Natsal-4 technical report

Ipsos data collection

November 2025

Contents

1 Introduction

This technical report provides details of the non-probability online panel data collection for the fourth British National Survey of Sexual Attitudes and Lifestyles ('Natsal-4 online'), conducted in Spring 2024. The survey was conducted by Ipsos on behalf of the National Survey for Sexual Attitudes and Lifestyles (Natsal) team at the University College London (UCL), working in collaboration with London School of Hygiene and Tropical Medicine (LSHTM), University of Glasgow (UoG), Örebro University Hospital, and the National Centre for Social Research.

This survey was carried out to complement probability sample data collection conducted by the National Centre for Social Research (NatCen), which is described in a separate technical report. It builds on previous non-probability online panel data collection carried out for the Natsal-COVID study (see https://www.natsal.ac.uk/projects/natsal-covid/).

The research included a questionnaire survey and a biosample element for which participants were sent kits to send back samples for analysis. Participants were also asked for consent for data linkage at the end of the survey. Each element is described in a separate chapter.

2 Main survey

2.1 Questionnaire and material design

The questionnaire was designed by UCL (in collaboration with UoG and the LSHTM), based on a shortened version of the questionnaire used in the probability sample Natsal-4 surveys.

The questionnaire covered the following topics:

- First sexual experiences
- Sexual activity and relationships during the last five years, and in the last four weeks
- Digital technology
- Reproductive health
- Sexual and reproductive health service use
- Alcohol, smoking and drug use.

The questionnaire contained a large amount of routing, with certain sections only applicable to a subset of participants. This meant that whilst the content programmed was about 20 minutes, the length for participants was often shorter (see table 2.5).

2.2 Sampling

The cross-sectional sample was taken from Ipsos and external online panels. The online panels use stringent recruitment processes and quality controls, allowing individuals to take part only once, and ensuring that they are not oversampled. Checks are used at recruitment and while people are on the panel to ensure that inactive panellists and those for whom there have been previous data quality queries are removed (see quality control measures section for more detail). For this research because of the boost samples of younger people and ethnic minority people multiple online panels were used. If someone was on more than one panel, it was possible for someone to take part twice. In the rare cases where this was identified in checks the duplicate case was removed (retaining only the first response from an identified duplicate).

Table 2.1 below sets out the split by panel supplier for the main sample and Table 2.2 below sets out the split by panel supplier for the young people (ages 18-29) and ethnic minority boost samples.

Table 2.1: Completed surveys by panel supplier – main sample

Supplier	Number of completed interviews	Percentage
Ipsos panel	4,173	52%
Other panels (6 panels)	3,827	48%
Total	***8,000***	***100%***

The eligible sample for the study were those aged 18-59 years in Great Britain (England, Wales, Scotland). People under 18 and over 59 were not eligible to take part in the survey. The sample had three elements:

1. A general population sample of 8,000 aged 18-59 designed to ensure the overall sample was representative of the national population by age, gender, region and social grade.

2. A young people boost of 2,000 designed to be representative of the population aged 18-29 by age, gender, and region.

3. An ethnic minority boost of 2,401 for the following ethnic groups (target 400 per group) – Black African, Black Caribbean, Indian, Pakistani, Bangladeshi, and White other. Quotas were adjusted during fieldwork to achieve 500 Black African and 301 Bangladeshi.

Table 2.2: Panel supplier – boost sample completed surveys

Target (boosts)	Young People Boost		Black African Boost		Black Caribbean Boost		Indian Boost		Pakistani Boost		Bangladeshi Boost		White other Boost	
Supplier	**n**	**%**	**n**	**%**	**n**	**n**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Ipsos Panel	678	34%	152	30%	98	25%	162	41%	101	25%	44	15%	335	84%
Other panels (10 panels)	1,322	66%	348	69%	302	76%	238	59%	299	76%	257	16%	65	86%
Total	***2,000***	***100%***	***500***	***100%***	***400***	***100%***	***400***	***100%***	***400***	***100%***	***301***	***100%***	***400***	***100%***

Sample quotas were set to ensure overall representativeness of the total sample for gender, age, region, and social grade. The quotas were set separately for each characteristic and there were no interlocking quotas. The quotas for gender, age and region used ONS mid-year estimates for 2022. The quotas for social grade used the FRS Bluebook 2023 (using Ipsos in house mixed mode data from a nationally representative sample of 60,000 participants as mid-year census estimates are not available for this measure). The social grade quotas were based on census data for age 16-64 years rather than 18-59 years as figures for 18+ were not available and the banded data had a cut off at 64, not 59 years.

Table 2.3 below shows the target quotas as well as the percentage achieved in each quota group in the final data.

Weighting was used to ensure that the weighted profile of participants matched the target quotas for these characteristics where this was not achieved during fieldwork to ensure that the weighted sample was representative of the intended population. This is described in section 2.5.

Table 2.3: Target and achieved sample quotas – main sample and young people boost (unweighted)

Quota variable	Categories	Main sample aged 18-59 years		Young people boost (aged 18-29)	
		Target (%)	Achieved %	Target (%)	Achieved %
Gender	Men	49.15	48.83	49.90	45.92
Gender	Women	50.85	51.17	50.10	54.08
Age	18-29	27.03	29.04	100.00	100.00
Age	30-39	24.90	23.32	0.00	0.00
Age	40-49	22.99	22.40	0.00	0.00
Age	50-59	25.09	25.23	0.00	0.00
Region	NORTH EAST	3.93	4.28	4.00	4.12
Region	WALES	4.55	5.81	4.60	5.86
Region	SCOTLAND	8.46	9.85	8.45	8.80
Region	NORTH WEST	11.26	12.41	11.40	12.07
Region	YORKSHIRE AND THE HUMBER	8.29	9.01	8.55	8.60
Region	EAST MIDLANDS	7.40	8.06	7.50	7.49
Region	WEST MIDLANDS	8.96	9.61	9.10	9.15
Region	EAST OF ENGLAND	9.51	9.17	8.90	8.80
Region	GREATER LONDON	15.28	6.41	16.15	11.36
Region	SOUTH EAST	14.01	16.00	13.10	14.73
Region	SOUTH WEST	8.35	9.36	8.25	9.00
Social Grade	SES- AB	28.14	30.70		
Social Grade	SES - C1	32.39	33.51		
Social Grade	SES - C2	19.05	14.57		
Social Grade	SES - DE	20.43	21.23		

For the ethnic minority boost, there were no other quota variables set (e.g. gender, age, region or social grade). The table below shows the initial quotas set. During fieldwork adjustments to the quotas to for Black African (500) and Bangladeshi (300) were made to ensure the overall ethnic minority sample was

the intended size but reflected the ease and challenge of recruiting participants from different ethnic groups.

Table 2.4: Target and achieved sample quotas – ethnic minority boost sample

Quota variable	Categories	Ethnic minority boost sample	
		Target	Achieved
Ethnicity	Black African	400	500
Ethnicity	Black Caribbean	400	400
Ethnicity	Indian	400	400
Ethnicity	Pakistani	400	400
Ethnicity	Bangladeshi	400	301
Ethnicity	White other	400	400

2.3 Data collection

All survey fieldwork was carried out from 5th March to 5th April 2024 using an online survey panel. During this time 12,401 participants completed the survey.

In total, after quality control checks and deduplication 12,268 cases were included in the final dataset. This includes:

- 10,478 who were eligible for a biosample of whom 4,931 participants agreed to a biosample (of whom 4,101 provided the details necessary to provide them with a biosample kit)
- 5,814 people who agreed to one or both types of data linkage (of whom 4,253 gave full details for data linkage)
- 7,384 people who agreed to be recontacted by Ipsos about further research as part of this project about health and relationships, within the next 12 months

In the final dataset 5,321 participants were aged 18-29 (including those in the main and young people and ethnic minority boost samples).

The most common device used to access the survey was a smartphone (68%), followed by laptop or desktop (30%) Device use varied by gender and age, with people aged 50-59 more likely to use a laptop or desktop (45%) than younger people aged 18-29 who were move likely to use a smartphone (78%) (see table 2.5 for more detail).

Table 2.5: Device used to access the survey overall, and by gender and age (unweighted)

Group	Laptop or desktop	Smartphone	Tablet	Base
All	30%	68%	2%	12,268
Men	37%	61%	3%	5,918

Women	23%	75%	2%	6,262
Another gender identity	26%	72%	2%	88
Age 18-29 years	21%	78%	1%	5,321
Age 30 – 39 years	31%	67%	2%	2,489
Age 40 – 49 years	33%	64%	3%	2,234
Age 50 – 59 years	45%	50%	6%	2,224

The median interview length for the final achieved sample included in the final data was 17 minutes. The interquartile range was 12.73 minutes (from 12.23 to 24.97 minutes).

Table 2.6: Questionnaire length (median)

Group	Median length of interview (mins)	Base
All	17	12,268
Men	17	5,918
Women	18	6,262
Another gender identity	20	88
Age 18-29 years	16	5,321
Age 30 – 39 years	19	2,489
Age 40 – 49 years	19	2,234
Age 50 – 59 years	17	2,224
Ever had sexual experience	19	10,316
Never had sexual experience	11	1,512
Prefer not to say whether ever had sexual experience	10	440
Device used for survey: Laptop or desktop	19	3,632
Device used for survey: Smartphone	17	8,353
Device used for survey: Tablet	17	283

2.4 Quality control measures

There were a number of quality control measures in place across panels to ensure the survey was run successfully and to standard. This includes the following:

Pre-survey checks: before joining the panel, applicants are assessed by a sophisticated validation system (includes duplicate and robot detection, geo-IP and contact information validation, and checks against Ipsos black-list).

Early panel checks: potential members are tested on their survey taking behaviour. New panellists who are most likely to make intentional or unintentional errors on future surveys are deactivated at an early stage.

During survey checks: checking for suspicious behaviours (such as flat-lining, patterning on questions, excessively similar answers and high speed). Panellists who display such behaviours are removed from the panel (and from the survey data – as fraudulent).

On-going panel: Panellist behaviour history is monitored and tracked across all surveys. Ipsos uses purging procedures base on these data to remove bad and inactive panellists from out eligible sampling pools.

Once the survey was complete, the research team also checked the survey data for suspicious response behaviour (outlined above in the 'data cleaning' section) and any errors in the creation of variables.

Data Cleaning

The completed sample size at the end of fieldwork was 12,401. Of these, a total of 91 of cases were excluded from the final dataset, as they were suspected duplicates based on variables such as date of birth, name, address (if requested biosample kit or agreed to data linkage,or based on further checks for duplication). A further 220 cases were suspected of being duplicates based on matches on gender, sex, ethnicity, place of birth, age, marital status, highest level of education and postcode. However, since people with similar characteristics can live in the same postcode it was decided that there was insufficient evidence to treat these as duplicates so both cases were retained.

In addition another 41 cases were removed as part of standard data checks by the survey team. These cases had been checked by the project team and removed as having entered a suspicious or incoherent response. One case was excluded because it was over quota, despite being complete.

Fieldwork outcome and response

In total 21,935 participants from panel providers started the survey or attempted to do so.

The Ipsos research team monitored fieldwork outcomes and response rates throughout fieldwork. Table 2.7 below shows the breakdown of the fieldwork outcome.

Table 2.7: Outcome of sample

Outcome	Number of participants
Participant screened out	6,379
Abandoned	3,155
Completed but fraudulent	41
Completed but duplicate	91
Complete Over Quota	1
Completes in analysis dataset	12,268
TOTAL starting survey	21,935

Table 2.8 below shows a further breakdown of respondents who were screened out and the reason for being screened out.

Table 2.8: Reason for being screened out

Outcome	Number of participants
Screened out as did not give consent to take part (at initial Ipsos consent page)	302
Screened out as did not fit quota	3,038
Screened out – due to quota full	2,993
Screened out – did not answer gender question	46
TOTAL – screened out	6,379

Those who were screened out or said no to the Natsal specific consent question are included among the screened out cases in table 2.7 as they were considered to have started the questionnaire. Anyone who did not say yes to the consent question or was screened out or removed because of suspected fraud or duplication is not included in the data for analysis. Cases which started the survey and abandoned part way through are also not included in the data.

2.5 Data processing

Weighting

Weighting was used to ensure that the achieved sample in the final data was representative of the population of Great Britain by gender, age, region, social grade and ethnicity. The census estimates used for setting the weighting targets were ONS 2022 mid-year estimates for age, gender and region. The ethnicity weights were based on 2021 census data for England and Wales and 2022 Census data for Scotland. 2021 Census figures were used for sexual orientation, and FRS Bluebook (Ipsos survey based source) for social grade.

For weighting by gender the variable gender_corr was used. This variable reflects the gender participants currently identify as. People with a trans history who now identify as man/boy would be in the man/boy category. In that variable ‘another gender identity’ is for those with an identity other than man/boy or woman/girl, for example non-binary. The population data for weighting is binary and so ‘another gender identity’ was weighted to reflect their percentage in the sample for that dimension. The ethnicity categories for weighting reflect the ethnic groups used for sample quotas (based on a boost of some ethnic groups as described in section 2.2). All sample boost ethnic groups form a weighting category and other large groups which were not boosted also form categories. Very small groups such as prefer not to say, other ethnicity and missing ethnicity are grouped into one category to improve weighting efficiency.

