</b>	N=197	N=155	N=157	
Yes	95.9 (189)	98.1 (152)	97.5 (153)	0.473
<b>Undetectable viral load (last time checked)</b>	N=197	N=155	N=157	
Yes	94.9 (187)	97.4 (151)	96.2 (151)	0.840
<b>PrEP use (in the lookback period)</b>	N=1941	N=1462	N=1487	
Yes	13.6 (264)	23.1 (337)	20.7 (308)	<0.001
<b>How user took PrEP (in the lookback period)</b>	N=264	N=337	N=308	
Daily	35.6 (94)	50.7 (171)	55.8 (172)	<0.001
4-6 times a week	8.3 (22)	8.9 (30)	10.4 (32)	
Intermittently (e.g. week on/week off)	12.9 (34)	5.0 (17)	3.9 (12)	
Before and after sex (event based/on demand)	28.4 (75)	29.1 (98)	20.5 (63)	
One-off(s)	7.6 (20)	4.2 (14)	4.9 (15)	
Other	7.2 (19)	2.1 (7)	4.6 (14)	
<b>Life satisfaction level †</b>	N=1948	N=1463	N=1484	
Low	31.2 (608)	24.4 (357)	24.7 (367)	<0.001
<b>Anxiety level †</b>	N=1943	N=1460	N=1484	
Low/very low	54.0 (1050)	41.2 (601)	44.8 (665)	<0.001

¶ Cis-gender MSM

§ including 'Bisexual' (S1: n=220; S2: n=179; S3: n=180); 'Other' (S1: n=44; S2: n=50; S3: n=47); 'Straight' (S1: n=8; S2: n=14; S3: n=8)

† personal well-being (using the Office for National Statistics (ONS) well-being measures); Descriptions/definitions available at:

<https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/surveysusingthe4officeforationalstatisticspersonalwellbeingquestions>

\* the UK government paid 80% of the salary of those who were unable to work due to COVID-19 restrictions [15]

#### Appendix 4 Sexual behaviour reported by participants in the RiISH-COVID surveys conducted during three periods of the first year of the UK's pandemic response

Lookback period (period number)	March-June/July 2020 (P1)	July-November/December 2020 (P2)	December 2020-March/April 2021 (P3)	p-value (overall difference across periods)
	Column % (n)	Column % (n)	Column % (n)	
Sexual behaviours (in the lookback period) ¶				
Sex with a man	N=1950	N=1463	N=1487	<0.001
None	22.8 (445)	10.5 (153)	14.3 (212)	
Virtual only	14.4 (280)	6.1 (89)	8.7 (129)	
Physical	62.8 (1225)	83.5 (1221)	77.1 (1146)	
No. of new physical sex* partners	N=1949	N=1460	N=1483	<0.001
None	63.0 (1227)	38.3 (559)	48.2 (715)	
One	13.6 (264)	14.4 (210)	14.5 (215)	
Two or more	23.5 (458)	47.3 (691)	37.3 (553)	
≥5 new physical sex partners	N=1949	N=1460	N=1483	<0.001
Yes	8.1 (158)	21.8 (318)	14.4 (214)	
No. of CAS partners	N=1950	N=1463	N=1487	
None	62.1 (1211)	43.2 (632)	48.5 (721)	
One	20.4 (398)	23.7 (346)	23.9 (356)	<0.001
Two or more	17.5 (341)	33.2 (485)	27.6 (410)	
Chemsex	N=1950	N=1463	N=1487	0.002
Yes	3.7 (72)	6.0 (87)	3.8 (56)	

¶ Cis-gender MSM

\* Physical sex, defined as: any activity intended to achieve orgasm (or close to) for one or both partners

## Appendix 5 Sexual health service use reported by participants in the RiSH-COVID surveys conducted during three periods of the first year of the UK's pandemic response

Lookback period (period number)	March-June/July 2020 (P1)	July-November/December 2020 (P2)	December 2020-March/April 2021 (P3)	p-value (overall difference across periods)
	Column % (n)	Column % (n)	Column % (n)	
HIV-testing ¶				
Ever tested for HIV	N=1950	N=1463	N=1487	
Yes	87.5 (1707)	89.7 (1313)	88.5 (1316)	0.390
Where tested if tested in the lookback period	N=521	N=515	N=538	
In-person	26.1 (136)	53.8 (277)	44.6 (240)	<0.001
Self-sample	73.7 (384)	46.2 (238)	55.4 (538)	
Tried (and failed) to get a HIV test in the lookback period	N=989	N=643	N=621	
Yes	11.6 (115)	11.4 (73)	18.8 (117)	<0.001
Confident accessing a HIV test if not tested in the lookback period	N=1232	N=793	N=792	
Yes	60.4 (744)	65.6 (520)	73.7 (584)	<0.001
STI testing ¶				
Ever tested for STIs	N=1950	N=1463		
Yes	81.7 (1593)	83.0 (1214)	-	0.330
Results of most recent STI test	N=487	N=544		
Positive for at least 1	17.3 (84)	22.6 (123)	-	0.096
Where tested if tested in the lookback	N=487	N=544		
In-person	34.5 (168)	60.9 (331)	-	<0.001
Self-sample	65.3 (318)	39.0 (212)	-	
Tried (and failed) to get an STI test in the lookback	N=1950	N=1463		
Yes	7.6 (148)	6.2 (90)	-	0.103
Confident accessing STI testing if not tested in	N=1106	N=669		



<i>the lookback</i>				
Yes	60.8 (672)	66.4 (444)	-	0.018

¶ Cis-gender MSM

# Your sex life since lockdown

Welcome to *Your sex life since lockdown*. This is a voluntary survey about sexually transmitted infections (STIs), use of sexual health clinics and sexual behaviour before and during the COVID-19 pandemic.

## Please take part if you

- Are a man OR a trans man OR a trans woman OR a non-binary person assigned male at birth
- AND you have sex with men and/or other people assigned male at birth
- AND are aged 16 years or over
- AND you live in the UK

## What is the survey about?

It asks about your thoughts about sexually transmitted infections (STIs), your sexual behaviour, and your use of health services including sexual health clinics both before and during the lockdown when social distancing measures were introduced by the UK government due to the COVID-19 pandemic. This information will be used to help plan better sexual health services.

## How long does the survey take to do?

Most people take about 10 minutes to complete the survey.

## What about data protection?

This survey is completely anonymous. We will NOT collect any information that identifies the device you are using (phone or computer) or try to install any cookies on it. We will not collect any information about you that would allow anybody to identify you. A report of the results will be produced at the end of the study. It will be available from our study website. No one will be identifiable from the report.

## Who are we?

The National Institute for Health Research (NIHR) Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections is led by University College London in partnership with Public Health England. The unit aims to conduct state-of-the-art research to improve the health of the population, and to help develop practical policy guidelines for those working in health protection. If you have any questions or concerns about the study, please contact Alison Howarth via email ([alison.howarth@ucl.ac.uk](mailto:alison.howarth@ucl.ac.uk)).

## Please complete this survey once only

Please read the statements below carefully and tick the appropriate box to indicate whether you agree to participate in this survey

- ☐ I have read and understood the above information and I agree to participate in the survey
- ☐ I do not want to take part in this survey

Are you aged 16 years or over?

- ☐ I am aged 16 or over  
☐ I am aged under 16

Are you currently living in the UK?

- ☐ Yes  
☐ No

## About you ...

How old are you?

- ☐ 16  
☐ 17  
☐ etc  
☐ 80  
☐ Over 80

Which of the following options best describes how you think of yourself?

- ☐ Man (including trans man)  
☐ Woman (including trans woman)  
☐ Non-binary  
☐ In another way

What sex were you assigned at birth?

- ☐ Male  
☐ Female  
☐ Intersex  
☐ Prefer not to say

Since the beginning of 2019, have you had sex with... [*tick all that apply*]

- ☐ Men (including trans men)  
☐ Women (including trans women)  
☐ Non-binary people assigned male at birth  
☐ Non-binary people assigned female at birth  
☐ People who identify in another way  
☐ No one

*Thank you for your interest but your answers show that you do not qualify to take part in this survey. Please press submit on the next page to exit and you will see some links to information on sexual health and support services.*

## About you ...

How would you describe your sexual orientation?

- ☐ Straight or heterosexual
- ☐ Gay or homosexual
- ☐ Bisexual
- ☐ I don't use any terms
- ☐ Other
- ☐ Rather not say

Please describe your sexual orientation:

Which of the following best describes your ethnic group?

- ☐ White British
- ☐ White Irish
- ☐ Any other White background
- ☐ Black or Black British: Caribbean
- ☐ Black or Black British: African
- ☐ Black or Black British: Any other Black background
- ☐ Asian/Asian British: Indian
- ☐ Asian/Asian British: Pakistani
- ☐ Asian/Asian British: Bangladeshi
- ☐ Asian/Asian British: Chinese
- ☐ Asian/Asian British: Any other Asian background
- ☐ Mixed: White and Black Caribbean
- ☐ Mixed: White and Black African
- ☐ Mixed: White and Asian
- ☐ Any other mixed/multiple background
- ☐ Any other ethnic group

Please describe what other white background?

Please describe what other black background?

Please describe what other Asian background?

Please describe what other mixed/multiple background?

Please describe what other ethnic group?

## COVID-19

In many of the following questions, we ask about your life and activities **since 'lockdown'**, which is the period since **23 March 2020** when social distancing measures were introduced by the UK government due to the COVID-19 (coronavirus) pandemic.

We also ask about your life and activities **between mid-December 2019** and **lockdown**, which is the three-month period from just before Christmas until 23 March 2020 i.e. before social distancing measures were introduced.

This survey is completely anonymous. We do NOT collect any information that identifies you or the device you are using.

## Where you live and where you were born ...

Were you born in the UK?

- ☐ No  
☐ Yes

How many years have you been living in the UK?

- ☐ Less than 1 year  
☐ 1  
☐ 2 etc  
☐ More than 80



Which part of the UK are you currently living in?

- ☐ England
- ☐ Scotland
- ☐ Wales
- ☐ Northern Ireland

Which local authority are you currently living in?

- ☐ I don't know
- ☐ Barking etc
- ☐ York

Which council area are you currently living in?

- ☐ I don't know
- ☐ Aberdeenshire
- ☐ Angus etc
- ☐ West Lothian

Which council are you currently living in?

- ☐ I don't know
- ☐ Antrim and Newtownabbey Borough
- ☐ etc
- ☐ Newry, Mourne and Down District

Which local authority are you currently living in?

- ☐ I don't know
- ☐ Blaenau Gwent
- ☐ Bridgend etc
- ☐ Wrexham

Is this your usual place of residence?

- ☐ No
- ☐ Yes

Did you move from your usual place of residence because of the lockdown?

- ☐ No
- ☐ Yes

## About your education and employment ...

What is your highest educational qualification?

- ☐ I have no educational qualifications
- ☐ GCSEs/O-Levels/National 5 or equivalent
- ☐ A-levels/Scottish Highers or equivalent
- ☐ Higher education below degree level (e.g. HNC, HND)
- ☐ Degree or higher
- ☐ Other

Which of the following best describes you **between mid-December 2019 and lockdown**? [*tick all that apply*]

- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Self-employed
- ☐ Unemployed
- ☐ Student
- ☐ Retired
- ☐ Long-term sick leave / medically retired
- ☐ Other

Which of the following best describes you **since lockdown**? [*tick all that apply*]

- ☐ On furlough
- ☐ Previous job made redundant
- ☐ Employed in the same job on reduced hours
- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Self-employed
- ☐ Unemployed
- ☐ Student
- ☐ Retired
- ☐ Long-term sick leave / medically retired
- ☐ Other

## About your household ...

Who are you living with currently? [*tick all that apply*]

- ☐ I live alone
- ☐ A partner / partners
- ☐ My child / children
- ☐ Other family member(s)
- ☐ Friend(s) / housemate(s)
- ☐ Other(s)

## HIV testing

Have you **ever** received an HIV test result?

