



Public Health
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The impact of the COVID-19 pandemic on prevention, testing, diagnosis and care for sexually transmitted infections, HIV and viral hepatitis in England

Appendix

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Data sources

Data source	Description	Data availability	Metrics
GUMCAD STI Surveillance System	Disaggregate patient-level data submitted by specialist (Level 3) and non-specialist (Level 2) SHSs [i] on consultations, tests, vaccinations and diagnoses	Data to end of June 2020	<ul style="list-style-type: none"> • consultations undertaken by SHSs • vaccination provision in MSM • STI and HIV tests • STI and HIV diagnoses • STI and HIV positivity
CTAD Chlamydia Surveillance System	Disaggregate patient-level dataset that collects chlamydia data from all laboratories commissioned by Local Authorities or the NHS to carry out chlamydia testing. This report includes data on chlamydia tests and diagnoses in non-specialist (Level 1 and 2) SHSs	Data to end of June 2020	<ul style="list-style-type: none"> • chlamydia tests • chlamydia diagnoses

i Specialist (Level 3) SHSs refers to genitourinary medicine (GUM) and integrated GUM/sexual and reproductive health (SRH) services. Non-specialist (Level 1 and 2) SHSs refers to Sexual and Reproductive Health (SRH) services, young people's services, internet services, termination of pregnancy services, pharmacies, outreach, general practice, and other community-based settings. Details on the levels of sexual health service provision are provided in Appendix B of the Standards for the Management of STIs (British Association for Sexual Health and HIV)

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Data source	Description	Data availability	Metrics
The HIV and AIDS Reporting System (HARS)	Consultation based, disaggregate dataset which is submitted on a quarterly basis, and reported by all outpatient HIV service providers	Data to end of September 2020	<ul style="list-style-type: none"> • consultations by consultation medium
National HIV and Syphilis Self-Sampling Service	Monthly disaggregate anonymised dataset containing information on all online service users ordering and returning kits through the national framework	Data to end of August 2020	<ul style="list-style-type: none"> • HIV and syphilis tests • HIV and syphilis reactivity
Second Generation Surveillance System (SGSS)	Disaggregate individual-level laboratory data on diagnoses of infectious diseases and antimicrobial resistance	Data to end of August 2020	<ul style="list-style-type: none"> • <i>Shigella</i> spp. diagnoses • HAV, HBV, HCV diagnoses
Sentinel Surveillance of Blood-borne Viruses (SSBBV)	Disaggregate individual-level data with patient identifiers on all laboratory test results for hepatitis viruses extracted from the laboratory information system in a sentinel network of laboratories in England (up to 23, including reference laboratories). Positive and negative results are extracted so denominator available	Data to end of June 2020	<ul style="list-style-type: none"> • HAV, HBV, HAV tests • HAV, HBV, HCV diagnoses • HAV, HBV, HCV positivity • ethnicity assigned using validated software • setting of test

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Data source	Description	Data availability	Metrics
Hepatitis C Patient Registry and Treatment Outcome System	Disaggregate individual-level data with patient identifiers on patients initiating treatment for HCV collected from 22 NHS Operational Delivery Networks	Data to end of August 2020	<ul style="list-style-type: none"> HCV treatment: patient demographics, year of diagnosis, risk factors, source of referral, liver disease stage, co-infection, co-morbidities, past treatment, treatment type, treatment duration, treatment outcome
Unlinked Anonymous Survey (UAM) of people who inject drugs (PWID)	Annual anonymised unlinked bio-behavioural cross-sectional survey among PWID attending drug services in England, Wales and Northern Ireland	Preliminary 2020 survey data up to September	<ul style="list-style-type: none"> user experience of access to harm reduction, BBV testing and HCV treatment services pre and post COVID-19
National Institute for Health Research Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections	An online community-based survey to assess the impact of the COVID-19 pandemic response on sexual behaviour and service use among MSM	Survey conducted over a three-week period between the 23rd June and 14th July	<ul style="list-style-type: none"> sexual behaviour and service access in MSM during lockdown

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Data reported and missing data

Please note that data in this report are provisional. Due to COVID-19 related pressures, reporting deadlines have been relaxed and some reporters have postponed their submissions.