One set of weights was used for both the main and boost samples, covering those aged 18-59, from all ethnicities. The achieved weighted profile and the rim weights for each group are shown in table 2.9. Rim weights were calculated using regression analysis. The weight calculations are repeated until the weights are sufficiently close to the target. The weighting efficiency was 75.4% overall, which reflects the size of the boost populations included and the large number of weighting cells.

Table 2.9: Profile of achieved sample after weighting and rim weights

		Weight	
		Output percent	Rim weight
Age and gender	Men - 18-29	13.39	0.761806
	Men - 30-39	11.98	1.329344
	Men - 40-49	11.21	1.135406
	Men - 50-59	12.22	1.104328
	Women - 18-29	13.44	0.5942
	Women - 30-39	12.74	1.228395
	Women - 40-49	11.61	1.370136
	Women - 50-59	12.7	1.430868
	Another gender identity and any age	0.72	1.003746
Ethnicity	White British - Men	36.96	1.233457
	White Other - Men	3.36	1.371886
	Mixed / multiple ethnic groups - Men	1.34	1.399575
	Indian - Men	1.47	0.542166
	Pakistani - Men	1.28	0.692399
	Bangladeshi - Men	0.5	0.233745
	Black African- Men	1.13	0.316797
	Black Caribbean- Men	0.44	0.167178
	Other ethnic group/ Prefer not to say/ Missing - Men	2.31	0.687981
	White British - Women	37.98	1.251707
	White Other - Women	3.75	0.711368
	Mixed / multiple ethnic groups - Women	1.38	1.245767
	Indian - Women	1.46	0.541381
	Pakistani - Women	1.26	0.538677
	Bangladeshi - Women	0.49	0.446343
	Black African- Women	1.23	0.395567
	Black Caribbean - Women	0.51	0.24302
	Other ethnic group/ Prefer not to say/ Missing - Women	2.43	0.726223
	Another gender identity and any ethnicity	0.72	1.001
Region	NORTH EAST Men	1.91	1.002105
	NORTH WEST Men	5.51	0.915682
	YORKSHIRE AND THE HUMBER Men	4.06	0.958448
	EAST MIDLANDS Men	3.63	0.970385
	WEST MIDLANDS Men	4.4	0.94609
	EAST Men	4.66	1.018062
	LONDON Men	7.33	1.571288
	SOUTH EAST Men	6.84	0.953845
	SOUTH WEST Men	4.1	0.964247
	WALES Men	2.22	0.836907

Table 2.9: Continued - Profile of achieved sample after weighting and rim weights

Region	SCOTLAND Men	4.14	0.781243
	NORTH EAST Women	1.99	0.90023
	NORTH WEST Women	5.68	0.94548
	YORKSHIRE AND THE HUMBER Women	4.18	0.873209
	EAST MIDLANDS Women	3.71	0.907141
	WEST MIDLANDS Women	4.5	0.94222
	EAST Women	4.79	1.051263
	LONDON Women	7.82	2.156764
	SOUTH EAST Women	7.06	0.852514
	SOUTH WEST Women	4.19	0.803094
	WALES Women	2.3	0.715594
	SCOTLAND Women	4.27	0.881475
	Another gender identity and any region	0.72	0.999001
Social Grade	Men - AB	15.04	0.838193
	Men - C1	14.59	0.975961
	Men - C2	9.89	1.427455
	Men - DE	9.28	1.020638
	Women - AB	12.93	0.783988
	Women - C1	17.54	1.046978
	Women - C2	9.11	1.322275
	Women - DE	10.9	1.033004
	Another gender identity and any socio-economic status	0.72	1

** Red text indicates rim weight is outside the range of 0.6 - 1.4*

The maximum individual weight was 5.107 for a white British woman aged 50-59 in London in the skilled working class social grade. The minimum individual weight was 0.081 for a Black Caribbean woman aged 18-29 in Wales in the upper middle and middle class social grade.

The weights for the analysis of the survey data are in a variable called 'total_wt'. Separate weights (wt_bio) have been created for the cases which provided a valid sample. These are explained in the weighting section of the biosample chapter.

2.6 Ethical and compliance considerations

Natsal-4 was given ethical approval by the East Midlands - Leicester South Research Ethics Committee (Reference no. 20/EM/0025).

Participants were shown an introductory screen explaining who was involved in the survey and the subject matter. A University College London (UCL) privacy notice was available to view, hosted by Ipsos. When asked about permission for follow up, participants were told the timing and purpose.

2.7 Gender, sex and ethnicity in the survey

There are multiple sex and gender variables in the survey.

Sexbirth -reported sex at birth. This is the variable that was used to route respondents through the survey. The variable in the dataset which most analysts will use is d_sexbirth_final.

Gender – Natsal question on gender identity. In this variable man and woman reflects current gender identity and may include those with a trans history.

Gender_corr – adjusted ‘gender’ with data corrected for a small number of cases who initially answered incorrectly (final answer for these cases based on GenderCheckA/GenderCheckB). As for ‘gender’ in this variable man and woman reflects current gender identity and may include those with a trans history.This variable was used for survey routing; however, analyses should use d_gender_final.

Gender_corr_dv– a version of gender_corr but which takes account of open answers given in response to gender questions which have been backcoded during data processing.

Groute – a gender question which determined routing through the survey in which all gender diverse participants are in a trans/ gender diverse category and the man and women categories refer to cisgender men and women (d_groute in final data).

Groute_dv- a version of groute which takes account of open answers given in response to gender questions which have been backcoded during data processing.

EthnicNS – reported ethnic identity

EthnicNS_DV - a derived version of EthnicNS which takes account of open answers describing other ethnicity which have been backcoded during data processing.

BornIn – country of birth.

BornIn_DV - a derived version of BornIn which takes account of open answers given in response to the country of birth question which have been backcoded during data processing.

3 Biosample research

3.1 Introduction

Natsal-4 aims to use biological testing data linked to questionnaire data to provide up-to-date estimates of the population prevalence, distribution and associated factors of five key STIs in the British population to inform service provision and STI control strategies and assess the urogenital microbiome.

In all arms of the study, including Natsal-4 online carried out by Ipsos, participants who completed the questionnaire were invited to provide, with informed electronic consent, self-collected biological samples (urine for men, vaginal swabs for women (or if declined, urine), and urine for transgender people). The protocols, documents and processes used on Natsal-4 online were based on those developed and piloted on the other arms of the study.

The biological sample collection on Natsal-4 online carried out by Ipsos was designed to supplement those collected in the other arms. This meant that not all participants were invited to provide a sample.

3.2 Eligibility and consent process

Participants who reached the end of the main survey who were members of one or more of these groups were invited to provide a sample: aged 18-49, members of particular ethnic groups (Indian/British Indian, Pakistani/British Pakistani, Bangladeshi/British Bangladeshi, Black Caribbean, Black African, Irish, Gypsy or Irish Traveller, any other White background), transgender participants, and men who have sex with men.

To be eligible for a vaginal swab the participant had to have reported their sex at birth as female and not to have reported being trans/gender diverse. To be eligible for a urine sample the participant had to be a female who had declined the vaginal swab, male or transgender.

The consent to provide a biological sample came at the end of the main survey questionnaire. It was made clear to participants that this was an optional additional element and their survey responses would still be used and of value even if they did not consent to biological sample collection. At the point of consent, full information was provided about the purpose of the biosample collection, how the sample would be used and stored and where, clarification that the results would not be sent to participants and the reasons for this, and answers to potential questions about eligibility. These were provided in the questionnaire text and linked information leaflets. Participants were also informed that they would not receive results from the testing.

Separate consent was sought for providing a sample and for storage of the sample for further analysis. Name and postal contact information was collected for despatch of the sample and only those willing to provide this information were included. In addition email address and telephone number were collected for sending the incentive and in case of queries but were not essential for sending a kit.

3.3 Additional questions in the survey

Those participants who consented to biosample collection and provided the details needed to send the kits to them were asked some optional additional questions relevant to the analysis of biosample data. This included symptoms associated with STIs experienced in the last 4 weeks, circumcision, recent diagnosis and treatment for vaginal thrush, bacterial vaginosis, use of antibiotics and vaginal treatments, routed according to gender.

Participants were also asked for their month and year of birth for the purpose of checks and reconciliation of samples with the laboratory.

3.4 Biological sample kit, collection and dispatch protocols

The biosample kit despatch was carried out by a specialist printing and despatch provider (an approved supplier of Ipsos). Twice a week during the four week fieldwork period a list of those who had agreed to provide a sample was sent to the supplier including a unique ID and barcode number which could be used by the despatch company and laboratory for reconciliation (this ID was not shared with the UCL study team). Name, postal contact information and type of sample required were provided and these were used to send a vaginal swab kit or urine sample kit to participants. Where the despatch company checks identified that the address details were not a valid UK address a sample kit was not sent (187 cases were not sent – some of these subsequently had their survey data removed as well). In some cases kits were sent but returned by the postal system (319).

The despatch also included a covering letter, information leaflet, instructions on how to take the relevant sample (see appendix), a despatch form containing month and year of birth and ID number and barcode, and a return envelope addressed to the laboratory where the sample would be processed.

Vaginal swab kits contained three packets containing a swab and collection tube, a test kit box, a security seal and three barcode labels. Urine sample kits contained a collector tube, protective packing wallet, Colli-Pee© device for collecting the sample, a specimen transport bag and a barcode label. These were sent to participants as packages (they were too large to be large letters).

Participants were asked to take the samples, attach barcode labels to the tubes, write the date of collection on the despatch form and return them to the laboratory as soon as possible using any Royal Mail post box.

Ipsos provided the laboratory with the details of all participants to whom a sample kit had been sent (with the ID and barcode, month and year of birth, gender and type of sample kit sent) so that the receipt of samples could be reconciled with those sent without providing identifiable details.

Where incomplete samples or those which did not match the information provided were received, errors were flagged and resolved.

On average (taking the median), it took 2 days from when the sample was collected by the participant to when the sample arrived at the lab. See table 3.1.

Table 3.1: Sample transit time

	Transit time between kit posted to participant and sample collected (in days)	**Transit time between sample collected and sample arrived at TDL (in days)**
Mean	8.6	2.7
SD	7.9	2.1

Median	6.0	2.0
IQR	6.0	2.0

The STI testing was done on rolling basis without freezing. Testing for all samples was done within 60 days. The HPV testing was done after freezing and in batches.

3.5 Testing biological samples

Urine samples

Participants collected one urine sample of approximately 10ml which was split into four aliquots by TDL:

- Aliquot one: sent to UK Health Security Agency (UKHSA) for type-specific HPV testing - female and trans/gender diverse participants only
- Aliquot two: tested for non-viral STIs including Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis and Mycoplasma genitalium
- Aliquot three: aliquot transferred into Aptima buffer tube and stored at -80c for future research.
- Aliquot four: aliquot stored as raw urine without buffer at –80c for future research

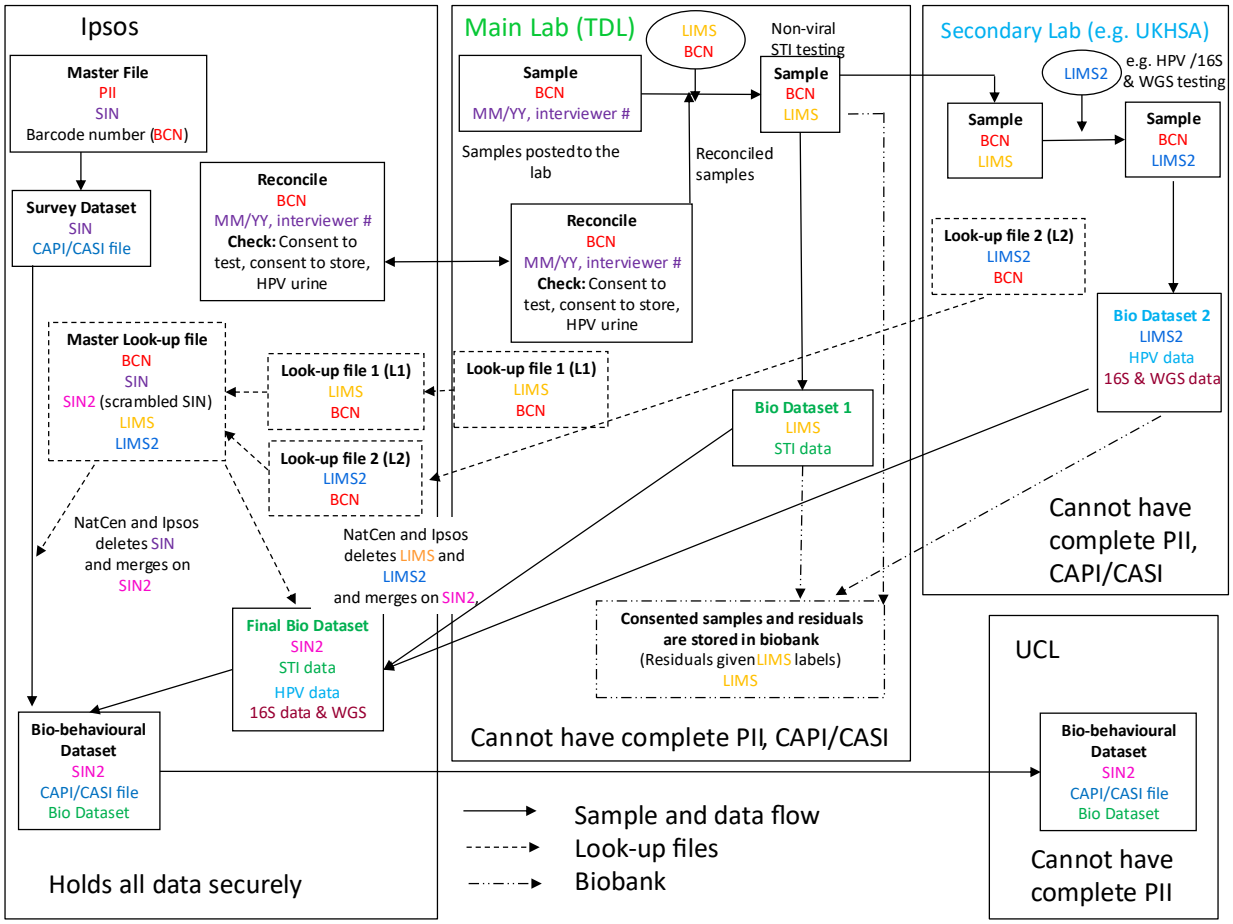
Vaginal swab samples

Participants collected three vaginal swab samples:

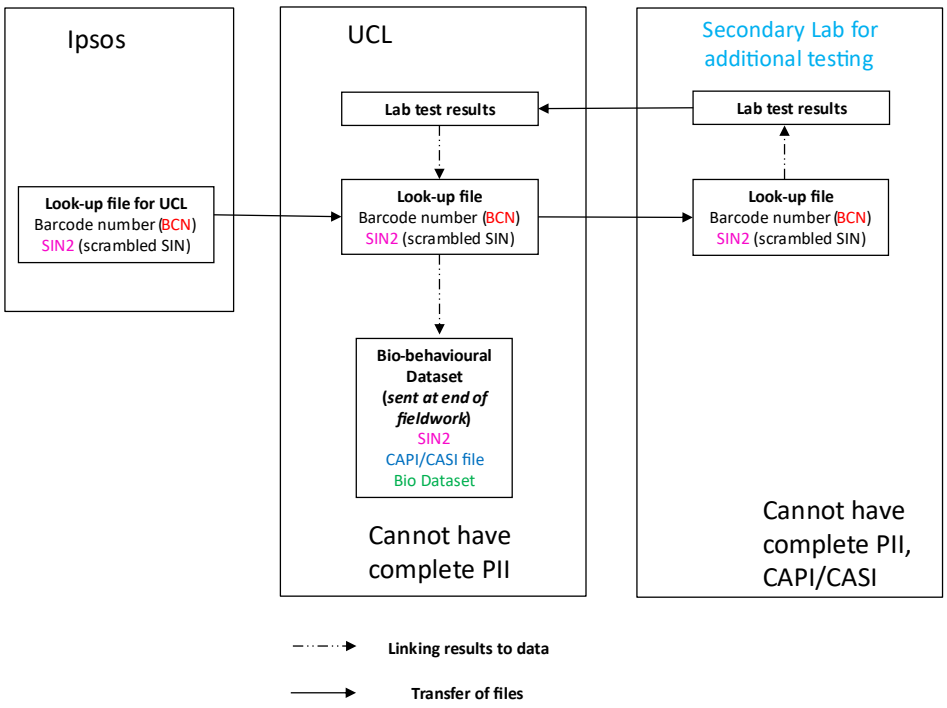
- Swab A was sent for testing for non-viral STIs including Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis and Mycoplasma genitalium
- Swab B was aliquoted. Aliquot one was referred to UKHSA for type-specific HPV testing. Aliquot two was prepared and stored at -80c for future research
- Swab C was held while waiting to see if gonorrhoea confirmation was required. In the event that it was needed, an aliquot was removed, and the remainder returned to -80C storage for future research. If not, it was sent direct to storage without opening.

A data sharing plan ensured that samples and data were pseudonymised. Labs received month and date of birth only for reconciliation purposes. The lab fed back data to the fieldwork agency where STI data were combined with survey data before sharing with the Natsal research team The process for this is shown in Figure 3.1.

Figure 3.1: Biological sampling data flow



Data flows after Ipsos delete study PII



3.6 Biosample data collection

Biological sample consent and provision of valid sample

There were several stages of eligibility and consent for biosamples. Only people in certain age groups, ethnicity, gender identity and sexual orientation were eligible. All of those aged under 50 years were eligible. Among those aged 50-59 19% of cisgender women and 20% of men and trans/diverse participants were eligible. Cisgender women were offered a vaginal swab sample first and then a urine sample if they refused. The tables below reflect this eligibility and consent process. The gender breaks used in the table are based on the variable groute.

Table 3.2 shows that 44% of women eligible for a biosample consented to be sent the vaginal swab kit and levels of agreement increased with age from 37% among 18-29 year olds to 65% among 50-59 year olds. Among those who refused the vaginal swab kit 6% agreed to be sent a urine kit instead. Overall 48% of eligible women consented to one of the kits, varying from 39% of 18-29 year olds to 71% of 50-59 year olds. Not all those consenting provided contact details so 40% of those eligible for any sample gave full name and address details to enable a kit to be sent.

Not all those who sent sample kits returned a sample. Of eligible cisgender women who consented and provided full name and address details 48% returned a valid vaginal swab or urine sample. A number of these would not have received a kit because they provided invalid address details (so a kit could not be sent or was returned by the postal system) and two sent back a sample which were unusable and had to be discarded for quality reasons. In most cases the reason for non return was that the person received but did not use or return the kit. Valid samples were received from 19% of eligible women and this varied from 11% of those aged 18-29 years to 44% of those aged 50-59 years. Note that a small number of

biosamples were received for cases whose survey responses were removed from the survey data as part of quality control and deduplication. These are not shown in the table below.

Participants were asked about storage of samples and overall 17% of cisgender women participants eligible for a sample provided a sample and consented to storage, varying from 10% of 18-29 year olds to 39% of 50-59 year olds.

The figures in the tables below only included cases included in the final dataset, excluding consent given and biosamples returned by cases excluded from the final dataset during quality control and deduplication.

Table 3.2: Ipsos online biological sample consent and receipt for cisgender women, by sample type and age

	18-29 year olds		30-39 year olds		40-59 year olds		50-59 year olds		All	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Eligible for providing a vaginal swab sample^	**2,706**	**-**	**1,241**	**-**	**1,018**	**-**	**186**	**-**	**5,151**	**-**
Vaginal swab consent provided	994	37%	599	48%	574	56%	120	65%	2,287	44%
Vaginal swab consent and full name and address details provided of which:	770	28%	527	42%	535	53%	112	60%	1,944	38%
- sample received and useable	*282*	*37%*	*243*	*46%*	*339*	*63%*	*77*	*69%*	*941*	*48%*
- sample received but unusable	*1*	*<1%*	*1*	*<1%*	*0*	*0%*	*0*	*0%*	*2*	*<1%*
- no sample received	*711*	*63%*	*355*	*54%*	*235*	*37%*	*43*	*31%*	*1,344*	*51%*
Refusal/consent withdrawn/unable for other reason	1,712	63%	642	52%	444	44%	66	35%	2,864	56%
Vaginal swab sample received from those eligible and useable	-	**10%**	-	**20%**	-	**33%**	-	**41%**	-	**18%**
Eligible for providing a urine sample^	**1712**	**-**	**642**	**-**	**444**	**-**	**66**	**-**	**2,864**	**-**
Urine consent provided	71	4%	47	7%	37	8%	12	18%	167	6%
Urine consent and full name and address details provided of which:	47	3%	36	6%	29	7%	8	12%	120	4%
- sample received and useable	*14*	*30%*	*12*	*33%*	*14*	*48%*	*4*	*50%*	*44*	*37%*
- sample received but unusable	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
- no sample received	*57*	*70%*	*35*	*67%*	*23*	*52%*	*8*	*50%*	*123*	*63%*
Refusal/consent withdrawn/unable for other reason	1,641	96%	595	93%	407	92%	54	82%	2,697	94%
Urine sample received from those eligible and useable	**-**	**1%**		**2%**		**3%**		**6%**		**2%**

Table 3.2: Continued - Ipsos online biological sample consent and receipt for cisgender women, by sample type and age

Eligible for providing a biological sample	**2,706**	**-**	**1,241**	**-**	**1,018**	**-**	**186**	**-**	**5,151**	**-**
Total sample consent provided	1,065	39%	646	52%	611	60%	132	71%	2,454	48%
Total sample consent and full name and address details provided of which:	817	30%	563	45%	564	55%	120	65%	2,064	40%
- sample received and useable	296	36%	255	45%	353	63%	81	68%	985	48%
- sample received but unusable	1	0%	1	0%	-	0%	-	0%	2	0%
- no sample received	768	64%	390	55%	258	37%	51	33%	1,467	52%
Total refused/consent withdrawn/unable for other reason	1,641	61%	595	48%	407	40%	54	29%	2,697	52%
Sample received from those eligible and useable		**11%**		**21%**		**35%**		**44%**		**19%**
Consented to storage for future research and provided useable sample	264	89%	230	90%	321	91%	73	90%	888	90%

^women were eligible to provide a urine sample if they did not consent to provide a vaginal swab sample

Cisgender men and trans and gender diverse participants were offered a urine sample if they were eligible. Table 3.3 shows that among those who were eligible 46% consented to be sent a urine kit. As for women, levels of consent increased with age from 39% of eligible 18-29 year olds providing consent to 70% of 50-59 year olds. Not all those consenting provided contact details so 38% of those eligible for a urine sample gave full name and address details to enable a kit to be sent.

Of eligible cisgender men and trans and gender diverse participants who consented and provided full name and address details 40% returned a valid urine sample. A number of these would not have received a kit because of providing invalid address details and three sent back a sample which were unusable and had to be discarded for quality reasons. Valid samples were received from 15% of eligible participants and this varied from 6% of those aged 18-29 years to 47% of those aged 50-59 years.

Overall, 14% of the eligible of sample of cisgender men and trans and gender diverse participants provided a urine sample and agreed to sample storage.

Table 3.3: Ipsos online biological sample consent and receipt for cisgender men and trans/gender diverse participants, by age

	16-29 year olds		30-39 year olds		40-49 year olds		50-59 year olds		All	
	n	%	n	%	n	%	n	%	n	%
Eligible for providing a urine sample*	2,615		1,249		1216		248		5,327	
Urine consent provided, of which:	1,028	39%	601	48%	674	55%	174	70%	2,477	46%
Urine consent and full name and address details provided of which:	782	30%	491	39%	600	49%	164	66%	2,037	38%
- sample received and useable	158	20%	186	38%	345	58%	116	71%	805	40%
- sample received but unusable	*0*	*0%*	3	*<1%*	*0*	*0%*	*0*	*0%*	3	*<1%*
- no sample received	870	80%	412	62%	329	43%	58	29%	1,669	60%
Refusal/consent withdrawn/unable for other reason	1587	61%	647	52%	542	45%	74	30%	2,850	54%
Urine sample received from those eligible^	-	**6%**		**15%**		**28%**		**47%**		**15%**
Consented to storage for future research and provided useable sample	139	88%	172	92%	318	92%	111	96%	740	92%

** of which 690 were trans/gender diverse participants according to the gender routing variable 'd_groute', which is based on a combination of gender identity, sex described at birth, and trans identity/history.*

^ of which 60 were trans/gender diverse participants.

Thank you payments

Participants who returned a biosample were sent a thank you payment. This was an online shopping voucher sent by email if they had provided an email address at the time of providing consent. Variable incentives were offered to those who returned a sample depending on their characteristics:

- £15 was offered to:
  - participants aged 18-29
  - members of these ethnic groups: Indian/British Indian, Pakistani/British Pakistani, Bangladeshi/British Bangladeshi, Black Caribbean, Black African, Irish, Gypsy or Irish Traveller, any other White background).
- £10 was offered to other eligible groups.

3.7 Biosample weighting

Since not all participants who were asked to provide a vaginal swab or urine sample did so, the calculation of an additional biosample weight (wt_bio) in addition to the main survey weight (total_wt) – is necessary in order to provide unbiased estimates of the biosample test results. The weighting was designed to weight the cases with valid biosamples to the profile of the eligible sample for biosamples within this study. The eligible sample included those from one or more of these groups:

- aged 18-49
- members of particular ethnic groups (Indian/British Indian, Pakistani/British Pakistani, Bangladeshi/British Bangladeshi, Black Caribbean, Black African, Irish, Gypsy or Irish Traveller, any other White background)
- transgender participants
- men who have sex with men.