- ☐ No, I've never received an HIV test result
- ☐ Yes, I have tested positive (I'm living with HIV)
- ☐ Yes, my last test was negative (I did not have HIV at the time of the test)

When did you **last** have an HIV test?

- ☐ Since lockdown (since 23 March 2020)
- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019

Where did you have your **last** HIV test?

- ☐ At a sexual health clinic
- ☐ At another type of hospital (outpatients) clinic
- ☐ At my GP practice
- ☐ At a private medical practice
- ☐ At a hospital as an inpatient (staying overnight)
- ☐ At a community HIV testing service (that is not in a hospital or clinic)
- ☐ At a blood donation service
- ☐ I used a free online self-sampling service [*I took my own sample and sent it off for the result*]
- ☐ I used a private online self-sampling service (I had to pay for it) [*I took my own sample and sent it off for the result*]
- ☐ I used a self-testing kit [*I took my own sample and found out the result immediately*]
- ☐ At a mobile medical unit
- ☐ Somewhere else

Have you tried to get an HIV test **since lockdown** (since 23 March 2020)?

- ☐ No  
☐ Yes

Where have you tried to get an HIV test since lockdown (since 23 March 2020)? [*tick all that apply*]

- ☐ At a sexual health clinic  
☐ At another type of hospital (outpatients) clinic  
☐ At my GP practice  
☐ At a private medical practice  
☐ At a hospital as an inpatient (staying overnight)  
☐ At a community HIV testing service (that is not in a hospital or clinic)  
☐ At a blood donation service  
☐ Using a free online self-sampling service [*taking my own sample and sending it off for the result*]  
☐ Using a private online self-sampling service (paying for it) [*taking my own sample and sending it off for the result*]  
☐ Using a self-testing kit [*taking my own sample and finding out the result immediately*]  
☐ At a mobile medical unit  
☐ Somewhere else

How confident are you that you could get a test for HIV **since lockdown** (since 23 March 2020) if you wanted one?

- ☐ Very confident  
☐ Quite confident  
☐ A little confident  
☐ Not at all confident  
☐ I don't know

## Living with HIV

In which year were you first diagnosed with HIV?

- ☐ 2020  
☐ etc  
☐ 1984  
☐ Before 1984

Were you first diagnosed with HIV in the last 12 months?

- ☐ No  
☐ Yes

Are you currently taking antiretroviral treatment (sometimes known as ART or HAART)?

- ☐ No  
☐ Yes

What was the result of your viral load test the last time you had it checked?

- ☐ Undetectable  
☐ Detectable  
☐ I was told but I don't remember the result  
☐ It was measured but I was not told the result  
☐ It was not measured  
☐ I don't remember

## Use of PrEP

*PrEP is a drug taken by HIV-negative people that reduces the risk of getting HIV.*

Have you **ever** used PrEP (including if you are currently using PrEP)?

- ☐ No  
☐ Yes  
☐ I don't know

## Use of PrEP

*PrEP is a drug taken by HIV-negative people that reduces the risk of getting HIV.*

Have you **ever** used PrEP?

- ☐ No  
☐ Yes  
☐ I don't know



When did you **first** take PrEP? [*Please estimate if you can't say exactly*]

Month

- ☐ January
- ☐ February
- ☐ March
- ☐ April
- ☐ May
- ☐ June
- ☐ July
- ☐ August
- ☐ September
- ☐ October
- ☐ November
- ☐ December

Year

- ☐ Before 2017
- ☐ 2017
- ☐ 2018
- ☐ 2019
- ☐ 2020

When did you **last** take PrEP? [*Please estimate if you can't say exactly*]

Month

- ☐ January
- ☐ February
- ☐ March
- ☐ April
- ☐ May
- ☐ June
- ☐ July
- ☐ August
- ☐ September
- ☐ October
- ☐ November
- ☐ December

Year

- ☐ Before 2017
- ☐ 2017
- ☐ 2018
- ☐ 2019
- ☐ 2020

Did you **first** take PrEP before or after lockdown (23 March 2020)?

- ☐ After lockdown
- ☐ Before lockdown

Did you **last** take PrEP before or after lockdown (23 March 2020)?

- ☐ After lockdown
- ☐ Before lockdown

Thinking about the time **since lockdown**, how often have you taken PrEP: [*tick all that apply*]

- ☐ I haven't used PrEP during this time
- ☐ Daily
- ☐ 4-6 times a week
- ☐ Intermittently (e.g. a week on a week off)
- ☐ Before and after sex (event based or on demand)
- ☐ One-off(s)
- ☐ Other

Thinking about the time **between mid-December 2019 and lockdown**, how often were you taking PrEP: [*tick all that apply*]

- ☐ I didn't use PrEP during this time
- ☐ Daily
- ☐ 4-6 times a week
- ☐ Intermittently (e.g. a week on a week off)
- ☐ Before and after sex (event based or on demand)
- ☐ One-off(s)
- ☐ Other

## Sexually transmitted infection (STI) testing (other than HIV)

Have you **ever** had a test for a sexually transmitted infection (STI) other than HIV?

- ☐ No
- ☐ Yes

When did you **last** have a test for a sexually transmitted infection (STI) other than HIV?

- ☐ Since lockdown (since 23 March 2020)
- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019

Have you received a test result for a sexually transmitted infection (STI) other than HIV **since lockdown**?

- ☐ No, I haven't received any STI results yet
- ☐ Yes, all my STI test results were negative
- ☐ Yes, I tested positive for at least one STI

Where have you tested for STIs other than HIV **since lockdown**? [*tick all that apply*]

- ☐ At a sexual health clinic
- ☐ At an HIV clinic
- ☐ At my GP practice
- ☐ At a private medical practice
- ☐ At a community HIV testing service (that is not in a hospital or clinic)
- ☐ I used a free online self-sampling service [*I took my own sample and sent it off for the result*]
- ☐ I used a private online self-sampling service (I had to pay for it) [*I took my own sample and sent it off for the result*]
- ☐ At a mobile medical unit
- ☐ Somewhere else

Have you tried to get a test for a sexually transmitted infection (STI) other than HIV **since lockdown**?

- ☐ No
- ☐ Yes

Where have you tried to get a test for a sexually transmitted infection (STI) other than HIV **since lockdown**? [*tick all that apply*]

- ☐ At a sexual health clinic
- ☐ At an HIV clinic
- ☐ At my GP practice
- ☐ At a private medical practice
- ☐ At a community HIV testing service (that is not in a hospital or clinic)
- ☐ Using a free online self-sampling service [*taking my own sample and sending it off for the result*]
- ☐ Using a private online self-sampling service (paying for it) [*taking my own sample and sending it off for the result*]
- ☐ At a mobile medical unit
- ☐ Somewhere else

How confident are you that you could get a test for STIs other than HIV **during lockdown** if you wanted one?

- ☐ Very confident
- ☐ Quite confident
- ☐ A little confident
- ☐ Not at all confident
- ☐ I don't know

## Vaccination

**Hepatitis A** is an infection of the liver caused by a virus that's spread in the poo of an infected person. Occasionally this could happen during sex.

Have you ever received the **hepatitis A** vaccine?

- ☐ No
- ☐ Yes
- ☐ I don't know

*Hepatitis A vaccination usually involves two doses, given by injection, between 6 and 12 months apart.*

When did you **last** receive the hepatitis A vaccine (your most recent injection)?

- ☐ Since lockdown (since 23 March 2020)
- ☐ Before lockdown but can't remember when
- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019

Have you completed the course of hepatitis A vaccine?

- ☐ No
- ☐ Yes
- ☐ I don't know

***Hepatitis B** is an infection of the liver caused by a virus that's spread through blood and body fluids.*

Have you ever received the **hepatitis B** vaccine?

- ☐ No
- ☐ Yes
- ☐ I don't know

*Hepatitis B vaccination involves having three doses, given by injection, at the recommended intervals. These intervals can vary between a few weeks to several months.*

When did you **last** receive the hepatitis B vaccine (your most recent injection)?

- ☐ Since lockdown (since 23 March 2020)
- ☐ Before lockdown but can't remember when
- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019

Have you completed the course of hepatitis B vaccine?

- ☐ No
- ☐ Yes
- ☐ I don't know

**HPV** (*Human papillomavirus*) is the name of a very common group of viruses. They do not cause any problems in most people, but some types can cause genital warts or cancer.

Have you ever received the **HPV** vaccine?

- ☐ No
- ☐ Yes
- ☐ I don't know

*HPV vaccination involves having three doses, given by injection, at the recommended intervals. If you receive the vaccine before the age of 15 you only need two doses.*

When did you **last** receive the HPV vaccine (your most recent injection)?

- ☐ Since lockdown (since 23 March 2020)
- ☐ Before lockdown but can't remember when
- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019

Have you completed the course of HPV vaccine?

- ☐ No
- ☐ Yes
- ☐ I don't know

## About symptoms ...

Have you had any of the following symptoms **since lockdown** (since 23 March 2020)? [*tick all that apply*]

- ☐ I haven't had any symptoms
- ☐ Pain, burning or stinging when passing urine
- ☐ Passing urine more often than usual
- ☐ Pain, bleeding or discharge from the rectum
- ☐ Pain during sex
- ☐ Genital wart or lump
- ☐ Genital ulcer or sore
- ☐ Discharge from the end of the penis
- ☐ Painful testicles

Have you had any of the following symptoms **since lockdown** (since 23 March 2020)? [*tick all that apply*]

- ☐ I haven't had any symptoms
- ☐ Pain, burning or stinging when passing urine
- ☐ Passing urine more often than usual
- ☐ Genital wart or lump
- ☐ Genital ulcer or sore
- ☐ Abnormal vaginal discharge
- ☐ Vaginal pain during sex
- ☐ Abnormal bleeding between periods
- ☐ Bleeding after sex (not during a period)
- ☐ Lower abdominal or pelvic pain (not related to periods)
- ☐ Pain, bleeding or discharge from the rectum
- ☐ Discharge from the end of the penis
- ☐ Painful testicles

Have you had any of the following symptoms **since lockdown** (since 23 March 2020)? [*tick all that apply*]

- ☐ I haven't had any symptoms
- ☐ Pain, burning or stinging when passing urine
- ☐ Passing urine more often than usual
- ☐ Genital wart or lump
- ☐ Genital ulcer or sore
- ☐ Abnormal vaginal discharge
- ☐ Vaginal pain during sex
- ☐ Pain during sex
- ☐ Abnormal bleeding between periods
- ☐ Bleeding after sex (not during a period)
- ☐ Lower abdominal or pelvic pain (not related to periods)
- ☐ Pain, bleeding or discharge from the rectum
- ☐ Discharge from the end of the penis
- ☐ Painful testicles



Have you seen a healthcare professional about your symptoms **since lockdown** (since 23 March 2020) [*please include telephone and video/online consultations, not just face-to-face*]?

- ☐ Yes – I have seen a healthcare professional
- ☐ No – I have not seen a healthcare professional
- ☐ No – but I have an appointment

What type of appointment(s) did you have? [*tick all that apply*]

- ☐ Face-to-face
- ☐ Telephone
- ☐ Video / online

What type of appointment have you booked?

- ☐ Face-to-face
- ☐ Telephone
- ☐ Video / online

### About sexual health clinics ...

Have you **ever** visited a sexual health clinic?

- ☐ No
- ☐ Yes

When was the last time you visited a sexual health clinic?

- ☐ Since lockdown (since 23 March 2020)
- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019

Why did you attend a sexual health clinic (the last time if more than once)? *[tick all that apply]*

- ☐ I wanted a general sexual health check-up
- ☐ I had no symptoms, but I was worried I might have an STI or HIV
- ☐ I had symptoms
- ☐ A sexual partner had symptoms
- ☐ A sexual partner was diagnosed with an STI
- ☐ Treatment after a previous positive test
- ☐ Check-up after a previous positive test
- ☐ As follow-up to an online test
- ☐ Ongoing HIV care and treatment
- ☐ To get PEP or PrEP to prevent HIV
- ☐ Following sexual assault
- ☐ Following domestic violence
- ☐ I was told to attend by my GP/family doctor or another healthcare professional
- ☐ I needed condoms
- ☐ I needed contraception (other than condoms)
- ☐ I needed a vaccination
- ☐ I couldn't get an online testing kit
- ☐ For another reason

## Your sexual relationships

*In this survey we use the term 'steady relationships' to refer to relationships with, for example, boyfriends, girlfriends, husbands or wives which mean that you are NOT 'single'. Do not include relationships with partners who are purely sex buddies.*

*We use 'men' to include 'trans men' and we use 'women' to include 'trans women'.*

Are you currently in a steady relationship? *[tick all that apply]*

- ☐ Yes, with a man (including trans men)
- ☐ Yes, with more than one man (including trans men)
- ☐ Yes, with a woman (including trans women)
- ☐ Yes, with more than one woman (including trans women)
- ☐ Yes, with a person who identifies in another way
- ☐ Yes, with more than one person who identifies in another way
- ☐ No, I'm single

For how many years have you been in your steady relationship with a man? *[if you have more than one steady relationship with a man, please tell us about the longest]*

- ☐ Less than 1 year
- ☐ 1
- ☐ 2
- ☐ 3 etc
- ☐ 25
- ☐ More than 25 years

Do you and this steady male partner have the same HIV status?

- ☐ Yes, we have the same HIV status (both positive or both negative)
- ☐ No, one of us is positive and the other is negative
- ☐ I don't know whether we have the same status or not

Are you and this steady male partner currently living together in the same household?

- ☐ No
- ☐ Yes

For how many years have you been in your steady relationship with a woman? *[if you have more than one steady relationship with a woman, please tell us about the longest]*

- ☐ Less than 1 year
- ☐ 1
- ☐ 2 etc
- ☐ 25
- ☐ More than 25 years

Do you and this steady female partner have the same HIV status?

- ☐ Yes, we have the same HIV status (both positive or both negative)
- ☐ No, one of us is positive and the other is negative
- ☐ I don't know whether we have the same status or not

Are you and this steady female partner currently living together in the same household?

- ☐ No
- ☐ Yes

For how many years have you been in your steady relationship with someone who identifies in another way? *[if you have more than one steady relationship with a person who identifies in another way, please tell us about the longest]*

- ☐ Less than 1 year
- ☐ 1 etc
- ☐ 24
- ☐ 25
- ☐ More than 25 years

Do you and this steady partner have the same HIV status?

- ☐ Yes, we have the same HIV status (both positive or both negative)
- ☐ No, one of us is positive and the other is negative
- ☐ I don't know whether we have the same status or not

Are you and this steady partner currently living together in the same household?

- ☐ No
- ☐ Yes

### **About sex with men since lockdown**

*In the following questions, we ask about sex since lockdown (since 23 March 2020). Please say when you last did something **EVEN** if this was not typical for you. This survey is anonymous and confidential.*

Thinking of the time since lockdown, have you had any kind of sex with a man (any activity intended to achieve orgasm (or close to orgasm) for one or both partners)?

- ☐ No
- ☐ Yes – virtual sex (e.g. phone sex, sexting)
- ☐ Yes – sex with physical contact (you could touch each other)
- ☐ Yes – virtual sex and sex with physical contact

Thinking of the time since lockdown, how many men have you had any kind of **physical sexual contact** with during this time [*please include any sexual contact, not just anal intercourse*]?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

Is this man a new sex partner (you had sex with him for the first time since lockdown)?

- ☐ No
- ☐ Yes

How many of these {number} men are new partners who you had sex with for the first time since lockdown?

- ☐ None
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

### Meeting male sexual partners since lockdown

In which of the following ways have you met or made contact with male partners for **physical sexual contact** since lockdown? [*tick all that apply*]

- ☐ A website for gay or bisexual men
- ☐ A smartphone app that locates potential partners and tells you how far away they are
- ☐ A gay sex party in a private home
- ☐ A gay community centre, gay organisation or gay social group (physical not virtual venues)
- ☐ A cruising location (street, roadside service area, park, beach, lavatory)
- ☐ Through friends
- ☐ In my household
- ☐ In a support bubble with another household
- ☐ Elsewhere



## About anal sex with men since lockdown

*We use the term "anal sex" to mean sex where one partner puts his penis into the other partner's anus, whether or not this ends in ejaculation.*

Thinking of the time since lockdown, have you had anal sex with a man (either with or without a condom)?

- ☐ No
- ☐ Yes

Since lockdown, have you had condomless anal sex with a man?

- ☐ No
- ☐ Yes

Since lockdown, how many men have you had condomless anal sex with?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

Do you and this man have the same HIV status?

- ☐ Yes, we have the same HIV status (both positive or both negative)
- ☐ No, one of us is positive and the other is negative
- ☐ I don't know whether we have the same status or not

How many of these {number} men you had condomless anal sex with did you know had the same HIV status as yourself (both positive or both negative)?

- ☐ I don't know
- ☐ None
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

### About anal sex with men

*We use the term "anal sex" to mean sex where one partner puts his penis into the other partner's anus, whether or not this ends in ejaculation.*

When did you **last** have anal sex with a man (either with or without a condom)?

- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019
- ☐ Never

When did you **last** have condomless anal sex with a man?

- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019
- ☐ Never

When did you **last** have condomless anal sex with a man?

- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019
- ☐ Never

When did you **last** have condomless anal sex with a man?

- ☐ Before 2019
- ☐ Never

Thinking now of the three-month period **between mid- December 2019** (so just before Christmas) and **lockdown**, how many men did you have condomless anal sex with?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

## About sex with women (including trans women)

*Please say when you last did something, even if this was not typical for you.*

Have you **ever** had sex of any kind with a woman [*please include any sexual contact, not just vaginal or anal intercourse*]?

- ☐ No
- ☐ Yes – virtual sex (e.g. phone sex, sexting)
- ☐ Yes – sex with physical contact (you could touch each other)
- ☐ Yes – virtual sex and sex with physical contact

## About sex with women (including trans women) since lockdown

Thinking of the time since lockdown (since 23 March 2020), how many women have you had any kind of **physical sexual contact** with during this time [*please include any sexual contact, not just vaginal or anal intercourse*]?

- ☐ None
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

Was this woman a new sex partner (you had sex with her for the first time since lockdown)?

- ☐ No
- ☐ Yes

How many of these {number} women were new partners who you had sex with for the first time since lockdown?

- ☐ None
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

### About vaginal and anal sex with women (including trans women) since lockdown

*We use the term "vaginal sex" to mean sex where one partner puts his penis into the other partner's vagina and "anal sex" to mean sex where one partner puts his penis into the other partner's anus, whether or not he ejaculates.*

Thinking of the since time lockdown (since 23 March 2020), have you had vaginal or anal sex with a woman?

- ☐ No
- ☐ Yes

Since lockdown, have you had condomless vaginal or anal sex with a woman?

- ☐ No
- ☐ Yes

Since lockdown, how many women have you had condomless vaginal or anal sex with?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

Do you and this woman have the same HIV status?

- ☐ Yes, we have the same HIV status (both positive or both negative)
- ☐ No, one of us is positive and the other is negative
- ☐ I don't know whether we have the same status or not

How many of these {number} women you had condomless vaginal or anal sex with did you know had the same HIV status as yourself (both positive or both negative)?

- ☐ I don't know
- ☐ None
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

### About vaginal and anal sex with women (including trans women)

*We use the term "vaginal sex" to mean sex where one partner puts his penis into the other partner's vagina and "anal sex" to mean sex where one partner puts his penis into the other partner's anus, whether or not he ejaculates.*

When did you **last** have vaginal or anal sex with a woman?

- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019
- ☐ Never



When did you **last** have condomless vaginal or anal sex with a woman?

- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019
- ☐ Never

When did you **last** have condomless vaginal or anal sex with a woman?

- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019
- ☐ Never

When did you **last** have condomless vaginal or anal sex with a woman?

- ☐ Before 2019
- ☐ Never

Thinking of the three-month period time **between mid- December 2019 and lockdown**, how many women did you have condomless vaginal or anal sex with?

- ☐ None
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50

About drugs and sex

Have you **ever** taken crystal meth, mephedrone or GHB/GBL?

- ☐ No
- ☐ Yes

When did you **last** take crystal meth, mephedrone or GHB/GBL?

- ☐ Since lockdown (since 23 March 2020)
- ☐ Between mid-December 2019 and lockdown
- ☐ Between January 2019 and mid-December 2019
- ☐ Before 2019

How much of the sex you have had was after taking crystal meth and/or mephedrone and/or GHB/GBL?

	None of it	A little	Less than half	About half	More than half	Almost all	All of it	I don't know
Since lockdown	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Between mid-December 2019 and lockdown	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## About injecting drugs

Have you **ever** injected any drug other than medicines or anabolic steroids, or had someone injected you with them?

- ☐ No  
☐ Yes

When did you **last** inject any drug other than anabolic steroids or medicines, or had someone inject for you?

- ☐ Since lockdown (since 23 March 2020)  
☐ Between mid-December 2019 and lockdown  
☐ Between January 2019 and mid-December 2019  
☐ Before 2019

## About your well-being

Overall, how satisfied are you with your life nowadays?

- ☐ Not at all - 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ Completely - 10

Overall, to what extent do you feel the things you do in your life are worthwhile?

- ☐ Not at all - 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ Completely - 10

Overall, how happy did you feel yesterday?

- ☐ Not at all - 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ Completely - 10

Overall, how anxious did you feel yesterday?

- ☐ Not at all - 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ Completely - 10

### About your experience of COVID-19

Have you experienced any of these symptoms **since lockdown** (since 23 March 2020)? [*tick all that apply*]

- ☐ High temperature
- ☐ A new continuous cough
- ☐ Loss or changed sense of normal smell or taste
- ☐ Shortness of breath or trouble breathing
- ☐ Runny or stuffy nose
- ☐ Muscle or body aches
- ☐ Headaches
- ☐ Sore throat
- ☐ Fatigue
- ☐ Diarrhoea/Digestive issues/Upset stomach
- ☐ Loss of sense of smell or taste
- ☐ None of these

Are you **currently** experiencing any of these symptoms? [*tick all that apply*]

- ☐ High temperature
- ☐ A new continuous cough
- ☐ Loss or changed sense of normal smell or taste
- ☐ Shortness of breath or trouble breathing
- ☐ Runny or stuffy nose
- ☐ Muscle or body aches
- ☐ Headaches
- ☐ Sore throat
- ☐ Fatigue
- ☐ Diarrhoea/Digestive issues/Upset stomach
- ☐ Loss of sense of smell or taste
- ☐ None of these

Have you had a test to see if you had coronavirus at the time you had the test (antigen test)? [*this involves swabbing the throat and nose*]

- ☐ No
- ☐ Yes

What was the result of your coronavirus antigen test?