In the final data 10,478 Natsal-4 online participants were eligible for the biosample study and of these 1,790 (17%) provided a valid sample which could be analysed by the laboratory. With the aim of minimising any potential bias in the achieved biosample data arising from differential response, a non-response weight was calculated specifically for those respondents providing a useable vaginal swab or urine sample. The weighting models were run separately based on a variable called groute. In this variable trans and gender diverse people are in one category and the man and woman categories are cisgender. For the weighting there were two models:

- Cisgender men
- Cisgender women and trans/gender diverse participants

The models were run using logistic regression, with the dependent variable indicating whether or not a useable biosample was obtained. Using data available for both eligible participants who did not return a valid sample and those who provided a valid biosample, a logistic regression model was run which included all the variables included in the main weights as well as those which had been used in the other arm of the Natsal-4 study. Both models were then run again including all variables that were significant (or borderline nonsignificant) in either the men's or women's model. The coefficients for the final model are shown in Tables 3.4 (men) and 3.5 (women and trans participants).

The weighting factors used for the main weights were included in the models:

- age
- social grade
- region
- ethnicity
- sexual orientation

In addition, these variables were found to be related to biosample response and were included in the final model:

- Employment status
- Marital status
- Number of partners in lifetime
- At least one new partner of any gender in the last year
- Ever had sex with same sex partner (men only)
- When (last) attended sexual health services (any appointment type) (women and trans only)
- Whether ever tested for HIV (women and trans only)

The weights were trimmed at 5% and 95%. The final biosample weights were rescaled within gender groups (based on groute) to have a mean of 1, so that the weighted biosample size is the same as the achieved biosample sample size. The distribution of the different components of the weighting are shown in Table 3.6 (all weights have been scaled to have a mean of 1 for comparison).

Table 3.4: Biosamples: model of non-response for cisgender men

	Coefficient (log odds)	Odds ratio	p
Age			
18-29 years			0.000
30-39 years	0.940	2.560	0.000
40-49 years	1.745	5.726	0.000
50-59 years	1.974	7.197	0.000
Region			
North East			0.115
North West	-0.413	0.662	0.093
Yorkshire and Humberside	-0.082	0.921	0.744
West Midlands	-0.142	0.868	0.567
East Midlands	0.071	1.074	0.780
East of England	-0.042	0.959	0.865
South West	0.030	1.030	0.905
South East	-0.073	0.930	0.757
Greater London	-0.334	0.716	0.159
Wales	-0.250	0.779	0.392
Scotland	-0.376	0.687	0.139
Sexual orientation			
Heterosexual / Straight			0.013
Gay/ Lesbian	0.617	1.854	0.003
Bisexual	0.082	1.085	0.712
Other (specify at the next question)	0.518	1.679	0.183
Prefer not to say	-0.450	0.638	0.306
Social grade			
AB			0.000
C1	-0.103	0.902	0.323
C2	-0.527	0.590	0.000
DE	-0.073	0.930	0.572
Ethnicity			
White British			0.023
White Other	0.272	1.313	0.055
Mixed/Multiple ethnic groups	-0.208	0.812	0.435
Indian	0.086	1.090	0.691
Pakistani	-0.657	0.518	0.041
Bangladeshi	-0.878	0.416	0.124
African	0.320	1.377	0.201
Caribbean	-0.953	0.386	0.076
Other ethnicity, prefer not to say, missing	-0.206	0.814	0.379

Table 3.4: Continued - Biosamples: model of non-response for cisgender men

Number of partners in lifetime			
0 Lifetime partners			0.000
1-2 Lifetime partners	0.599	1.820	0.000
3-5 Lifetime partners	0.638	1.893	0.000
6-10 Lifetime partners	0.525	1.691	0.000
11-25 Lifetime partners	0.643	1.902	0.000
26 or more Lifetime partners	0.935	2.548	0.000
Employment status at interview			
Employed			0.000
In full time education	-0.584	0.558	0.004
Unemployed or retired	-0.360	0.698	0.001
Ever had sex with same sex partner			
No			
Yes	0.481	1.618	0.005
Marital status			
Married/ civil partnership			0.000
Cohabitation	0.638	1.893	0.000
Previously married or in a civil partnership	0.309	1.363	0.118
Single and never married	0.636	1.889	0.000
Not answered	0.104	1.110	0.778
Whether had at least one new partner of any gender in last year			
No new partners in last year			0.000
At least one new partner in last year	-0.543	0.581	0.000
Not answered	-0.048	0.954	0.757
Intercept	-2.857	0.057	0.000

Table 3.5: Biosamples: model of non-response for cisgender women and trans/gender diverse participants

	Coefficient (log odds)	Odds ratio	p
Age			
18-29 years			0.000
30-39 years	0.577	1.780	0.000
40-49 years	1.340	3.820	0.000
50-59 years	1.523	4.584	0.000
Region			
North East			0.002
North West	-0.251	0.778	0.228
Yorkshire and Humberside	-0.350	0.705	0.110
West Midlands	-0.166	0.847	0.441
East Midlands	0.078	1.081	0.720
East of England	0.110	1.116	0.600
South West	0.019	1.019	0.931
South East	-0.184	0.832	0.360
Greater London	-0.360	0.697	0.082
Wales	-0.419	0.658	0.088
Scotland	-0.438	0.645	0.045
Sexual orientation			
Heterosexual / Straight			0.003
Gay/ Lesbian	-0.054	0.947	0.802
Bisexual	0.072	1.075	0.579
Other (specify at the next question)	0.790	2.202	0.000
Prefer not to say	-0.505	0.604	0.234
Social grade			
AB			0.005
C1	-0.243	0.785	0.008
C2	-0.356	0.701	0.001
DE	-0.104	0.902	0.334

Table 3.5: Continued - Biosamples: model of non-response for cisgender women and trans/gender diverse participants

Ethnicity			
White British			0.000
White Other	0.553	1.739	0.000
Mixed/Multiple ethnic groups	-0.294	0.746	0.200
Indian	0.053	1.055	0.791
Pakistani	0.057	1.059	0.802
Bangladeshi	-0.050	0.951	0.902
African	-0.018	0.983	0.937
Caribbean	0.243	1.275	0.392
Other ethnicity, prefer not to say, missing	-0.351	0.704	0.082
Number of partners in lifetime			
0 Lifetime partners			0.000
1-2 Lifetime partners	0.418	1.519	0.002
3-5 Lifetime partners	0.716	2.047	0.000
6-10 Lifetime partners	0.766	2.151	0.000
11-25 Lifetime partners	0.940	2.559	0.000
26 or more Lifetime partners	1.268	3.555	0.000
Employment status at interview			
Employed			0.003
In full time education	-0.317	0.729	0.029
Unemployed or retired	-0.258	0.773	0.002
When (last) attended sexual health services (any appointment type)			
Never			0.005
In last year	0.263	1.301	0.069
1-5 years	0.177	1.193	0.167
Over 5 years	0.354	1.425	0.001
Whether ever had an HIV test			
No or missing			
Yes	0.214	1.239	0.015
Marital status			
Married/ civil partnership			0.000
Cohabitation	0.093	1.098	0.369
Previously married or in a civil partnership	0.264	1.302	0.071
Single and never married	0.430	1.538	0.000
Not answered	-0.318	0.728	0.283

Table 3.5: Continued - Biosamples: model of non-response for cisgender women and trans/gender diverse participants

Whether had at least one new partner of any gender in last year			
No new partners in last year			0.000
At least one new partner in last year	-0.623	0.536	0.000
Not answered	-0.248	0.781	0.058
Intercept	-2.378	0.093	0.000

The non-response weighting is designed to reduce the bias in the profile of biosample participants.

Table 3.6: Distribution of different of weights after trimming

	Sample size	**Minimum**	**Maximum**	**Mean**	**Standard deviation**
Main survey weight (total_wt)	12,268	0.08	5.11	1.00	0.57
Biosample weight (wt_bio)	1,790	0.07	7.98	1.00	0.78

4 Data Linkage

4.1 Types of data linkage

Natsal-4 online involves the linkage of participants' survey responses with routinely-collected administrative data in England, Wales and Scotland:

- Education data held by the government department for education in England, Scotland or Wales.
- Census data held by the Office for National Statistics (for England and Wales) or the National Records of Scotland

In this section the process for obtaining consent is described. Details relating to the linkage process in practice will be provided in a separate report once that stage has been completed.

4.2 Data linkage consent

After the biosample section of the survey, participants were asked if they were willing to consent to their survey data (and biosample if collected) being linked to routinely-collected education and administrative datasets. It was made clear that they had completed the main part of the survey and their survey responses would still be used even if they declined to give consent.

Participants were provided with detailed information about the process of data linkage and the purpose in the main questionnaire and in a linked leaflet. The information leaflet and data flow are included in the appendix.

They were asked about each type of data separately and were able to select to have their data linked with neither, both or one of the types of data (education or census).

If they provided consent, they were be asked to check or provide personal details to make it possible to identify them within the administrative records. The details required were:

Name (was not asked again of participants who already provided this information in the biosample section)

Address (was not asked again of participants who already provided this information in the biosample section)

Date of birth (asked to all)

4.3 Data linkage data collection

Participants were asked for general consent for data linkage and were then asked separate education and census consent. After this they were asked to provide personal details.

Table 4.1 shows the percentage agreeing at each stage. Note that this includes cases in the final dataset only. The consent to the initial question which asked for general consent to both types was 56%. However not all those who said yes then agreed to either of the specific consents so overall consent to education was 46% and to census linkage was 44% and consent to either type of consent was 47%. Those who had agreed to either consent were then asked for personal details and not everyone provided the full personal details asked of them. As a result, despite initial general linkage consent of 56%, overall

35% of participants provided a specific consent and full details for linkage. There is potential for those who provided some but not all details to be linked and so more than 4,253 cases will be issued for potential linkage. The number of cases successfully linked will be reported on separately after data linkage has taken place.

Table 4.2 shows the number and percentage who consented for each type of consent or either, including only those who had also provided valid personal details, with the percentage being based on all those who completed the survey, split by demographic characteristics. Overall 35% provided consent to one or both types of data linkage (34% for education and 33% for census). This varied by age with consent being highest in the 40-49 year age group (44% for either compared with 28% of those aged 18-29 and 40% of those aged 50-59).

Table 4.1: Consent to data linkage by type and overall and provision of details needed for linkage

Consent	Number	%
Eligible cases (completed survey)	12,268	-
Consent to initial question (n & % of all)	6,907	56.3%
Consent to education (n & % of all)	5,588	45.5%
Consent to census (n & % of all)	5,376	43.8%
Consent to either (n & % of all)	5,814	47.4%
Consent and full details provided (n & % of all)	4,253	34.7%

Table 4.2: Consent to data linkage (providing consent and valid personal details) by gender, age group, country and area deprivation

Characteristics	Education consent consent and details		Census consent and details		Any linkage consent and details		Completed survey (base)
	n	% of all	n	% of all	n	% of all	Total
Overall	4,109	33.5%	4,060	33.1%	4,253	34.7%	12,268
Man	2,059	34.8%	2,057	34.8%	2,141	36.2%	5,918
Woman	2,020	32.3%	1,974	31.5%	2,081	33.2%	6,262
Another gender identity	30	34.1%	29	33.0%	31	35.2%	88
18-29 years	1,411	26.5%	1,379	25.9%	1,468	27.6%	5,321
30-39 years	899	36.1%	881	35.4%	928	37.3%	2,489
40-49 years	943	42.2%	946	42.3%	974	43.6%	2,234
50-59 years	856	38.5%	854	38.4%	883	39.7%	2,224
England	3,540	33.6%	3,499	33.2%	3,667	34.8%	10,538
Wales	200	31.7%	198	31.4%	210	33.3%	630
Scotland	369	33.5%	363	33.0%	376	34.2%	1,100
IMD quintile 1: most deprived	1,090	37.2%	1,067	36.4%	1,126	38.4%	2,932
IMD quintile 2	839	36.0%	834	35.8%	871	37.4%	2,330
IMD quintile 3	743	35.1%	746	35.2%	770	36.4%	2,117
IMD quintile 4	675	38.5%	672	38.4%	696	39.7%	1,752
IMD quintile 5: least deprived	563	34.9%	552	34.2%	584	36.2%	1,615

Appendix

Privacy notice

This Ipsos UK Survey and your personal data

Natsal online (Ipsos) survey and biosample study (22-078651-01 and 23-070750-01)

About this study

Ipsos UK is inviting you to take part in this research on behalf of University College London (UCL) and their collaborating parties, to collect limited special category data (including data concerning health, sex life, sexual orientation, ethnicity and religion), in order to understand Britain's sexual and reproductive health as part of an ongoing large scale study called the National Survey of Sexual Attitudes and Lifestyles (Natsal). Where relevant, you will also be asked for your contact information and your consent to take part in providing a biosample or linking information from your education and/or other administrative records to the responses you have provided in the study (data linkage).

This Privacy Notice explains who we are, the personal data we will collect, how we will use it, who we will share it with, and what your legal rights are.

About Ipsos UK

- Ipsos (market research) Limited are a specialist research agency, commonly known as 'Ipsos' and are referred to in this Privacy Notice as "Ipsos UK." Ipsos UK is part of the Ipsos worldwide group of companies, and a member of the Market Research Society. As such, we abide by the Market Research Society Code of Conduct and associated regulations and guidelines.
- Ipsos is a data controller for this study which means they make the decisions about the purpose and means of processing your data.

About UCL and the Natsal collaborating parties

- UCL is higher education institution and is also a controller of the data received during this study. UCL will not receive any identifiable personal data from this research. This means that UCL will not know who has responded to the survey.
- The other Natsal collaborating parties (NatCen Social Research (NatCen, an independent research organisation), the London School of Hygiene and Tropical Medicine (LSHTM), the University of Glasgow, the MRC Biostatistics Unit at University of Cambridge and Örebro University Hospital, Sweden) are processors of the data which means they process the data on behalf of UCL These collaborating parties will not know who has responded to the survey.

What is the legal basis for processing your personal data?

- We require a legal basis to process your personal data. The survey will collect personal data and special category personal data.
- Ipsos UK's legal basis for processing is your consent to take part in this research survey and specific consents to allow processing various personal data.
- UCL, LSHTM, the University of Glasgow, MRC Biostatics Unit at University of Cambridge and Örebro University Hospital process your information on the basis of performance of a task in the public interest. The lawful basis for processing special category data is for the purpose of archiving, research and statistics.
- Ipsos UK will pass pseudonymised survey responses to UCL and the collaborating parties. This means that your survey responses cannot be linked by UCL (and the collaborating parties) to your personally identifiable information.
- If you wish to withdraw your consent at any time, please see the section below covering 'Your Rights'.

How will Ipsos UK use any personal data including survey responses you provide?

- Firstly, responding to this survey is entirely voluntary and any responses are given with your consent, which can be withdrawn at any time, while your data can still be attributed to you.
- At the end of the survey you may be asked about whether you are willing to provide a biosample (urine or vaginal swab sample). This is voluntary and your survey responses will still count as complete, even if you say no to the biosample. Consenting to be sent a kit in the post is voluntary. Returning a sample to the lab is voluntary. You will not be charged if you do not use or return the kit, and the postage costs of returning the kit to the laboratory are covered by UCL.
- At the end of the survey you may also be asked whether you consent to your survey responses being linked with educational records (collected by the government Department for Education in England, Scotland or Wales) and administrative and survey datasets (held by the relevant government agency) for research and statistical purposes. This includes any information collected through the Census. In England and Wales, this is the Office for National Statistics (ONS). In Scotland, this is the National Records of Scotland. This is voluntary and you can choose which, if any, types of data (educational, administrative or both) your survey responses are linked to. Your survey response will still count as complete, even if you say no to this element.
- At the end of the survey you may also be asked about whether you consent to be recontacted by Ipsos UK (on behalf of UCL) within 12 months of initial survey completion for a follow up interview or survey as part of the same overall research project. This is voluntary and your survey responses will still count as complete, even if you say no to this element.
- Ipsos UK will keep your personal data and responses in strict confidence in accordance with this Privacy Notice. Personal information that can be used to identify you (such as your name and address) will be stored separately from your survey responses.
- Ipsos UK will use your personal data and responses solely for research and analysis purposes.

Who we share your data with?

- Ipsos UK will be using certain supplier organisations to assist us in running the Natsal online (Ipsos) survey and its biosampling component. Ipsos UK will need to disclose your personal data to these supplier organisations for that purpose.
- The supplier organisation for all elements of the research:
    - Rackspace Limited, who host Ipsos' servers in the UK. Rackspace do not receive any of your Personal Data and are used for Ipsos' backup and storage only.
- Ipsos UK's supplier organisation for the biosample element only:
    - Formara - who print and assemble the biosample kits (only for those who agree to this element) – Ipsos will share your name, postal address, month and year of birth and details of the kit required;
    - The Delivery Group – who post the biosample kits (only for those who agree to this element). They will handle packages with your name and postal address on, but will not be provided with any other personal data);
    - TextLocal – who will send SMS reminders for the biosample kits (only for those who agree to this element and provide a mobile number) – Ipsos will share your mobile number, but will not share any other personal data);
    - Blackhawk Network – who will pay incentives for completed biosample kits (only for those who agree to this element and successfully post back a biosample). Ipsos will share your name and email address as part of a list of respondents who are eligible to receive an incentive for completing this element of the study, but will not share any other personal data.
- For the biosample element, Ipsos is working with data processors, (contracted directly by UCL, the research sponsor), to analyse the biosamples and store them securely:
    - The Doctor's Laboratory (TDL) will receive the biosample serial number, your month and year of birth, your sex (male or female) and gender, and your completed biosample;
    - UK Health Security Agency (UKHSA) will receive a new biosample serial number, your sex (male or female) and gender, and your completed biosample;
    - World Health Organization STI Reference Centre in Sweden will receive a new biosample serial number and your completed biosample;
    - Wellcome Sanger Institute in the UK will receive a new biosample serial number and your completed biosample;
    - Other certified labs for secure storage of samples. This Privacy Notice will be updated if any additional labs are involved. We will ask you separately for your consent to store what is left over from your sample after the initial tests have been done. If you agree, any remaining sample may be used for future studies, for example, when new tests become available. The tests will never involve analysis of human DNA or genetics. Stored samples will only be used for future studies if all necessary ethical approvals and permissions have been obtained in advance. The sample will not be labelled with any of your identifying information.

- For those who agree to data linkage of each kind, if ethical and governance approval is received for linkage to take place, Ipsos UK will share information (data linkage serial number, your name, address, date of birth and sex) with these organisations:
    - Department for Education (England) (if consent is given for education data linkage in England)

    - Office for National Statistics (England) (if consent is given for administrative and census data linkage in England)
    - National Records of Scotland (if consent is given for education or administrative and census data linkage in Scotland)
- For those who consent to data linkage, any administrative, education or census data about you which has been identified as part of the data linkage process will be transferred to and stored in a secure research environment. Any identifying data (name, postcode of home address, date of birth, sex) will be removed and the data will be pseudonymised (it will no longer be personally identifiable) before transfer to the secure research environment. UCL has not yet agreed which secure research environment will be used but it will be an approved setting which has been certified to the ISO27001 information security standard and conforms to the NHS Digital's Information Governance Toolkit, such as the UK Data Service SecureLab, UCL Data Safe Haven or the ONS Integrated Data Service (all based in the UK). The precise secure research environment will be added to the online Privacy Notice once known.
- For those who consent to data linkage of any administrative, education or census data, Ipsos UK will transfer your survey responses and biosample results (if provided) to the secure research environment using only the data linkage serial number so that they can be matched to the administrative, education or census data about you. No other personal information will be used at this point.
- For those who agree to recontact for future follow up research at the end of this survey, Ipsos UK may later contact you (within 12 months) with more information about any future Natsal research studies, and you can decide whether or not to take part at that stage. Your contact details will only be shared with UCL or the Natsal collaborating parties if you give separate consent for this once further detail about the follow up research study has been provided to you by Ipsos.

How will Ipsos UK ensure my personal information is secure?

- Ipsos UK takes its information security responsibilities seriously and applies various precautions to ensure your information is protected from loss, theft or misuse. Security precautions include appropriate physical security of offices and controlled and limited access to computer systems.
- Ipsos UK has regular internal and external audits of its information security controls and working practices and is accredited to the International Standard for Information Security, ISO 27001.
- Ipsos UK will ensure that any transfers of personal data to the organisations listed in the section above will be done using a secure method, encrypted to AES 256 Standard, or equivalent.

How long will Ipsos UK retain your personal data and identifiable responses?

- Ipsos UK will only retain your data in a way that can identify you for as long as is necessary to support the research project and findings. In practice, this means that once we have satisfactorily shared pseudonymised research data and conducted any follow up research, data linkage or biosample collection which you agree to, we will securely destroy your personal data from our systems.
- For this project, Ipsos UK will securely destroy your personal data from our systems as described below.

    - If you are part of the iSay or other panel, your membership details will still be retained by the panel unless you unsubscribe. The file linking your encrypted panelist identifier to the custom ID for this study will be deleted by Panel Operations three months after the quality control checks are completed and the initial data file is provided to the client (July 2024).
    - The file with contact details for biosample collection and provision of incentives will be securely destroyed within three months of the deadline for the return of the completed biosample kits (July 2024).
    - The file with contact details, date of birth and sex for data linkage will be securely destroyed within one month of the data linkage being completed or by November 2026 (whichever is sooner).
    - The file with contact details for recontact will be securely destroyed within twelve months of the closure of fieldwork (April 2025) or once recontact activities have been completed and survey data is provided to the client (whichever is sooner).
    - Serial numbers will be managed to ensure that once details are deleted, your pseudonymised data cannot be linked back to information held by the iSay or other panel using serial numbers.
- Ipsos UK's partners (the SMS supplier (TextLocal), printing supplier (Formara), and incentives supplier (Blackhawk) will securely delete the data within one month of the final contacts/incentives being sent.
- Any government departments or government agencies responsible for data linkage will be asked to securely delete any personal data from the file prior to transferring the administrative data to the secure research environment. Once quality checks are completed they will securely delete all identifiable records provided by Ipsos UK (name, address, date of birth, and sex) and confirm that the data is deleted.
- Pseudonymised survey data (which will no longer contain personally identifiable information), biosample results, biosamples (urine or vaginal swab) and linked administrative data will be held permanently in an appropriate setting in a way which cannot identify you (see next section for locations).

Where will your personal data be held & processed?

- All of your identifiable personal data used and collected for this survey will be stored and processed in the United Kingdom and the European Union.
- Pseudonymised data (which will no longer include personally identifiable information) containing your survey responses, biosample results (if provided), data from follow up survey or interview (if provided) will be stored permanently by UCL and the collaborating partners, and in an approved repository such as UK Data Archive where it can be accessed by authorised researchers. This pseudonymised data may then be transferred to countries outside the United Kingdom and the European Union.
- Your administrative census and education data (if you give consent to data linkage) will be stored permanently with your survey responses and biosample results (if provided) in a pseudonymised form (which will no longer include personally identifiable information) in a secure research environment which has been certified to the ISO27001 information security standard and conforms to NHS Digital's Information Governance Toolkit, such as the UK Data Service SecureLab, UCL Data Safe Haven or the ONS Integrated Data Service (all based in the UK). This Privacy Notice will be updated to provide details of which secure environment the data are being held in.
- Your biosamples (urine or vaginal swab) will be stored securely in approved laboratories in a way which cannot identify you (without identifying information such as name or month or year of birth). This would be The Doctor's Laboratory (TDL), UK Health Security Agency (UKHSA), World Health Organization STI Reference Centre in Sweden, Wellcome Sanger Institute in the UK or other approved labs for secure storage of samples. This Privacy Notice will be updated if any additional labs are involved.

Your rights.

- You have the right to access your personal data within the limited period that Ipsos UK and its partners hold your personal data at an identifiable level (please refer to the specific data retention periods communicated in the ***How long will Ipsos UK retain your personal data and identifiable responses?*** section of this privacy notice).
- Providing responses to this survey is entirely voluntary and is done with your consent. You have the right to withdraw your consent at any time whilst we hold your personal data at an identifiable level (please refer to the specific data retention periods communicated in the ***How long will Ipsos UK retain your personal data and identifiable responses?*** section of this privacy notice).
- You also have the right to request from us the deletion or erasure of the personal data we hold about you.
- You also have the right to rectify any incorrect or out-of-date personal data about you which we may hold.
- If you want to exercise your rights, please contact us at the below address.
- If you have any complaints, we would appreciate if you could give us an opportunity to resolve any issues, by first contacting us as set out below. You have the right to lodge a complaint with the UK's Information Commissioner's Office (ICO), if you have concerns on how we have processed your personal data. You can find details about how to contact the Information Commissioner's Office at https://ico.org.uk/global/make-a-complaint.

How can I contact Ipsos UK about this survey and/or my personal data?

- **Contact Ipsos UK:**

Email: NatsalSurvey@ipsosresearch.com with **Natsal online (Ipsos) survey and biosample study (22-078651-01 and 23-070750-01)** in the email subject line

Post: **Natsal online (Ipsos) survey 22-078651-01**
Data Protection Officer
Compliance Department
Ipsos (market research) Limited
3 Thomas More Square
London E1W 1YW
United Kingdom

Biological sample kit cover letter

Thank you for taking part in the National Study of Health and Relationships (Natsal) 2024

Please collect your sample

Dear Participant,

Thank you for taking part in Natsal and agreeing to provide a biological sample. This will either be three vaginal swab samples or a urine sample, depending on what you agreed in the survey.

Enclosed in this envelope is everything you need to collect your sample. Before collecting your sample, please make sure you read the **instructions**. The instructions will tell you how to collect your sample using the **collection kit** and how to package it.

Please ensure you write the date and time when the sample was taken in Section 1 of the enclosed **dispatch form** and place the form in the envelope.

Once you have collected your sample, please place your sample into the envelope and post it as soon as possible using any Royal Mail post box. We really appreciate your time to do this.

As a thank you for providing a sample, if you provided an email address, we will send you a £10 e-voucher.

For more information please visit **https://www.natsal.ac.uk/**. If you have any problems please call Ipsos on Freephone **0800 151 0184**.

Thank you,

Natsal Study team

Urine information leaflet

Thank you for completing the questionnaire. We would also like your help with the next part of the study that involves you collecting a urine sample.

We very much hope you will agree to give a sample, as this is an important part of the study. However, you don't have to give a sample if you prefer not to.

Why give a urine sample?