- ☐ Positive - it showed I had coronavirus at the time of the test
- ☐ Negative - it showed I did not have coronavirus at the time of the test
- ☐ Inconclusive
- ☐ Waiting for results

Have you been tested to see if you previously had coronavirus (antibody test)? [*this involves a blood test*]

- ☐ No
- ☐ Yes

What was the result of your coronavirus antibody test?

- ☐ Positive - it showed I had coronavirus antibodies
- ☐ Negative - it showed I did not have coronavirus antibodies
- ☐ Inconclusive
- ☐ Waiting for results

Have you been admitted to hospital because of coronavirus symptoms?

- ☐ No  
☐ Yes

How many nights did you stay in hospital because of coronavirus symptoms?

- ☐ I am still in hospital  
☐ I did not stay overnight

Number of nights:

Were you taken to intensive care because of coronavirus symptoms?

- ☐ No  
☐ Yes

Do you have any of the medical conditions identified as placing someone at greater risk of severe illness from COVID-19 [[click here for information about these conditions](#)]?

- ☐ No  
☐ Yes

## Just before you submit ...

**Your privacy is important.** This survey is completely anonymous and confidential. We do not collect any information about you that would allow anybody to identify you.

Later in the year, we plan to conduct more surveys about COVID-19 and sexual health. You are welcome to fill in these surveys as well. To help us link your anonymous responses to future surveys, please consider providing the following information which is personal to you but not easily guessed:

A memorable female name (for example, your mother's or a celebrity name):

The name of a street where you lived as a child:

If you complete another survey, we will ask you for the same information.

**Now please submit.** You will then see some links to information on sexual health and support services. The information you have given will help plan better sexual health services.



# Your sex life since lockdown

Welcome to *Your sex life since lockdown*. This is a voluntary survey about sexually transmitted infections (STIs), use of sexual health clinics and sexual behaviour before and during the COVID-19 pandemic.

## Please take part if you

- Are a man OR a trans man OR a trans woman OR a non-binary person assigned male at birth
- AND you have sex with men and/or other people assigned male at birth
- AND are aged 16 years or over
- AND you live in the UK

This is the second time we are asking people to complete the survey. You can take part whether you did or you didn't complete the first survey in summer 2020.

## What is the survey about?

It asks about your thoughts about sexually transmitted infections (STIs), your sexual behaviour, and your use of health services including sexual health clinics before, during and after the first national lockdown on 23 March 2020 when social distancing measures were first introduced by the UK government due to the COVID-19 pandemic. This information will be used to help plan better sexual health services.

## How long does the survey take to do?

Most people take about 10 minutes to complete the survey.

## What about data protection?

This survey is completely anonymous. We will NOT collect any information that identifies the device you are using (phone or computer) or try to install any cookies on it. We will not collect any information about you that would allow anybody to identify you. A report of the results will be produced at the end of the study. It will be available from our study website. No one will be identifiable from the report.

## Who are we?

The National Institute for Health Research (NIHR) Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections is led by University College London in partnership with Public Health England. The unit aims to conduct state-of-the-art research to improve the health of the population, and to help develop practical policy guidelines for those working in health protection. If you have any questions or concerns about the study, please contact Alison Howarth via email ([alison.howarth@ucl.ac.uk](mailto:alison.howarth@ucl.ac.uk)).

Please read the statements below carefully and tick the appropriate box to indicate whether you agree to participate in this survey

- I have read and understood the above information and I agree to participate in the survey
- I do not want to take part in this survey

Are you aged 16 years or over?

- I am aged 16 or over
- I am aged under 16

Are you currently living in the UK?

- Yes
- No

## About you

How old are you?

- 16
- 17
- etc 80
- Over 80

Which of the following options best describes how you think of yourself?

- Man (including trans man)
- Woman (including trans woman)
- Non-binary
- In another way

What sex were you assigned at birth?

- Male
- Female
- Intersex
- Prefer not to say

In the past year, that is since November 2019, have you had sex with... *[tick all that apply]*

- Men (including trans men)
- Women (including trans women)
- Non-binary people assigned male at birth
- Non-binary people assigned female at birth
- People who identify in another way
- No one

*Thank you for your interest but your answers show that you do not qualify to take part in this survey. Please press submit on the next page to exit and you will see some links to information on sexual health and support services.*

## About you

How would you describe your sexual orientation?

- Straight or heterosexual
- Gay or homosexual
- Bisexual
- I don't use any terms
- Other
- Rather not say

Please describe your sexual orientation:

Which of the following best describes your ethnic group?

- White British
- White Irish
- Any other White background
- Black or Black British: Caribbean
- Black or Black British: African
- Black or Black British: Any other Black background
- Asian/Asian British: Indian
- Asian/Asian British: Pakistani

- Asian/Asian British: Bangladeshi
- Asian/Asian British: Chinese
- Asian/Asian British: Any other Asian background
- Mixed: White and Black Caribbean
- Mixed: White and Black African
- Mixed: White and Asian
- Any other mixed/multiple background
- Any other ethnic group

Please describe what other white background?

Please describe what other black background?

Please describe what other Asian background?

Please describe what other mixed/multiple background?

Please describe what other ethnic group?

Which of the following social networking and dating apps have you used in the past 3 months? [*tick all that apply*]

- |            |             |                 |
|------------|-------------|-----------------|
| • Bumble   | • Hornet    | • TikTok        |
| • Facebook | • Instagram | • Tinder        |
| • Grindr   | • Scruff    | • Twitter       |
| • Hinge    | • Snapchat  | • None of these |

Which other social networking and dating apps have you used in the past 3 months? [*tick all that apply*]

- |              |             |          |
|--------------|-------------|----------|
| • Adam4adam  | • Clover    | • Happn  |
| • Badoo      | • Daddyhunt | • Jack'd |
| • barebackRT | • Growlr    | • Knki   |

- Match.com
- OkCupid
- Plenty of Fish
- Recon
- Romeo
- Squirt
- Surge
- None of these

## COVID-19

In the following questions, we ask about your life and activities before, during and after the '**first national lockdown**' which is when social distancing measures were first introduced on 23 March 2020 by the UK government, due to the COVID-19 (coronavirus) pandemic.

In this questionnaire, we focus on the time since **July 2020** which is when social distancing measures first began to loosen across much of the UK.

We also refer to **mid-December 2019**, that is just before Christmas 2019, before social distancing measures were introduced.

This survey is completely anonymous. We do NOT collect any information that identifies you or the device you are using.

## Where you live and where you were born

Were you born in the UK?

- No
- Yes

How many years have you been living in the UK?

- Less than 1 year
- 1
- etc
- More than 80

Which part of the UK are you currently living in?

- England
- Scotland
- Wales
- Northern Ireland

Which local authority are you currently living in?

- I don't know
- Barking etc
- York

Which council area are you currently living in?

- I don't know
- Aberdeenshire
- Angus etc
- West Lothian

Which council area are you currently living in?

- I don't know
- Antrim and Newtownabbey Borough etc
- Newry, Mourne and Down District

Which local authority are you currently living in?

- I don't know
- Blaenau Gwent Bridgend etc
- Wrexham

Is this your usual place of residence?

- No
- Yes

Did you move from your usual place of residence because of the first national lockdown?

- No
- Yes

## **About your education and employment**

What is your highest educational qualification?

- I have no educational qualifications
- GCSEs/O-Levels/National 5 or equivalent
- A-levels/Scottish Highers or equivalent
- Higher education below degree level (e.g. HNC, HND)

- Degree or higher
- Other

Which of the following best describes your current situation?

- On furlough
- Employed on reduced hours (due to COVID / lockdown) AND on furlough
- Employed on reduced hours (due to COVID / lockdown) AND NOT on furlough
- Job made redundant (due to COVID / lockdown)
- Employed full-time
- Employed part-time
- Self-employed
- No longer self-employed (due to COVID / lockdown)
- Self-employed on reduced hours (due to COVID / lockdown)
- Unemployed
- Full-time student
- Part-time student
- Retired
- Long-term sick leave / medically retired
- Other

{if more than one response to above question, only response options ticked are included here} Which of **one** the following best describes your current situation?

## About your household

Who are you living with currently? [*tick all that apply*]

- I live alone
- A partner / partners
- My child / children
- Other family member(s)
- Friend(s) / housemate(s)
- Other(s)



## HIV testing

Have you **ever** received an HIV test result?

- No, I've never received an HIV test result
- Yes, I have tested positive (I'm living with HIV)
- Yes, my last test was negative (I did not have HIV at the time of the test)

When did you **last** have an HIV test?

- Since July 2020
- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

{if since July 2020} Which month did you **last** have an HIV test?

- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020
- I don't remember

Where did you have your **last** HIV test?

- At a sexual health clinic
- At another type of hospital (outpatients) clinic
- At my GP practice
- At a private medical practice
- At a hospital as an inpatient (staying overnight)
- At a community HIV testing service (that is not in a hospital or clinic)
- At a blood donation service
- I used a free online self-sampling service [I took my own sample]

- and sent it off for the result]
- I used a private online self-sampling service (I had to pay for it) [I took my own sample and sent it off for the result]
- I used a self-testing kit [I took my own sample and found out the result immediately]
- At a mobile medical unit
- Somewhere else

Have you tried to get an HIV test since **July 2020**?

- No
- Yes

Where have you tried to get an HIV test since **July 2020**? [*tick all that apply*]

- At a sexual health clinic
- At another type of hospital (outpatients) clinic
- At my GP practice
- At a private medical practice
- At a hospital as an inpatient (staying overnight)
- At a community HIV testing service (that is not in a hospital or clinic)
- At a blood donation service
- Using a free online self-sampling service [taking my own sample and sending it off for the result]
- Using a private online self-sampling service (paying for it) [taking my own sample and sending it off for the result]
- Using a self-testing kit [taking my own sample and finding out the result immediately]
- At a mobile medical unit
- Somewhere else

How confident are you that you could have got an HIV test since **July 2020** if you wanted one?

- Very confident
- Quite confident
- A little confident
- Not at all confident

- I don't know

## Living with HIV

In which year were you first diagnosed with HIV?

- 2020
- etc 1984
- Before 1984

Were you first diagnosed with HIV in the last 12 months?

- No
- Yes

Are you currently taking antiretroviral treatment (sometimes known as ART or HAART)?

- No
- Yes

What was the result of your viral load test the **last** time you had it checked?

- Undetectable
- Detectable
- I was told but I don't remember the result
- It was measured but I was not told the result
- It was not measured
- I don't remember

## Use of PrEP

*PrEP is a drug taken by HIV-negative people that reduces the risk of getting HIV.*

Have you **ever** used PrEP (including if you are currently using PrEP)?

- No
- Yes
- I don't know

When did you **first** take PrEP? [*Please estimate if you can't say*

*exactly]*

Month

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

Year

- Before 2017
- 2017
- 2018
- 2019
- 2020

When did you **last** take PrEP? [*Please estimate if you can't say exactly]*

Month

- January
- February
- March
- April
- May
- June
- July
- August

- September
- October
- November
- December

Year

- Before 2017
- 2017
- 2018
- 2019
- 2020

Did you **first** take PrEP before or after the first national lockdown (23 March 2020)?

- After first national lockdown
- Before first national lockdown

Did you **last** take PrEP before or after the first national lockdown (23 March 2020)?