The sample will be tested for some infections that can be transmitted through sexual activity, as well as other microbes that are harmless and live in the genital tract. It is important to know how many people in Britain have different sexually transmitted infections (STIs) to help plan for sexual health services. To do this, we need to get a true picture of the levels of infections by asking participants of the Natsal study if they would be willing to provide a sample for testing.

Who is being asked to take part?

We are asking people taking part in Natsal to provide a sample, even if they are not sexually active or think they are at no risk of STIs. It is important that as many people take part as possible, as this will help us understand the true overall picture of STIs in the population of Britain.

What if I have never had sex?

We are still interested in a sample from you if you have never had sex.
Your sample helps us understand what is happening in the general population.

What do I have to do?

You will be sent in the post a kit that contains instructions and a container to collect the first part of your urine stream. This should be done in a bathroom and will only take a few minutes. You will be provided with a pre-paid envelope and instructions about how to pack and post your sample in a Royal Mail post box. If you have any questions, please contact Freephone 0800 151 0184 or email UK-PA-NatsalSurvey@ipsosresearch.com.
To thank you for your co-operation, a voucher will be given to everyone who provides a sample.

What will my sample be tested for?

The sample will be sent to The Doctors Laboratory (TDL), UK Health Security Agency (UKHSA) and other certified laboratories and will be tested for the following:

Chlamydia and Gonorrhoea: These are infections that can be passed on through sexual contact. They can be treated with antibiotics, but if not treated can lead to problems such as infertility and can be passed on to sexual partners.

Human papillomavirus (HPV): This is an infection that can be passed on through sexual contact. HPV can cause genital warts or, in rare cases, can lead to cervical or other types of cancer. A vaccine to protect against common types of HPV is available.

Trichomonas: This is an infection that can be passed on through sexual contact. It may be more common in women but can also be found in men and can be treated with antibiotics.

Mycoplasma genitalium (MGen): This is an infection that can be passed on through sexual contact. However, we need more information about how common it is. At present, only people who have symptoms are tested and treated with antibiotics for this infection.

Microbiome: This is the term used for all microbes that live in the human genital tract. We want to know how the microbiome varies by age, gender, and sexual behaviour.

The tests above will **never** involve analysis of human DNA or human genetics. Sample collection and storage is controlled by the Human Tissue Act (2004). The samples may be sent to Natsal investigators and collaborators, including at the World Health Organization STI Reference Centre in Sweden and the Wellcome Sanger Institute in the UK.

For an up-to-date list of laboratories involved please refer to the online privacy notice which can be found here: https://cdn.ipsosinteractive.com/projects/S23056728/Privacy_notice.htm.

What happens to the rest of my sample?

The questionnaire will ask you separately for consent to store what is left over from your sample after the tests listed above have been done. If you agree, any remaining sample may be used for future studies investigating infections in the population, for example, when new tests become available. Stored samples will only be used for future studies if all necessary ethics and research approvals have been obtained in advance.

As before, any new studies will not involve analysis of human DNA or human genetics. The sample will not be labelled with your identifying information and researchers who want to use the stored sample will have to apply for ethical and research permission. If you do not agree to the rest of your sample being stored for future studies, Ipsos will inform the laboratory and it will be destroyed. You may still give a sample even if you do not wish any remaining sample to be stored for future use.

What happens to the results of these tests?

The test results will be linked to the answers given in your questionnaire and the information will be used for research purposes only. The laboratory will not know your name or address. The data will be kept strictly confidential, and no results will ever be traced to you or given to you. All data will be dealt with according to the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR). Please see https://cdn.ipsosinteractive.com/projects/S23056728/Privacy_notice.htm for more details on how the information you provide will be used.

Why will my test results not be returned?

We will not return individual results to you because: (1) the tests are good enough to help us understand what is happening with these infections at a population level, but they may not be as accurate as the ones used by the NHS to make a diagnosis. Testing through the NHS is the best way to find out if you have an infection that needs treatment; (2) we are testing for some infections and harmless microbes that do not need treatment; (3) not returning results means that we do not need to link your sample to your name and address.

What if I change my mind about providing a urine sample?

You can withdraw your consent to processing of your urine sample at any point in time while there is still a link between your name and details and the barcode used on the samples by contacting Ipsos using the details below. Ipsos will inform the laboratory and the sample will be destroyed. Once we unlink your name and details from the barcode used on the samples you will no longer be able to withdraw consent.

What should I do if I am worried about having a sexually transmitted infection (STI) or about my sexual health?

If you have concerns about STIs or sexual health, we suggest you seek professional advice. Free testing for STIs, as well as free confidential advice about sexual health, cervical screening, family planning and contraception, can be obtained online or from your local sexual health or Genitourinary Medicine (GUM) clinic, your GP, family planning clinics, as well as some pharmacies and youth centres.

The following website will allow you to find your nearest sexual health service: **https://nhs.uk/service-search/sexual-health**

The UK Health Security Agency (UKHSA – previously part of Public Health England) recommends sexual health check-ups for sexually active people every time they change partner. This is because STIs may be present without a person knowing or having symptoms.

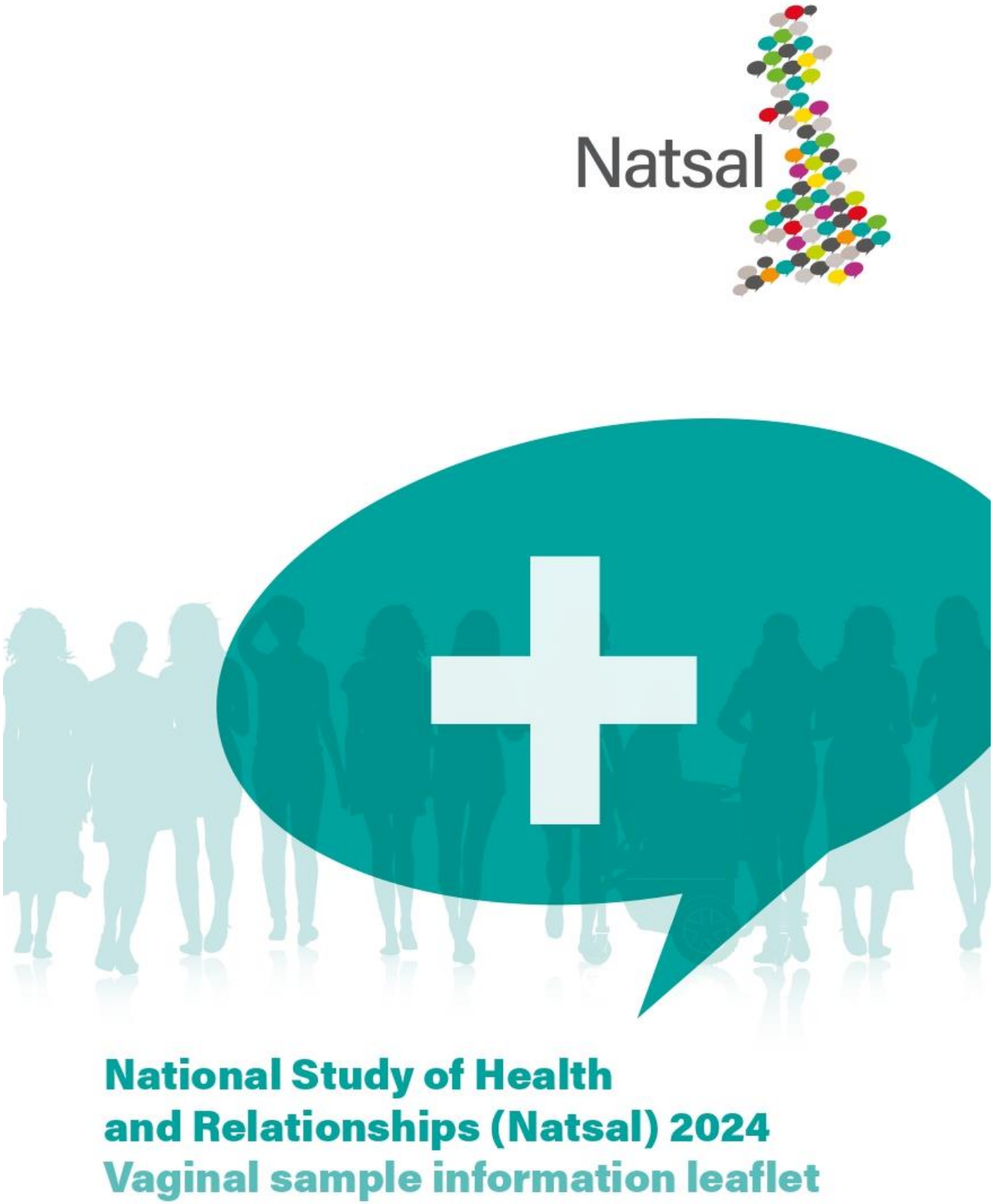
Your co-operation is very much appreciated

If you have any questions, you can contact Ipsos by calling Freephone **0800 151 0184** or **UK-PA-NatsalSurvey@ipsosresearch.com**

https://www.ipsos.com/en-uk

Our team is from Ipsos, University College London (UCL), the London School of Hygiene and Tropical Medicine (LSHTM) and the University of Glasgow.

Vaginal sample information leaflet



Thank you for completing the questionnaire. We would also like your help with the next part of the study that involves you collecting vaginal samples.

We very much hope you will agree to give these samples, as they are an important part of the study. However, you don't have to give a sample if you prefer not to.

Why give vaginal samples?

The samples will be tested for some infections that can be transmitted through sexual activity, as well as other microbes that are harmless and live in the genital tract. It is important to know how many people in Britain have different sexually transmitted infections (STIs) to help plan for sexual health services. To do this, we need to get a true picture of the levels of infections by asking participants of the Natsal study if they would be willing to provide a sample for testing.

Who is being asked to take part?

We are asking people taking part in Natsal to provide samples, even if they are not sexually active or think they are at no risk of STIs. It is important that as many people take part as possible, as this will help us understand the true overall picture of STIs in Britain.

What if I have never had sex?

We are still interested in samples from you if you have not had sex. Your samples help us understand what is happening in the general population. There is no risk to self-collecting samples. The swabs used to collect the samples are small and smooth.

What do I have to do?

You will be sent in the post a kit that contains instructions and containers to collect vaginal samples. This part of the study involves you inserting a small cotton swab approximately 2 inches (5 cm) into the vaginal opening and gently swirling it around, before placing it into a collection tube. This should be repeated two more times, for a total of three swabs. This should be done in a bathroom or somewhere else private and will only take a few minutes. You will be provided with a pre-paid envelope and instructions about how to pack and post your samples yourself in a Royal Mail post box. If you have any questions, please contact Freephone 0800 151 0184 or email UK-PA-NatsalSurvey@ipsosresearch.com. To thank you for your co-operation, a voucher will be given to everyone who provides these samples.

What will my samples be tested for?

The samples will be sent to The Doctors Laboratory (TDL), UK Heath Security Agency (UKHSA) and other certified laboratories and will be tested for the following:

Chlamydia and Gonorrhoea: These are infections that can be passed on through sexual contact. They can be treated with antibiotics, but if not treated can lead to problems such as infertility and can be passed on to sexual partners.

Human papillomavirus (HPV): This is an infection that can be passed on through sexual contact. HPV can cause genital warts or, in rare cases, can lead to cervical or other types of cancer. A vaccine to protect against common types of HPV is available.

Trichomonas: This is an infection that can be passed through sexual contact. It may be more common in women but can also be found in men and can be treated with antibiotics.

Mycoplasma genitalium (MGen): This is an infection that can be passed through sexual contact. However, we need more information about how common it is. At present, only people who have symptoms are tested and treated with antibiotics for this infection.

Microbiome: This is the term used for all microbes that live in the human genital tract. We want to know how the microbiome varies by age, gender and sexual behaviour.

The tests above will **never** involve analysis of human DNA or human genetics. Sample collection and storage is controlled by the Human Tissue Act (2004). The samples may be sent to Natsal investigators and collaborators, including at the World Health Organization STI Reference Centre in Sweden and the Wellcome Sanger Institute in the UK. For an up-to-date list of laboratories involved please refer to the online privacy notice found at https://cdn.ipsosinteractive.com/projects/S23056728/Privacy_notice.htm.

What happens to the rest of my samples?

The questionnaire will ask you separately for consent to store what is left of your samples after the tests listed above have been done. If you agree, any remaining samples may be used for future studies investigating infections in the population, for example, when new tests become available. Stored samples will only be used in future studies if all necessary ethics and research approvals have been obtained in advance.

As before, any new studies will not involve analysis of human DNA or human genetics. The samples will not be labelled with your identifying information and researchers who want to use the stored samples will have to apply for ethical and research permission. If you do not agree to the rest of your samples being stored for future studies, Ipsos will inform the laboratory and they will be destroyed. You may still give the samples even if you do not wish any remaining samples to be stored for future use.

What happens to the results of these tests?

The test results will be linked to the answers given in your questionnaire and the information will be used for research purposes only.

The laboratory will not know your name or address. The data will be kept strictly confidential, and no results will ever be traced to you or given to you. All data will be dealt with according to the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR). Please see https://cdn.ipsosinteractive.com/projects/S23056728/Privacy_notice.htm for more information on how the information you provide will be used.

Why will my test results not be returned?