- After first national lockdown
- Before first national lockdown

Thinking about the time since **July 2020**, how often have you taken PrEP: [*tick all that apply*]

- Daily
- 4-6 times a week
- Intermittently (e.g. a week on a week off)
- Before and after sex (event based or on demand)
- One-off(s)
- Other

Thinking about the time **between 23 March 2020 (first national lockdown) and July 2020**, how often were you taking PrEP: [*tick all that apply*]

- I didn't use PrEP during this time
- Daily
- 4-6 times a week

- Intermittently (e.g. a week on a week off)
- Before and after sex (event based or on demand)
- One-off(s)
- Other

## Use of STI prophylaxis

*In the same way that PrEP can be taken before and after sex to protect against HIV, there is ongoing research to see if antibiotics taken before or after sex protect against chlamydia and syphilis (STI prophylaxis). Using antibiotics in this way **might** cause side effects in some people such as mild stomach upset and **might** increase the chance that future infections (not just STIs) could be harder to treat because of drug resistance. Using antibiotics in this way is not currently recommended by clinicians or public health professionals [[click here for information about sexual health](#)].*

Before taking this survey, had you heard about using antibiotics immediately before or after sex to prevent STIs other than HIV (STI prophylaxis)?

- No
- Yes
- Not sure

Have you **ever** used antibiotics in this way?

- No
- Yes
- 

{ASK IF: 'No'} Have you ever considered taking antibiotics in this way?

- No
- Yes

{ASK IF: 'Yes'} When did you **last** use antibiotics in this way?

- Since July 2020
- Between 23 March 2020 (first national lockdown) and July 2020

- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

{ASK IF: 'Yes'} Which antibiotic(s) have you used to prevent STIs? [*tick all that apply*]

- Doxycycline
- Azithromycin
- Amoxicillin
- Metronidazole
- Not sure
- Something else

## Sexually transmitted infection (STI) testing (other than HIV)

Have you **ever** had a test for a sexually transmitted infection (STI) other than HIV?

- No
- Yes

When did you **last** have a test for a sexually transmitted infection (STI) other than HIV?

- Since July 2020
- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

{if since July 2020} Which month did you **last** have a test for a sexually transmitted infection (STI) other than HIV?

- July 2020
- August 2020
- September 2020

- October 2020
- November 2020
- December 2020
- I don't remember

Have you received a test result for a sexually transmitted infection (STI) other than HIV since **July 2020**?

- No, I haven't received any STI results yet
- Yes, all my STI test results were negative
- Yes, I tested positive for at least one STI

Where have you tested for STIs other than HIV since **July 2020**? *[tick all that apply]*

- At a sexual health clinic
- At an HIV clinic
- At my GP practice
- At a private medical practice
- At a community HIV testing service (that is not in a hospital or clinic)
- I used a free online self-sampling service [I took my own sample and sent it off for the result]
- I used a private online self-sampling service (I had to pay for it) [I took my own sample and sent it off for the result]
- At a mobile medical unit
- Somewhere else

Have you tried to get a test for a sexually transmitted infection (STI) other than HIV since **July 2020**?

- No
- Yes

Where have you tried to get a test for a sexually transmitted infection (STI) other than HIV since **July 2020**? *[tick all that apply]*

- At a sexual health clinic
- At an HIV clinic
- At my GP practice
- At a private medical practice
- At a community HIV testing service (that is not in a hospital or clinic)



- Using a free online self-sampling service [taking my own sample and sending it off for the result]
- Using a private online self-sampling service (paying for it) [taking my own sample and sending it off for the result]
- At a mobile medical unit
- Somewhere else

How confident are you that you could have got an STI test since **July 2020** if you wanted one?

- Very confident
- Quite confident
- A little confident
- Not at all confident
- I don't know

## Vaccination

**Hepatitis A** is an infection of the liver caused by a virus that's spread in the poo of an infected person. Occasionally this could happen during sex.

Have you ever received the **hepatitis A** vaccine?

- No
- Yes
- I don't know

*Hepatitis A vaccination usually involves two doses, given by injection, between 6 and 12 months apart.*

When did you **last** receive the hepatitis A vaccine (your most recent injection)?

- Since July 2020
- Before July 2020 but can't remember when
- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

Have you completed the course of hepatitis A vaccine?

- No
- Yes
- I don't know

**Hepatitis B** is an infection of the liver caused by a virus that's spread through blood and body fluids.

Have you ever received the **hepatitis B** vaccine?

- No
- Yes
- I don't know

*Hepatitis B vaccination involves having three doses, given by injection, at the recommended intervals. These intervals can vary between a few weeks to several months.*

When did you **last** receive the hepatitis B vaccine (your most recent injection)?

- Since July 2020
- Before July 2020 but can't remember when
- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

Have you completed the course of hepatitis B vaccine?

- No
- Yes
- I don't know

**HPV** (Human papillomavirus) is the name of a very common group of viruses. They do not cause any problems in most people, but some types can cause genital warts or cancer.

Have you ever received the **HPV** vaccine?

- No
- Yes
- I don't know

*HPV vaccination involves having three doses, given by injection, at the recommended intervals. If you receive the vaccine before the age of 15 you only need two doses.*

When did you **last** receive the HPV vaccine (your most recent injection)?

- Since July 2020
- Before July 2020 but can't remember when
- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

Have you completed the course of HPV vaccine?

- No
- Yes
- I don't know

## About sexual health symptoms

Have you had any of the following symptoms since **July 2020**? [*tick all that apply*]

- I haven't had any symptoms
- Pain, burning or stinging when passing urine
- Passing urine more often than usual
- Genital wart or lump
- Genital ulcer or sore
- Abnormal vaginal discharge
- Vaginal pain during sex
- Pain during sex
- Abnormal bleeding between periods

- Bleeding after sex (not during a period)
- Lower abdominal or pelvic pain (not related to periods)
- Pain, bleeding or discharge from the rectum
- Discharge from the end of the penis
- Painful testicles

Have you seen a healthcare professional about your symptoms since **July 2020** [*please include telephone and video/online consultations, not just face-to-face*]?

- Yes – I have seen a healthcare professional
- No – I have not seen a healthcare professional
- No – but I have an appointment

What type of appointment(s) did you have? [*tick all that apply*]

- Face-to-face
- Telephone
- Video / online

What type of appointment have you booked?

- Face-to-face
- Telephone
- Video / online

## About sexual health clinics

Have you **ever** visited a sexual health clinic?

- No
- Yes

When was the **last** time you visited a sexual health clinic?

- Since July 2020
- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

{if since July 2020} Which month did you **last** visit a sexual health

clinic?

- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020
- I don't remember

Why did you attend a sexual health clinic (the **last** time if more than once)? [*tick all that apply*]

- I wanted a general sexual health check-up
- I had no symptoms, but I was worried I might have an STI or HIV
- I had symptoms
- A sexual partner had symptoms
- A sexual partner was diagnosed with an STI
- Treatment after a previous positive test
- Check-up after a previous positive test
- As follow-up to an online test
- Ongoing HIV care and treatment
- To get PEP to prevent HIV
- To get PrEP to prevent HIV
- Following sexual assault
- Following domestic violence
- I was told to attend by my GP/family doctor or another healthcare professional
- I needed condoms
- I needed contraception (other than condoms)
- I needed a vaccination
- I couldn't get an online testing kit
- For another reason

## Your sexual relationships

*In this survey we use the term 'steady relationships' to refer to relationships with, for example, boyfriends, girlfriends, husbands or wives which mean that you are NOT 'single'. Do not include relationships with partners who are purely sex buddies.*

*We use 'men' to include 'trans men' and we use 'women' to include 'trans women'.*

Are you currently in a steady relationship? *[tick all that apply]*

- Yes, with a man (including trans men)
- Yes, with more than one man (including trans men)
- Yes, with a woman (including trans women)
- Yes, with more than one woman (including trans women)
- Yes, with a person who identifies in another way
- Yes, with more than one person who identifies in another way
- No, I'm single

For how many years have you been in your steady relationship with a man? *[if you have more than one steady relationship with a man, please tell us about the longest]*

- Less than 1 year
- 1
- 2
- etc
- 25
- More than 25 years

Do you and this steady male partner have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

Are you and this steady male partner currently living together in the same household?

- No
- Yes

For how many years have you been in your steady relationship with a woman? *[if you have more than one steady relationship with a*

*woman, please tell us about the longest]*

- Less than 1 year
- 1
- 2 etc
- 25
- More than 25 years

Do you and this steady female partner have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

Are you and this steady female partner currently living together in the same household?

- No
- Yes

For how many years have you been in your steady relationship with someone who identifies in another way? *[if you have more than one steady relationship with a person who identifies in another way, please tell us about the longest]*

- Less than 1 year
- 1 etc
- 24
- 25
- More than 25 years

Do you and this steady partner have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

Are you and this steady partner currently living together in the same household?

- No
- Yes

## About sex with men since July 2020

*In the following questions, we ask about sex since July 2020 which is when social distancing measures first began to loosen across the UK . Please say when you last did something **EVEN** if this was not typical for you. This survey is anonymous and confidential.*

Thinking of the time since July 2020, have you had any kind of sex with a man (any activity intended to achieve orgasm (or close to orgasm) for one or both partners)?

- No
- Yes – virtual sex (e.g. phone sex, sexting)
- Yes – sex with physical contact (you could touch each other)
- Yes – virtual sex and sex with physical contact

Thinking of the time since July 2020, how many men have you had any kind of **physical sexual contact** with during this time [*please include any sexual contact, not just anal intercourse*]?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

Is this man a new sex partner (you had sex with him for the first time since July 2020)?



- No
- Yes

How many of these {number} men are new partners who you had sex with for the first time since July 2020?

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

## Meeting male sexual partners since July 2020

In which of the following ways have you met or made contact with male partners for **physical sexual contact** since July 2020? [*tick all that apply*]

- A website for gay or bisexual men
- A smartphone app that locates potential partners and tells you how far away they are
- A gay sex party in a private home
- A gay community centre, gay organisation or gay social group (physical not virtual venues)
- A cruising location (street, roadside service area, park, beach, lavatory)
- Through friends

- In my household
- In a support bubble with another household
- Elsewhere

## About anal sex with men since July 2020

*We use the term "anal sex" to mean sex where one partner puts his penis into the other partner's anus, whether or not this ends in ejaculation.*

Thinking of the time since July 2020, have you had anal sex with a man (either with or without a condom)?

- No
- Yes

Since July 2020, have you had condomless anal sex with a man?

- No
- Yes

{if since July 2020} Which month did you **last** have condomless anal sex with a man?

- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020
- I don't remember

Since July 2020, how many men have you had condomless anal sex with?

- 1
- 2
- 3
- 4
- 5
- 6

- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50

More than 50 Do you and this man have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

How many of these {number} men you had condomless anal sex with did you know had the same HIV status as yourself (both positive or both negative)?

- I don't know
- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

## About anal sex with men

*We use the term "anal sex" to mean sex where one partner puts his penis into the other partner's anus, whether or not this ends in ejaculation.*

When did you **last** have anal sex with a man (either with or without a condom)?

- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019
- Never

When did you **last** have condomless anal sex with a man?

- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019
- Never

When did you **last** have condomless anal sex with a man?

- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019
- Never

When did you **last** have condomless anal sex with a man?

- Between January 2019 and mid-December 2019
- Before 2019
- Never

When did you **last** have condomless anal sex with a man?

- Before 2019
- Never

Thinking now of the period **between 23 March 2020 (first national lockdown) and July 2020**, how many men did you have condomless anal sex with?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

### **About sex with women (including trans women)**

*Please say when you last did something, even if this was not typical for you.*

Have you **ever** had sex of any kind with a woman [*please include any sexual contact, not just vaginal or anal intercourse*]?

- No
- Yes – virtual sex (e.g. phone sex, sexting)
- Yes – sex with physical contact (you could touch each other)
- Yes – virtual sex and sex with physical contact

### **About sex with women (including trans women) since July 2020**

Thinking of the time since July 2020, how many women have you

had any kind of **physical sexual contact** with during this time  
[*please include any sexual contact, not just vaginal or anal intercourse*]?

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

Was this woman a new sex partner (you had sex with her for the first time since July 2020)?

- No
- Yes

How many of these {number} women were new partners who you had sex with for the first time since July 2020?

- None
- 1
- 2
- 3
- 4
- 5
- 6

- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

### **About vaginal and anal sex with women (including trans women) since July 2020**

*We use the term "vaginal sex" to mean sex where one partner puts his penis into the other partner's vagina and "anal sex" to mean sex where one partner puts his penis into the other partner's anus, whether or not he ejaculates.*

Thinking of the time since July 2020, have you had vaginal or anal sex with a woman?

- No
- Yes

Since July 2020, have you had condomless vaginal or anal sex with a woman?

- No
- Yes

Since July 2020, how many women have you had condomless vaginal or anal sex with?

- 1
- 2
- 3
- 4
- 5
- 6

- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

Do you and this woman have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

How many of these {number} women you had condomless vaginal or anal sex with did you know had the same HIV status as yourself (both positive or both negative)?

- I don't know
- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50



- More than 50

## About vaginal and anal sex with women (including trans women)

*We use the term "vaginal sex" to mean sex where one partner puts his penis into the other partner's vagina and "anal sex" to mean sex where one partner puts his penis into the other partner's anus, whether or not he ejaculates.*

When did you **last** have vaginal or anal sex with a woman?

- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019
- Never

When did you **last** have condomless vaginal or anal sex with a woman?

- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019
- Never

When did you **last** have condomless vaginal or anal sex with a woman?

- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019
- Never

When did you **last** have condomless vaginal or anal sex with a woman?

- Between January 2019 and mid-December 2019

- Before 2019
- Never

When did you **last** have condomless vaginal or anal sex with a woman?

- Before 2019
- Never

Thinking of the period **23 March 2020 (first national lockdown)** and **July 2020**, how many women did you have condomless vaginal or anal sex with?

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

## About drugs and sex

Have you **ever** taken crystal meth, mephedrone or GHB/GBL?

- No
- Yes

When did you **last** take crystal meth, mephedrone or GHB/GBL?

- Since July 2020
- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

How much of the sex you have had was after taking crystal meth and/or mephedrone and/or GHB/GBL?

None of it      A little      Less than half      About half      More than half      Almost all      All of it      I don't know

Since July 2020

Between 23 March 2020 (first national lockdown) and July 2020

## About injecting drugs

Have you **ever** injected any drug other than medicines or anabolic steroids, or had someone inject these for you?

- No
- Yes

When did you **last** inject any drug other than anabolic steroids or medicines, or had someone inject these for you?

- Since July 2020
- Between 23 March 2020 (first national lockdown) and July 2020
- Between mid-December 2019 and 23 March 2020 (first national lockdown)
- Between January 2019 and mid-December 2019
- Before 2019

## About your well-being

Overall, how satisfied are you with your life nowadays?

- Not at all – 0
- 1
- 2
- 3
- 4

- 5
- 6
- 7
- 8
- 9
- Completely - 10

Overall, to what extent do you feel the things you do in your life are worthwhile?

- Not at all – 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- Completely - 10

Overall, how happy did you feel yesterday?

- Not at all – 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- Completely – 10

Overall, how anxious did you feel yesterday?

- Not at all – 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- Completely - 10

## About your experience of COVID-19

Have you experienced any of these symptoms since **July 2020**? [*tick all that apply*]

- High temperature
- A new continuous cough
- Loss or changed sense of normal smell or taste
- Shortness of breath or trouble breathing
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Sore throat
- Fatigue
- Diarrhoea/Digestive issues/Upset stomach
- None of these

Are you **currently** experiencing any of these symptoms? [*tick all that apply*]

- High temperature
- A new continuous cough
- Loss or changed sense of normal smell or taste

- Shortness of breath or trouble breathing
- Runny or stuffy nose Muscle or body aches
- Headaches
- Sore throat
- Fatigue
- Diarrhoea/Digestive issues/Upset stomach
- None of these

Have you had a throat and nose swab to see if you had coronavirus? [*an antigen test to see if you had coronavirus at the time of the test*]

- No
- Yes

{if yes} How many coronavirus swab tests have you had?

- 1
- 2
- 3
- 4
- 5 or more

{if 1} Was the result of your coronavirus swab test positive (showing you had coronavirus at the time of the test)?

- No
- Yes
- Still waiting for result

{if yes} When did you have a positive result from a coronavirus swab test?

- December 2019
- January 2020
- February 2020
- March 2020
- April 2020
- May 2020
- June 2020

- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020

{if 2 or more} Have you had a positive result from any of your coronavirus swab tests (showing you had coronavirus at the time of the test)?

- No
- Yes
- Still waiting for results

{if yes} When did you have a positive result from a coronavirus swab test? [*tick all that apply*]

- December 2019
- January 2020
- February 2020
- March 2020
- April 2020
- May 2020
- June 2020
- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020

Have you had a blood test to see if you previously had coronavirus? [*an antibody test*]

- No
- Yes

{if yes} How many coronavirus antibody blood tests have you had?

- 1
- 2
- 3
- 4
- 5 or more

{if 1} Was the result of your coronavirus antibody test positive (showing you had coronavirus previously)?

- No
- Yes
- Still waiting for result

{if yes} When did you have a positive result from a coronavirus antibody test?

- December 2019
- January 2020
- February 2020
- March 2020
- April 2020
- May 2020
- June 2020
- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020

{if 2 or more} Have you had a positive result from any of your coronavirus antibody tests (showing you had coronavirus previously)?

- No
- Yes



- Still waiting for results

{if yes} When did you have a positive result from a coronavirus antibody test? [*tick all that apply*]

- December 2019
- January 2020
- February 2020
- March 2020
- April 2020
- May 2020
- June 2020
- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020

Have you been admitted to hospital because of coronavirus symptoms?

- No
- Yes

How many nights did you stay in hospital because of coronavirus symptoms?

- I am still in hospital
- I did not stay overnight

Number of nights:

Were you taken to intensive care because of coronavirus symptoms?

- No
- Yes

Do you have any of the medical conditions identified as placing someone at greater risk of severe illness from COVID-19 [*click here for information about these conditions*]?

- No
- Yes

## Just before you submit

**Your privacy is important.** This survey is completely anonymous and confidential. We do not collect any information about you that would allow anybody to identify you.

In the new year, we plan to conduct more surveys about COVID-19 and sexual health. You are welcome to fill in these surveys as well. You may have completed our first survey four months ago, in summer 2020. To help us link your anonymous responses to past and future surveys, please consider providing the following information which is personal to you but not easily guessed:

A memorable female name (for example, your mother's or a celebrity name):

The name of a street where you lived as a child:

If you complete another survey, we will ask you for the same information.

**Now please submit.** You will then see some links to information on sexual health and support services. The information you have given will help plan better sexual health services.

# Your sex life since lockdown

Welcome to *Your sex life since lockdown*. This is a voluntary survey about sexually transmitted infections (STIs), use of sexual health clinics and sexual behaviour before and during the COVID-19 pandemic.

## Please take part if you

- Are a man OR a trans man OR a trans woman OR a non-binary person assigned male at birth
- AND you have sex with men and/or other people assigned male at birth
- AND are aged 16 years or over
- AND you live in the UK

This is the third time we are asking people to complete the survey. You can take part whether you did or you didn't complete the first and/or second surveys in 2020.

## What is the survey about?

It asks about your thoughts about sexually transmitted infections (STIs), your sexual behaviour, and your use of health services including sexual health clinics before, during and after the first national lockdown on 23 March 2020 when social distancing measures were first introduced by the UK government due to the COVID-19 pandemic. This information will be used to help plan better sexual health services.

## How long does the survey take to do?

Most people take about 10 minutes to complete the survey.

## What about data protection?

This survey is completely anonymous. We will NOT collect any information that identifies the device you are using (phone or computer) or try to install any cookies on it. We will not collect any information about you that would allow anybody to identify you. A report of the results will be produced at the end of the study. It will be available from our study website. No one will be identifiable from the report.

## Who are we?

The National Institute for Health Research (NIHR) Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections is led by University College London in partnership with Public Health England. The unit aims to conduct state-of-the-art research to improve the health of the population, and to help develop practical policy guidelines for those working in health protection. If you have any questions or concerns about the study, please contact David Reid via email ([david.reid@ucl.ac.uk](mailto:david.reid@ucl.ac.uk)).

Please read the statements below carefully and tick the appropriate box to indicate whether you agree to participate in this survey

- I have read and understood the above information and I agree to participate in the survey
- I do not want to take part in this survey

Are you aged 16 years or over?

- I am aged 16 or over
- I am aged under 16

Are you currently living in the UK?

- Yes
- No

## About you

How old are you?

- 16
- 17
- etc 80
- Over 80

Which of the following options best describes how you think of yourself?

- Man (including trans man)
- Woman (including trans woman)
- Non-binary
- In another way

What sex were you assigned at birth?

- Male
- Female
- Intersex
- Prefer not to say

Since the beginning of last year (2020), have you had sex with... *[tick all that apply]*

- Men (including trans men)
- Women (including trans women)
- Non-binary people assigned male at birth
- Non-binary people assigned female at birth
- People who identify in another way
- No one

*Thank you for your interest but your answers show that you do not qualify to take part in this survey. Please press submit on the next page to exit and you will see some links to information on sexual health and support services.*

## About you

How would you describe your sexual orientation?

- Straight or heterosexual
- Gay or homosexual
- Bisexual
- I don't use any terms
- Other
- Rather not say

Please describe your sexual orientation:

Which of the following best describes your ethnic group?

- White British
- White Irish
- Any other White background
- Black or Black British: Caribbean
- Black or Black British: African
- Black or Black British: Any other Black background
- Asian/Asian British: Indian
- Asian/Asian British: Pakistani

- Asian/Asian British: Bangladeshi
- Asian/Asian British: Chinese
- Asian/Asian British: Any other Asian background
- Mixed: White and Black Caribbean
- Mixed: White and Black African
- Mixed: White and Asian
- Any other mixed/multiple background
- Any other ethnic group

Please describe what other white background?

Please describe what other black background?

Please describe what other Asian background?

Please describe what other mixed/multiple background?

Please describe what other ethnic group?

Have you used any of the following social networking and dating apps in the past 3 months? [*tick all that apply*]

- |            |             |                 |
|------------|-------------|-----------------|
| • Facebook | • Instagram | • None of these |
| • Grindr   | • Twitter   |                 |

## COVID-19

In the following questions, we ask about your life and activities before, during and after the '**first national lockdown**' which is when social distancing measures were first introduced on 23 March 2020 by the UK government, due to the COVID-19 (coronavirus) pandemic.

In this questionnaire, we focus on your life and activities in the last four months, since **December 2020**.

This survey is completely anonymous. We do NOT collect any information that identifies you or the device you are using.

## Where you live and where you were born

Were you born in the UK?

- No
- Yes

How many years have you been living in the UK?

- Less than 1 year
- 1
- etc
- More than 80

Which part of the UK are you currently living in?

- England
- Scotland
- Wales
- Northern Ireland

Which local authority are you currently living in?

- I don't know
- Barking etc
- York

Which council area are you currently living in?

- I don't know
- Aberdeenshire
- Angus etc
- West Lothian

Which council area are you currently living in?

- I don't know
- Antrim and Newtownabbey Borough etc

- Newry, Mourne and Down District

Which local authority are you currently living in?

- I don't know
- Blaenau Gwent Bridgend etc
- Wrexham

Is this your usual place of residence?

- No
- Yes

Did you move from your usual place of residence because of the first national lockdown?