We will not return individual results to you because: (1) the tests are good enough to help us understand what is happening with these infections at a population level, but they may not be as accurate as the ones used by the NHS to make a diagnosis. Testing through the NHS is the best way to find out if you have an infection that needs treatment; (2) we are testing for some infections and harmless microbes that do not need treatment; (3) not returning results means that we do not need to directly link your sample to your name and address.

What if I am on my period or menstruating?

We are still interested in samples from you if you are on your period and the tests will not be affected. However, if you prefer, you can collect a sample a few days later when your period has stopped.

What if I am pregnant?

We are still interested in samples from you and there is no risk to self-collecting samples if you are pregnant. The swabs used to collect the samples are small and smooth.

What if I change my mind about providing vaginal samples?

You can withdraw your consent to processing of your vaginal samples at any point in time while there is still a link between your name and details and the barcode used on the samples by contacting Ipsos using the details below. Ipsos will inform the laboratory and the samples will be destroyed. Once we unlink your name and details from the barcode used on the samples you will no longer be able to withdraw consent.

What should I do if I am worried about having a sexually transmitted infection (STI) or about my sexual health?

If you have concerns that you may have been infected with an STI, we suggest you seek professional advice.

Free testing for STIs, as well as free confidential advice about sexual health, cervical screening, family planning and contraception, can be obtained online or from your local sexual health or Genitourinary Medicine (GUM) clinic, your GP, family planning clinics, as well as some pharmacies and youth centres. The following website will allow you to find your nearest sexual health service: **https://www.nhs.uk/service-search/sexual-health**.

The UK Health Security Agency (UKHSA - previously part of Public Health England) recommends sexual health check-ups for sexually active people every time they change partner. This is because STIs may be present without a person knowing or having symptoms.

Your co-operation is very much appreciated

If you have any questions, you can contact Ipsos by calling Freephone **0800 151 0184** or **UK-PA-NatsalSurvey@ipsosresearch.com**

https://www.ipsos.com/en-uk

Our team is from Ipsos, University College London (UCL), the London School of Hygiene and Tropical Medicine (LSHTM) and the University of Glasgow.

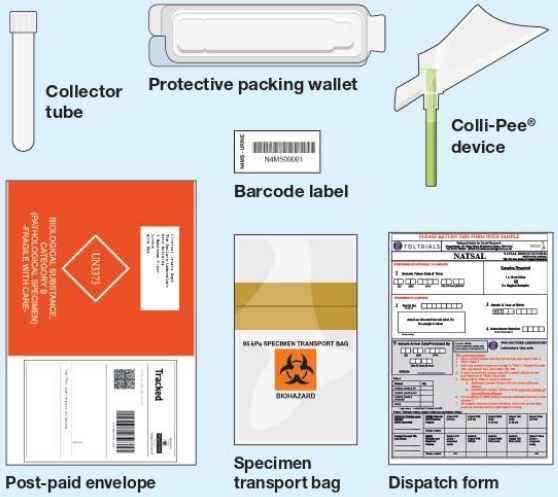
Urine sample collection instructions

Urine sample collection: instructions for collection after interview

Please read these instructions first, slowly and carefully, the whole way through **before collecting** your sample.

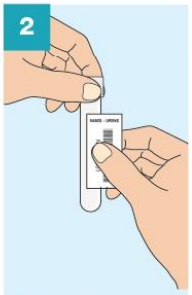
Natsal

Your sample collection pack contains

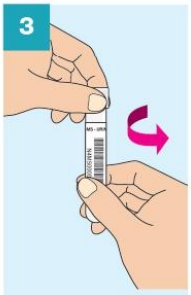


Please follow steps 1-14

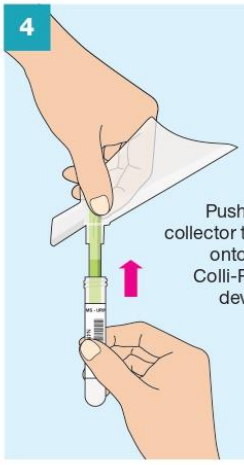
1 Wash your hands using soap and water and dry them.



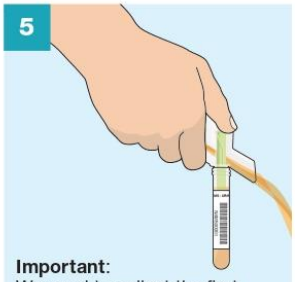
2 Apply the barcode label vertically to the collector tube as shown.



3 Carefully unscrew the cap of the collector tube.



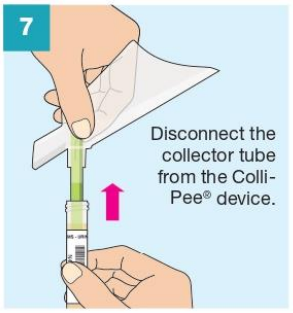
4 Push the collector tube onto the Colli-Pee® device.



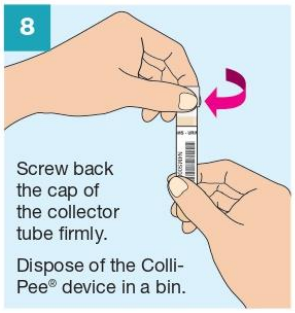
5 **Important:** We need to collect the first part of your urine stream. The Colli-Pee® device will collect the correct volume of urine. Once the collector tube is full, excess urine will flow into the toilet through the other end of the Colli-Pee®.

6 Find a comfortable position, with the Colli-Pee® device in one hand, hold it as shown, close to your body.

Proceed to start passing urine into the Colli-Pee®, remember any excess will flow out of the Colli-Pee® into the toilet, so you do not need to stop midstream.

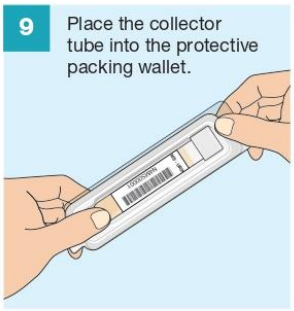


7 Disconnect the collector tube from the Colli-Pee® device.



8 Screw back the cap of the collector tube firmly.

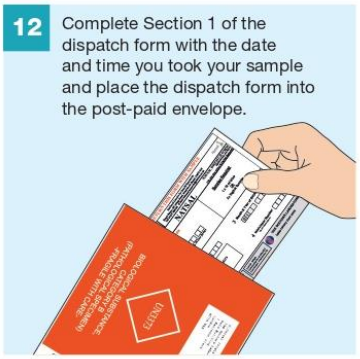
Dispose of the Colli-Pee® device in a bin.



9 Place the collector tube into the protective packing wallet.

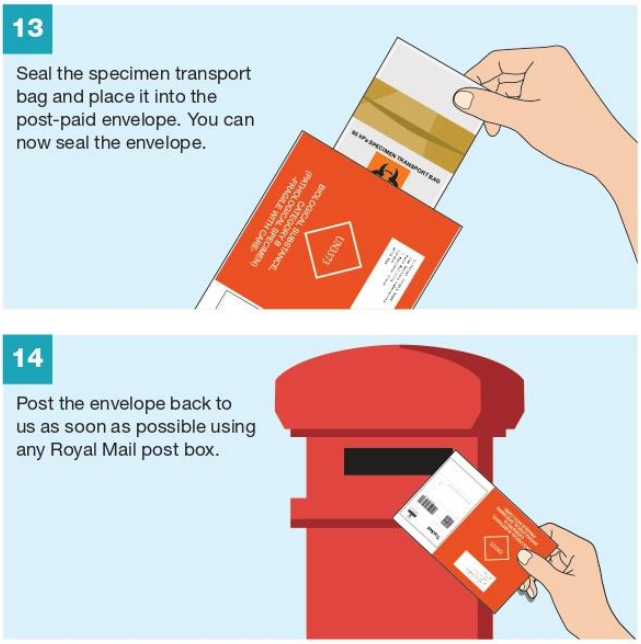
10 Place the protective packing wallet into the specimen transport bag.

11 Wash your hands using soap and water and dry them.



12 Complete Section 1 of the dispatch form with the date and time you took your sample and place the dispatch form into the post-paid envelope.

Please turn over for further instructions



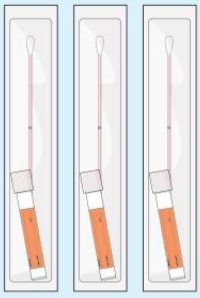
Vaginal sample collection instructions

Vaginal swab sample collection: instructions for collection after interview

Please read these instructions first, slowly and carefully, the whole way through **before collecting** your sample.

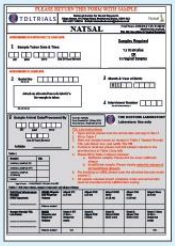
Natsal

Your sample collection pack contains

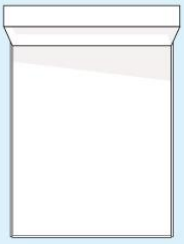


Packets containing swab and collection tube x 3

Specimen transport bag



Dispatch form



Test kit box

Post-paid envelope

Security seal

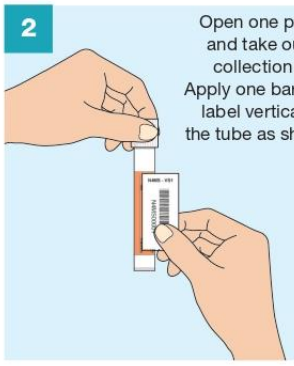
Barcode label x 3

Please follow steps 1-18

1

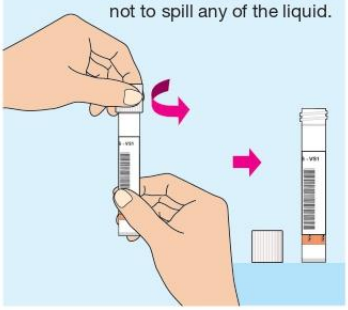
Wash your hands using soap and water and dry them.

2



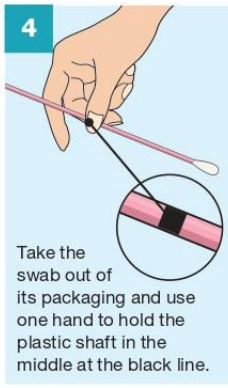
Open one packet and take out the collection tube. Apply one barcode label vertically to the tube as shown.

3



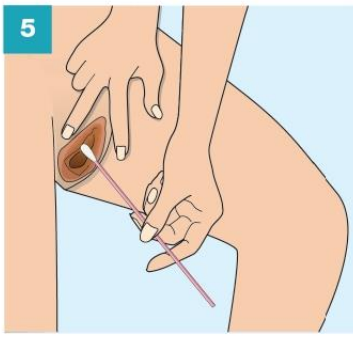
Carefully unscrew the cap and place the tube upright on a flat surface, taking care not to spill any of the liquid.

4



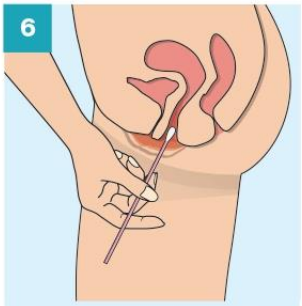
Take the swab out of its packaging and use one hand to hold the plastic shaft in the middle at the black line.

5



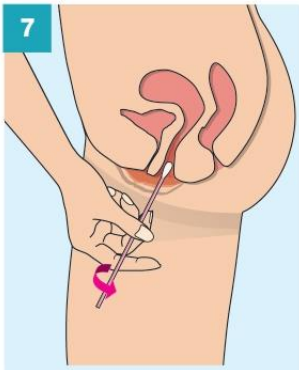
With your legs apart, use your other hand to gently spread the skin outside your vagina. Insert the cotton tip of the swab into the vagina. Point the tip towards your lower back and relax your muscles.

6



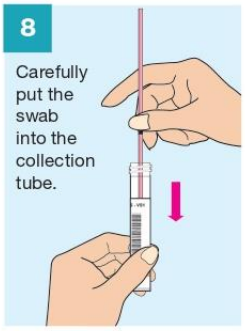
Gently insert the swab about 5 cm into your vagina. Your fingers on the black line will stop you going in too far. If the swab does not slide easily, gently rotate it as you put it in. If it is too difficult, do not attempt to continue.

7



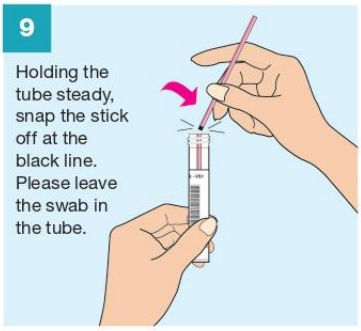
Rotate the swab for 5 seconds (count to 5 slowly), making sure it touches the walls of your vagina. Carefully pull out the swab.

8



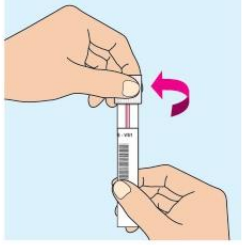
Carefully put the swab into the collection tube.

9



Holding the tube steady, snap the stick off at the black line. Please leave the swab in the tube.