- No
- Yes

## About your education and employment

What is your highest educational qualification?

- I have no educational qualifications
- GCSEs/O-Levels/National 5 or equivalent
- A-levels/Scottish Highers or equivalent
- Higher education below degree level (e.g. HNC, HND)
- Degree or higher
- Other

Which of the following best describes your current situation?

- On furlough
- Employed on reduced hours (due to COVID / lockdown) AND on furlough
- Employed on reduced hours (due to COVID / lockdown) AND NOT on furlough
- Job made redundant (due to COVID / lockdown)
- Employed full-time
- Employed part-time
- Self-employed
- No longer self-employed (due to COVID / lockdown)



- Self-employed on reduced hours (due to COVID / lockdown)
- Unemployed
- Full-time student
- Part-time student
- Retired
- Long-term sick leave / medically retired
- Other

{if more than one response to above question, only response options ticked are included here} Which of **one** the following best describes your current situation?

## About your household

Who are you living with currently? [*tick all that apply*]

- I live alone
- A partner / partners
- My child / children
- Other family member(s)
- Friend(s) / housemate(s)
- Other(s)

## HIV testing

Have you **ever** received an HIV test result?

- No, I've never received an HIV test result
- Yes, I have tested positive (I'm living with HIV)
- Yes, my last test was negative (I did not have HIV at the time of the test)

When did you **last** have an HIV test?

- Since December 2020
- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)

Where did you have your **last** HIV test?

- At a sexual health clinic
- At another type of hospital (outpatients) clinic
- At my GP practice
- At a private medical practice
- At a hospital as an inpatient (staying overnight)
- At a community HIV testing service (that is not in a hospital or clinic)
- At a blood donation service
- I used a free online self-sampling service [I took my own sample and sent it off for the result]
- I used a private online self-sampling service (I had to pay for it) [I took my own sample and sent it off for the result]
- I used a self-testing kit [I took my own sample and found out the result immediately]
- At a mobile medical unit
- Somewhere else

Have you tried to get an HIV test since **December 2020**?

- No
- Yes

Where have you tried to get an HIV test since **December 2020**?

*[tick all that apply]*

- At a sexual health clinic
- At another type of hospital (outpatients) clinic
- At my GP practice
- At a private medical practice
- At a hospital as an inpatient (staying overnight)
- At a community HIV testing service (that is not in a hospital or clinic)
- At a blood donation service
- Using a free online self-sampling service [taking my own sample and sending it off for the result]
- Using a private online self-sampling service (paying for it) [taking my own sample and sending it off for the result]
- Using a self-testing kit [taking my own sample and finding out the result immediately]

- At a mobile medical unit
- Somewhere else

How confident are you that you could have got an HIV test since **December 2020** if you wanted one?

- Very confident
- Quite confident
- A little confident
- Not at all confident
- I don't know

## Living with HIV

In which year were you first diagnosed with HIV?

- 2021
- etc 1984
- Before 1984

Were you first diagnosed with HIV in the last 12 months?

- No
- Yes

Are you currently taking antiretroviral treatment (sometimes known as ART or HAART)?

- No
- Yes

What was the result of your viral load test the **last** time you had it checked?

- Undetectable
- Detectable
- I was told but I don't remember the result
- It was measured but I was not told the result
- It was not measured
- I don't remember

## Use of PrEP

*PrEP is a drug taken by HIV-negative people that reduces the risk of getting HIV.*

Q39, Have you **ever** used PrEP (including if you are currently using PrEP)?

- No
- Yes
- I don't know

Q41 When did you **first** take PrEP? [*Please estimate if you can't say exactly*]

Month

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

Q 42Year

- Before 2017
- 2017
- 2018
- 2019
- 2020
- 2021

When did you **last** take PrEP? [*Please estimate if you can't say exactly*]

Q43Month

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

#### Q44 Year

- Before 2017
- 2017
- 2018
- 2019
- 2020
- 2021

Did you **first** take PrEP before or after the first national lockdown (23 March 2020)?

- After first national lockdown
- Before first national lockdown

Did you **last** take PrEP before or after the first national lockdown (23 March 2020)?

- After first national lockdown
- Before first national lockdown

Thinking about the time since **December 2020**, how often have you taken PrEP: [*tick all that apply*]

- Daily
- 4-6 times a week
- Intermittently (e.g. a week on a week off)

- Before and after sex (event based or on demand)
- One-off(s)
- Other

Thinking about the time **between 23 March 2020 (first national lockdown) and December 2020**, how often were you taking PrEP:  
[tick all that apply]

- I didn't use PrEP during this time
- Daily
- 4-6 times a week
- Intermittently (e.g. a week on a week off)
- Before and after sex (event based or on demand)
- One-off(s)
- Other

## Sexually transmitted infection (STI) testing (other than HIV)

Have you **ever** had a test for a sexually transmitted infection (STI) other than HIV?

- No
- Yes

When did you **last** have a test for a sexually transmitted infection (STI) other than HIV?

- Since December 2020
- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)

Have you received a test result for a sexually transmitted infection (STI) other than HIV since **December 2020**?

- No, I haven't received any STI results yet
- Yes, all my STI test results were negative
- Yes, I tested positive for at least one STI

Where have you tested for STIs other than HIV since

**December 2020?** *[tick all that apply]*

- At a sexual health clinic
- At an HIV clinic
- At my GP practice
- At a private medical practice
- At a community HIV testing service (that is not in a hospital or clinic)
- I used a free online self-sampling service [I took my own sample and sent it off for the result]
- I used a private online self-sampling service (I had to pay for it) [I took my own sample and sent it off for the result]
- At a mobile medical unit
- Somewhere else

Have you tried to get a test for a sexually transmitted infection (STI) other than HIV since **December 2020**?

- No
- Yes

Where have you tried to get a test for a sexually transmitted infection (STI) other than HIV since **December 2020**? *[tick all that apply]*

- At a sexual health clinic
- At an HIV clinic
- At my GP practice
- At a private medical practice
- At a community HIV testing service (that is not in a hospital or clinic)
- Using a free online self-sampling service [taking my own sample and sending it off for the result]
- Using a private online self-sampling service (paying for it) [taking my own sample and sending it off for the result]
- At a mobile medical unit
- Somewhere else

How confident are you that you could have got an STI test since **December 2020** if you wanted one?

- Very confident

- Quite confident
- A little confident
- Not at all confident
- I don't know

## Sexually transmitted infection (STI) testing (other than HIV)

*We are aware that there are lots of reasons why people do or do not get tested for sexually transmitted infections (STIs) other than HIV. We are interested in hearing your views on this.*

*The following statements are about testing for **sexually transmitted infections (STIs) other than HIV**. (e.g. Chlamydia, Gonorrhea, Syphilis), either at a sexual health clinic or at home by ordering a test online or by phone, taking your own samples and sending them off by post for the test result. Please think about how you feel at this moment when indicating the extent to which you **disagree or agree** with each statement.*

- Strongly disagree
- Disagree
- Neither disagree nor agree
- Agree
- Strongly agree

I only think about having an STI test if I have symptoms.

I know how to get an STI test at the moment.

I know what the current recommendations are for when and how often I should get tested.

I would feel confident to collect my own finger prick blood sample.

I would feel confident to collect my own urine sample.

I would feel confident to collect my own swab sample. (e.g. throat/anal/vaginal swab).



Arranging to have an STI test is difficult for me.

Taking my own STI test samples at home is convenient.

It is convenient to get an STI test at a clinic.

I think my partners would want me to be tested for STIs.

People I know have STI tests.

I worry that staff at a sexual health clinic would judge me for seeking an STI test.

Getting tested for STIs regularly protects me and my partner/s.

I intend to have an STI test in the next 3 months.

I believe I am at risk of getting an STI at the moment.

I think that STI samples taken at home and sent back for results are accurate.

I am afraid of STI test results.

I would feel ashamed if I had an STI.

I would feel embarrassed to be seen in a sexual health clinic.

Having a regular STI test has become a habit.

## Vaccination

*Hepatitis A is an infection of the liver caused by a virus that's spread in the poo of an infected person. Occasionally this could happen during sex.*

Have you ever received the **hepatitis A** vaccine?

- No
- Yes
- I don't know

*Hepatitis A vaccination usually involves two doses, given by injection, between 6 and 12 months apart.*

When did you **last** receive the hepatitis A vaccine (your most recent injection)?

- Since December 2020
- Before December 2020 but can't remember when
- Between 23 March 2020 (first national lockdown) and December 2020

- Before 23 March 2020 (first national lockdown)

**Hepatitis B** is an infection of the liver caused by a virus that's spread through blood and body fluids.

Have you ever received the **hepatitis B** vaccine?

- No
- Yes
- I don't know

*Hepatitis B vaccination involves having three doses, given by injection, at the recommended intervals. These intervals can vary between a few weeks to several months.*

When did you **last** receive the hepatitis B vaccine (your most recent injection)?

- Since December 2020
- Before December 2020 but can't remember when
- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)

**HPV** (Human papillomavirus) is the name of a very common group of viruses. They do not cause any problems in most people, but some types can cause genital warts or cancer.

Have you ever received the **HPV** vaccine?

- No
- Yes
- I don't know

*HPV vaccination involves having three doses, given by injection, at the recommended intervals. If you receive the vaccine before the age of 15 you only need two doses.*

When did you **last** receive the HPV vaccine (your most recent injection)?

- Since December 2020
- Before December 2020 but can't remember when
- Between 23 March 2020 (first national lockdown) and December 2020

- Before 23 March 2020 (first national lockdown)

## About sexual health symptoms

Have you had any of the following symptoms since **December 2020**?  
[tick all that apply]

- I haven't had any symptoms
- Pain, burning or stinging when passing urine
- Passing urine more often than usual
- Genital wart or lump
- Genital ulcer or sore
- Abnormal vaginal discharge
- Vaginal pain during sex
- Pain during sex
- Abnormal bleeding between periods
- Bleeding after sex (not during a period)
- Lower abdominal or pelvic pain (not related to periods)
- Pain, bleeding or discharge from the rectum
- Discharge from the end of the penis
- Painful testicles

Have you seen a healthcare professional about your symptoms since **December 2020** [please include telephone and video/online consultations, not just face-to-face]?

- Yes – I have seen a healthcare professional
- No – I have not seen a healthcare professional
- No – but I have an appointment

What type of appointment(s) did you have? [tick all that apply]

- Face-to-face
- Telephone
- Video / online

What type of appointment have you booked?

- Face-to-face
- Telephone

- Video / online

## About sexual health clinics

Have you **ever** visited a sexual health clinic?

- No
- Yes

When was the **last** time you visited a sexual health clinic?

- Since December 2020
- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)

Why did you attend a sexual health clinic (the **last** time if more than once)? [*tick all that apply*]

- I wanted a general sexual health check-up
- I had no symptoms, but I was worried I might have an STI or HIV
- I had symptoms
- A sexual partner had symptoms
- A sexual partner was diagnosed with an STI
- Treatment after a previous positive test
- Check-up after a previous positive test
- As follow-up to an online test
- Ongoing HIV care and treatment
- To get PEP to prevent HIV
- To get PrEP to prevent HIV
- Following sexual assault
- Following domestic violence
- I was told to attend by my GP/family doctor or another healthcare professional
- I needed condoms
- I needed contraception (other than condoms)
- I needed a vaccination
- I couldn't get an online testing kit
- For another reason

## Your sexual relationships

*In this survey we use the term 'steady relationships' to refer to relationships with, for example, boyfriends, girlfriends, husbands or wives which mean that you are NOT 'single'. Do not include relationships with partners who are purely sex buddies.*

*We use 'men' to include 'trans men' and we use 'women' to include 'trans women'.*

Are you currently in a steady relationship? *[tick all that apply]*

- Yes, with a man (including trans men)
- Yes, with more than one man (including trans men)
- Yes, with a woman (including trans women)
- Yes, with more than one woman (including trans women)
- Yes, with a person who identifies in another way
- Yes, with more than one person who identifies in another way
- No, I'm single

For how many years have you been in your steady relationship with a man? *[if you have more than one steady relationship with a man, please tell us about the longest]*

- Less than 1 year
- 1
- 2
- etc
- 25
- More than 25 years

Do you and this steady male partner have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

Are you and this steady male partner currently living together in the same household?

- No

- Yes

For how many years have you been in your steady relationship with a woman? *[if you have more than one steady relationship with a woman, please tell us about the longest]*

- Less than 1 year
- 1
- 2 etc
- 25
- More than 25 years

Do you and this steady female partner have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

Are you and this steady female partner currently living together in the same household?

- No
- Yes

For how many years have you been in your steady relationship with someone who identifies in another way? *[if you have more than one steady relationship with a person who identifies in another way, please tell us about the longest]*

- Less than 1 year
- 1 etc
- 24
- 25
- More than 25 years

Do you and this steady partner have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

Are you and this steady partner currently living together in the same household?

- No
- Yes

### About sex with men since December 2020

*In the following questions, we ask about sex since December 2020. Please say when you last did something **EVEN** if this was not typical for you. This survey is anonymous and confidential.*

Q84 Thinking of the time since December 2020, have you had any kind of sex with a man (any activity intended to achieve orgasm (or close to orgasm) for one or both partners)?

- No
- Yes – virtual sex (e.g. phone sex, sexting)
- Yes – sex with physical contact (you could touch each other)
- Yes – virtual sex and sex with physical contact

Q85. Thinking of the time since December 2020, how many men have you had any kind of **physical sexual contact** with during this time [*please include any sexual contact, not just anal intercourse*]?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

Is this man a new sex partner (you had sex with him for the first time since December 2020)?

- No
- Yes

How many of these {number} men are new partners who you had sex with for the first time since December 2020?

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

## Meeting male sexual partners since December 2020

**Q88 In which of the following ways have you met or made contact with male partners for physical sexual contact since December 2020? [tick all that apply]**

- A website for gay or bisexual men
- A smartphone app that locates potential partners and tells you how far away they are
- A gay sex party in a private home
- A gay community centre, gay organisation or gay social group (physical not virtual venues)



- A cruising location (street, roadside service area, park, beach, lavatory)
- Through friends
- In my household
- In a support bubble with another household
- Elsewhere

## About anal sex with men since December 2020

*We use the term "anal sex" to mean sex where one partner puts their penis into the other partner's anus, whether or not this ends in ejaculation.*

Thinking of the time since December 2020, have you had anal sex with a man (either with or without a condom)?

- No
- Yes

Since December 2020, have you had condomless anal sex with a man?

- No
- Yes

Since December 2020, how many men have you had condomless anal sex with?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30

- 31-40
- 41-50
- More than 50

Do you and this man have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

How many of these {number} men you had condomless anal sex with did you know had the same HIV status as yourself (both positive or both negative)?

- I don't know
- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

## About anal sex with men

*We use the term "anal sex" to mean sex where one partner puts their penis into the other partner's anus, whether or not this ends in ejaculation.*

When did you **last** have anal sex with a man (either with or without a condom)?

- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)
- Never

When did you **last** have condomless anal sex with a man?

- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)
- Never

When did you **last** have condomless anal sex with a man?

- Before 23 March 2020 (first national lockdown)
- Never

Thinking now of the period **between 23 March 2020 (first national lockdown) and December 2020**, how many men did you have condomless anal sex with?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50

- More than 50

## About sex with women (including trans women)

*Please say when you last did something, even if this was not typical for you.*

Have you **ever** had sex of any kind with a woman [*please include any sexual contact, not just vaginal or anal intercourse*]?

- No
- Yes – virtual sex (e.g. phone sex, sexting)
- Yes – sex with physical contact (you could touch each other)
- Yes – virtual sex and sex with physical contact

## About sex with women (including trans women) since December 2020

Thinking of the time since December 2020, how many women have you had any kind of **physical sexual contact** with during this time [*please include any sexual contact, not just vaginal or anal intercourse*]?

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40

- 41-50
- More than 50

Was this woman a new sex partner (you had sex with her for the first time since December 2020)?

- No
- Yes

How many of these {number} women were new partners who you had sex with for the first time since December 2020?

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

### **About vaginal and anal sex with women (including trans women) since December 2020**

*We use the term "vaginal sex" to mean sex where one partner puts their penis into the other partner's vagina and "anal sex" to mean sex where one partner puts their penis into the other partner's anus,*

*whether or not this ends in ejaculation.*

Thinking of the time since December 2020, have you had vaginal or anal sex with a woman?

- No
- Yes

Since December 2020, have you had condomless vaginal or anal sex with a woman?

- No
- Yes

Since December 2020, how many women have you had condomless vaginal or anal sex with?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

Do you and this woman have the same HIV status?

- Yes, we have the same HIV status (both positive or both negative)
- No, one of us is positive and the other is negative
- I don't know whether we have the same status or not

How many of these {number} women you had condomless vaginal or anal sex with did you know had the same HIV status as yourself (both positive or both negative)?

- I don't know
- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

### **About vaginal and anal sex with women (including trans women)**

*We use the term "vaginal sex" to mean sex where one partner puts their penis into the other partner's vagina and "anal sex" to mean sex where one partner puts their penis into the other partner's anus, whether or not this ends in ejaculation.*

When did you **last** have vaginal or anal sex with a woman?

- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)
- Never

When did you **last** have condomless vaginal or anal sex with a woman?

- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)
- Never

When did you **last** have condomless vaginal or anal sex with a woman?

- Before 23 March 2020 (first national lockdown)
- Never

Thinking of the period between **23 March 2020 (first national lockdown)** and **December 2020**, how many women did you have condomless vaginal or anal sex with?

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11-20
- 21-30



- 31-40
- 41-50
- More than 50

## About drugs and sex

Have you **ever** taken crystal meth, mephedrone or GHB/GBL?

- No
- Yes

When did you **last** take crystal meth, mephedrone or GHB/GBL?

- Since December 2020
- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)

How much of the sex you have had was after taking crystal meth and/or mephedrone and/or GHB/GBL?

None of it    A little    Less than half    About half    More than half    Almost all    All of it    I don't know

Since December 2020

Between 23 March 2020 (first national lockdown) and December 2020

## About injecting drugs

Have you **ever** injected any drug other than medicines or anabolic steroids, or had someone inject these for you?

- No
- Yes

When did you **last** inject any drug other than anabolic steroids or medicines, or had someone inject these for you?

- Since December 2020
- Between 23 March 2020 (first national lockdown) and December 2020
- Before 23 March 2020 (first national lockdown)

## About your well-being

Overall, how satisfied are you with your life nowadays?

- Not at all – 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- Completely - 10

Overall, to what extent do you feel the things you do in your life are worthwhile?

- Not at all – 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- Completely - 10

Overall, how happy did you feel yesterday?

- Not at all – 0
- 1
- 2
- 3

- 4
- 5
- 6
- 7
- 8
- 9
- Completely – 10

Overall, how anxious did you feel yesterday?

- Not at all – 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- Completely - 10

## About your experience of COVID-19

Have you experienced any of these symptoms since **December 2020**? [*tick all that apply*]

- High temperature
- A new continuous cough
- Loss or changed sense of normal smell or taste
- Shortness of breath or trouble breathing
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Sore throat
- Fatigue

- Diarrhoea/Digestive issues/Upset stomach
- None of these

Are you **currently** experiencing any of these symptoms? [*tick all that apply*]

- High temperature
- A new continuous cough
- Loss or changed sense of normal smell or taste
- Shortness of breath or trouble breathing
- Runny or stuffy nose Muscle or body aches
- Headaches
- Sore throat
- Fatigue
- Diarrhoea/Digestive issues/Upset stomach
- None of these

Have you had a throat and nose swab to see if you had coronavirus? [*an antigen test to see if you had coronavirus at the time of the test*]

- No
- Yes

{if yes} How many coronavirus swab tests have you had?

- 1
- 2
- 3
- 4
- 5 or more

{if 1} Was the result of your coronavirus swab test positive (showing you had coronavirus at the time of the test)?

- No
- Yes
- Still waiting for result

{if yes} When did you have a positive result from a coronavirus swab test?

- December 2019
- January 2020
- February 2020
- March 2020
- April 2020
- May 2020
- June 2020
- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020
- January 2021
- February 2021
- March 2021
- April 2021

{if 2 or more} Have you had a positive result from any of your coronavirus swab tests (showing you had coronavirus at the time of the test)?

- No
- Yes
- Still waiting for results

{if yes} When did you have a positive result from a coronavirus swab test? [*tick all that apply*]

- December 2019
- January 2020
- February 2020
- March 2020
- April 2020
- May 2020
- June 2020

- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020
- January 2021
- February 2021
- March 2021
- April 2021

Have you had a blood test to see if you previously had coronavirus? [*an antibody test*]

- No
- Yes

{if yes} How many coronavirus antibody blood tests have you had?

- 1
- 2
- 3
- 4
- 5 or more

{if 1} Was the result of your coronavirus antibody test positive (showing you had coronavirus previously)?

- No
- Yes
- Still waiting for result

{if yes} When did you have a positive result from a coronavirus antibody test?

- December 2019
- January 2020
- February 2020

- March 2020
- April 2020
- May 2020
- June 2020
- July 2020
- August 2020
- September 2020
- October 2020
- November 2020
- December 2020
- January 2021
- February 2021
- March 2021
- April 2021

{if 2 or more} Have you had a positive result from any of your coronavirus antibody tests (showing you had coronavirus previously)?

- No
- Yes
- Still waiting for results

{if yes} When did you have a positive result from a coronavirus antibody test? *[tick all that apply]*

- December 2019
- January 2020
- February 2020
- March 2020
- April 2020
- May 2020
- June 2020
- July 2020
- August 2020

- September 2020
- October 2020
- November 2020
- December 2020
- January 2021
- February 2021
- March 2021
- April 2021

Have you received a vaccine for the coronavirus (COVID-19)?

- Yes, I have received my first vaccine dose
- Yes, I have received both vaccine doses
- No
- Don't know
- Prefer not to say.

Have you been offered the vaccine for the coronavirus (COVID-19)?

- Yes, I am waiting to be vaccinated
- Yes, I have been offered the vaccine and I have decided not to be vaccinated
- No
- Don't know
- Prefer not to say.

Have you been admitted to hospital because of coronavirus symptoms?

- No
- Yes

How many nights did you stay in hospital because of coronavirus symptoms?

- I am still in hospital



- I did not stay overnight

Number of nights:

Were you taken to intensive care because of coronavirus symptoms?

- No
- Yes

Do you have any of the medical conditions identified as placing someone at greater risk of severe illness from COVID-19 [[click here for information about these conditions](#)]?

- No
- Yes

## Just before you submit

**Your privacy is important.** This survey is completely anonymous and confidential. We do not collect any information about you that would allow anybody to identify you.

You may have completed our first survey in summer 2020 and/or our second survey in November/December 2020. To help us link your anonymous responses to past surveys, please consider providing the following information which is personal to you but not easily guessed:

A memorable female name (for example, your mother's or a celebrity name):

The name of a street where you lived as a child:

**Now please submit.** You will then see some links to information on sexual health and support services. The information you have given will help plan better sexual health services.