10

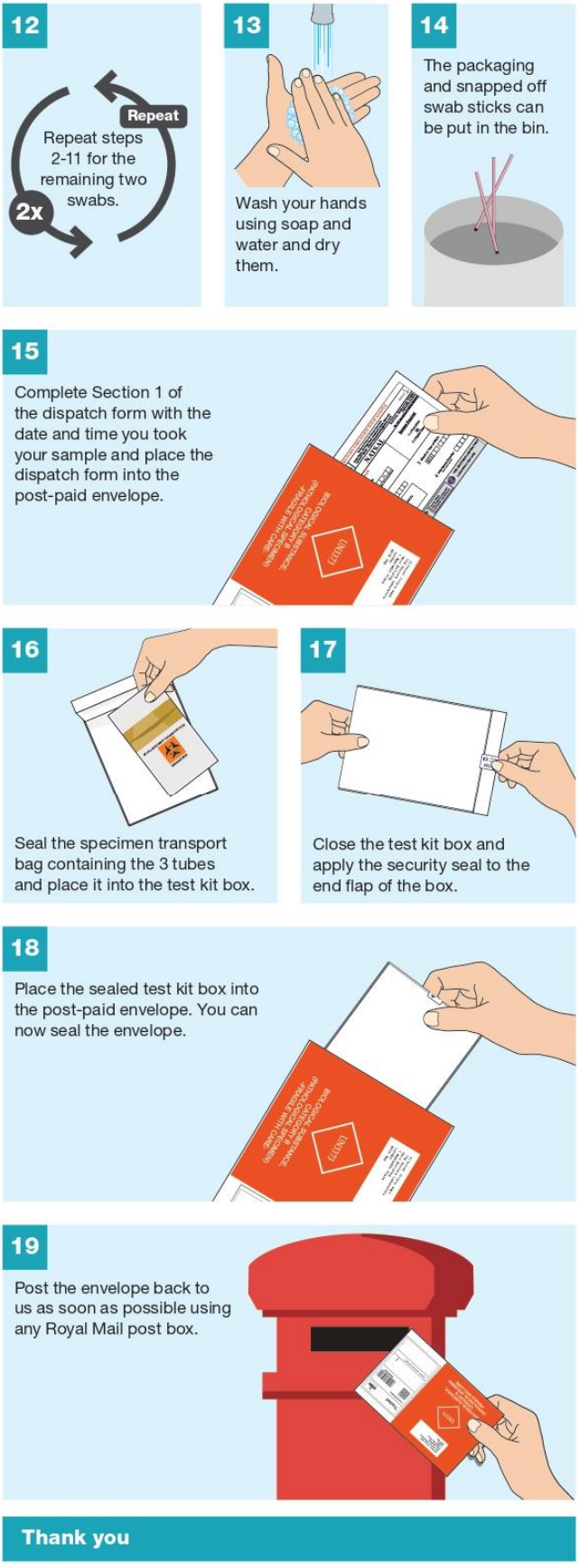


Screw the cap back onto the tube tightly.

11

Place the tube into the specimen transport bag. Do not seal the bag until you have taken all 3 swabs.

Please turn over for further instructions



Data linkage information leaflet

National Study of Health and Relationships (Natsal) 2024
Data linkage information leaflet

Thank you for completing the questionnaire. We would also like your help with the next part of the study that involves adding information from your health, education and/or other administrative records to the answers you have provided in the survey – this is a process called data linkage.

You don't have to agree to data linkage if you prefer not to but, of course, we very much hope you will agree, as this is an important part of this study.

Why consent to data linkage?

Your time is important to us and as a result we have tried to limit the number of questions we ask in this study, particularly around your education and background information. Data linkage will allow us to find out more about how experiences during school and your circumstances are related to the topics covered in the survey.

What am I being asked to give permission for?

If you agree to data linkage, we plan to link your survey answers to **education information** which is routinely collected by the government department for education in England, Scotland or Wales.

This information includes:

- Records about your attendance.
- Test and exam results.
- Special educational needs and disabilities
- Eligibility for free school meals.
- University and college admissions.
- Educational outcomes

Administrative and survey datasets held by the relevant government agency for research and statistical purposes, which includes any information collected through the Census. In England and Wales, this is the **Office for National Statistics (ONS)**. In Scotland, this is the **National Records of Scotland**. Census data covers some topics we have already asked about, but in greater detail.

How does data linkage work?

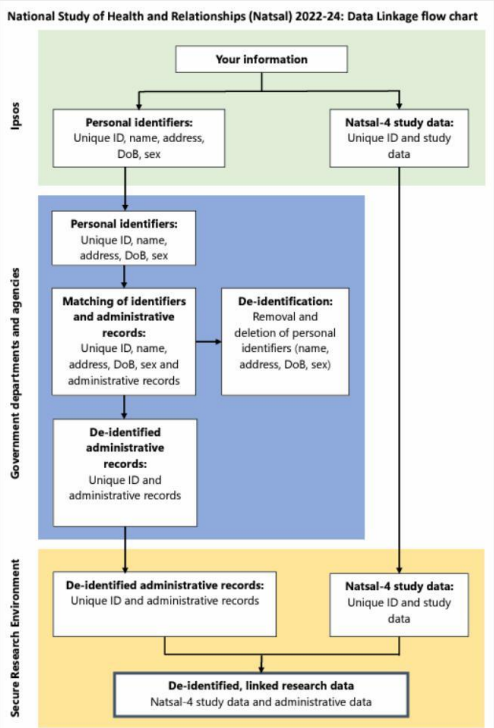
1 Ipsos will securely transfer your unique ID and personal identifiers (name, address, sex and date of birth) to the government departments and agencies that hold your education, administrative and other survey records. These personal identifiers will be used to match your unique ID to your education, administrative and other survey records.

2 Once your records have been identified, your personal identifiers will be removed. Your unique ID and education, administrative and/or other survey records will be transferred to a secure research environment. Details of the secure research environment can be found in the Privacy Notice.

3 Ipsos will securely transfer your unique ID and study data to the secure research environment where the information from your education, administrative and other survey records will be linked to your survey data using your unique ID.

4 The linked information containing survey data and administrative information is made available in the secure research environment to approved users. Your personal identifiers are never included in the linked data so researchers analysing the data never see them. Your personal identifiers will be deleted by Ipsos and the government agencies once the linkage has been completed. This will be by November 2026 at the latest.

5 You can view a diagram of this process here and more details are provided in the Privacy Notice.



What will the research be used for and who will use it?

These linked data will be used as a resource by approved professional, academic and social policy researchers for research, educational and statistical purposes only. Access to the data by these researchers will only be granted through a separate application and training process. Permission will only be given to those who can explain the potential impact of the research and its wider value for society.

The information will be stored on a secure research server, provided under restricted access arrangements which make sure that the information is used responsibly and safely.

Names, addresses, and exact date of birth will never be included in the research dataset, nor any published results, and so no individual will be identifiable from the research.

Furthermore, all information collected and linked to the National Study of Health and Relationships (Natsal) 2024 will be treated by all parties/organisations in the strictest confidence and in accordance with the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR). A Privacy Notice providing information on the organisations that hold this data, perform the linkage, and how your data are then used and stored is available at https://cdn.ipsosinteractive.com/projects/S23056728/Privacy_notice.htm

What if I change my mind?

You can withdraw your consent to data linkage while your data are still identifiable but not once the data have been matched and identifiers removed.

To withdraw consent, contact Ipsos using the details below.

Contact us for further information

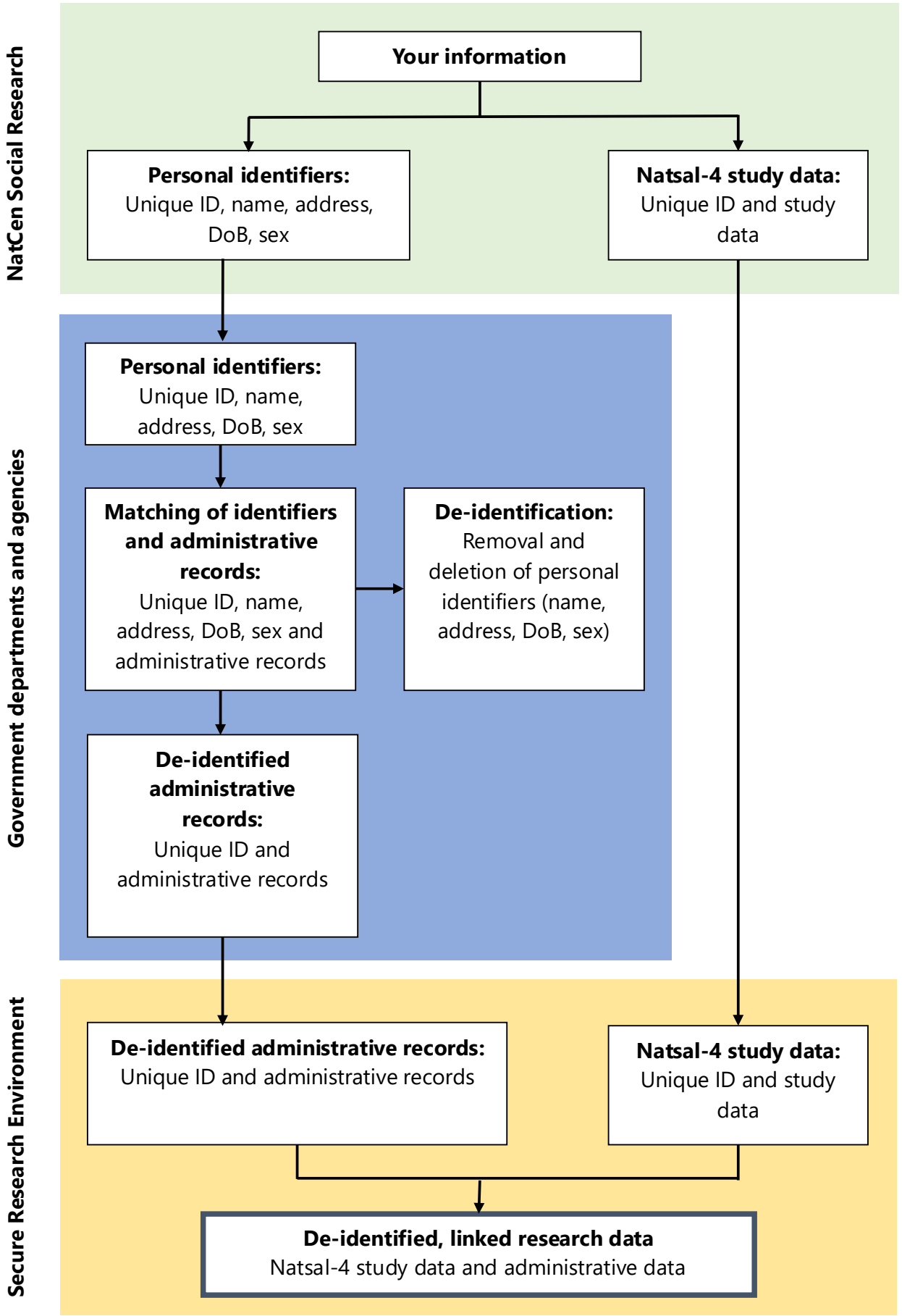
If you have any questions or would like to discuss further, you can call Ipsos on Freephone **0800 151 0184** or emailing **UK-PA-NatsalSurvey@ipsosresearch.com**

You can also write to Ipsos, 3 Thomas More Square, London E1W 1YW

The Natsal Research team is from Ipsos, University College London, the London School of Hygiene and Tropical Medicine and the University of Glasgow.

Data linkage flow

National Study of Health and Relationships (Natsal) 2022-23: Data Linkage flow chart



Our standards and accreditations

Ipsos' standards and accreditations provide our clients with the peace of mind that they can always depend on us to deliver reliable, sustainable findings. Our focus on quality and continuous improvement means we have embedded a "right first time" approach throughout our organisation.

ISO 20252

This is the international specific standard for market, opinion and social research, including insights and data analytics. Ipsos UK was the first company in the world to gain this accreditation.

Market Research Society (MRS) Company Partnership

By being an MRS Company Partner, Ipsos UK endorse and support the core MRS brand values of professionalism, research excellence and business effectiveness, and commit to comply with the MRS Code of Conduct throughout the organisation & we were the first company to sign our organisation up to the requirements & self-regulation of the MRS Code; more than 350 companies have followed our lead.

ISO 9001

International general company standard with a focus on continual improvement through quality management systems. In 1994 we became one of the early adopters of the ISO 9001 business standard.

ISO 27001

International standard for information security designed to ensure the selection of adequate and proportionate security controls. Ipsos UK was the first research company in the UK to be awarded this in August 2008.

The UK General Data Protection Regulation (UK GDPR) and the UK Data Protection Act 2018 (DPA)

Ipsos UK is required to comply with the UK General Data Protection Regulation (GDPR) and the UK Data Protection Act (DPA). These cover the processing of personal data and the protection of privacy.

HMG Cyber Essentials

Cyber Essentials defines a set of controls which, when properly implemented, provide organisations with basic protection from the most prevalent forms of threat coming from the internet. This is a government-backed, key deliverable of the UK's National Cyber Security Programme. Ipsos UK was assessed and validated for certification in 2016.

Fair Data

Ipsos UK is signed up as a "Fair Data" company by agreeing to adhere to twelve core principles. The principles support and complement other standards such as ISOs, and the requirements of data protection legislation.

For more information

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