Data presented here may differ from previous and future publications due to updated submissions received from reporters and further de-duplication, and quality assurance processes.

For STIs and HIV, data represent the number of consultations, tests and diagnoses reported, not the number of people accessing services, tested or diagnosed. For data on the number of consultations undertaken by SHSs, consultations exclusively for HIV care and consultations by prisoners have been excluded. For viral hepatitis, data represent the number of tests, the number of people tested for positivity, and the number of people diagnosed or treated.

For STIs and HIV, male gender includes transgender (trans) men; female gender includes transgender (trans) women. The GUMCAD STI Surveillance System is being updated to include more detailed information on gender identity, including those who identify as non-binary (not exclusively male or female). Data on sexual risk are sourced from GUMCAD only (CTAD does not include sexual risk). Heterosexual, MSM and women who have sex with women (WSW) reflect the sexual risk reported at the date of the patient consultation. MSM includes men who reported being gay or bisexual. WSW includes women who reported being lesbian.

Data represent STI/HIV tests and diagnoses made at SHSs located in England (ie where people access care and not where they reside). For hepatitis, tests in SSBBV are based on the site of test (ie where service is located); diagnoses in SGSS are based on where the patient resides; and HCV treatment is based on the ODN (where they access care).

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GUMCAD STI Surveillance System

Data on consultations, vaccinations, tests and diagnoses submitted by SHSs to the GUMCAD STI Surveillance System are incomplete for 2020. The table below shows the percentage of submissions received and missing by month, as well as the estimated percentage of consultations that are missing.

	Jan	Feb	Mar	Apr	May	Jun
Submissions received (%)	86	86	86	66	66	66
Submissions missing (%)	14	14	14	34	34	34
Estimated consultations missing (%)	14	19	30	65	61	49

Excludes data from enhanced general practices

Estimated consultations missing (%): the 2019 monthly average is used as a substitute for 2020 submissions which are outstanding or where the 2020 consultations reported are less than the 2019 average; it is assumed that 2020 consultations are lower than normal due to COVID-19 related pressures

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CTAD Chlamydia Surveillance System

Data on chlamydia tests and diagnoses submitted by laboratories that provide NHS or Local Authority commissioned chlamydia testing are incomplete for 2020. The table below shows the percentage of submissions received and missing by month, as well as the estimated percentage of chlamydia tests/diagnoses that are missing.

	Jan	Feb	Mar	Apr	May	Jun
Submissions received (%)	89	89	89	89	89	89
Submissions missing (%)	11	11	11	11	11	11
Estimated tests missing (%) - all ages	5.4	5.2	5.3	7.1	7.5	7.7
Estimated diagnoses missing (%) - all ages	3.8	3.9	3.7	4.3	5.3	6.0
Estimated tests missing (%) - 15 to 24 year olds	4.1	3.9	3.8	5.0	6.8	7.5
Estimated diagnoses missing (%) - 15 to 24 year olds	2.9	3.0	3.1	4.1	5.6	6.8

% of chlamydia tests/diagnoses missing has been calculated by dividing the monthly average for chlamydia tests/diagnoses for those labs with missing data by the total number of chlamydia tests/diagnoses in a particular month.

Monthly average has been calculated by taking the average from the three previous months. Where data were missing for 2020, the calculations were completed using data from 2019 to avoid an underestimation. For example, for January 2020, the average from October to December 2019 has been calculated. For February 2020, the average is calculated based on November 2019, December 2019 and January 2019.

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HIV and AIDS Reporting System (HARS)

Not all HIV specialised services have had capacity to report data to HARS in 2020. Data presented for consultations from HARS is based on 90 (56% of 160) services with submitted data between January to September 2019 and January to September 2020.

Second Generation Surveillance System (SGSS)

Approximately 200 laboratories routinely submit data to SGSS. Data from SGSS is subject to delays in laboratories submitting their laboratory data. Data from July and August may be incomplete due to delayed reporting of new laboratory reports, not only as a result of declines in diagnoses.

SGSS data presented for hepatitis A do not completely take into account results of the confirmatory testing at the Virus Reference Department (VRD) for more recent months' analysis; in addition, they have not gone through the full quality controls. Thus, false positive laboratory reports and some reports from outside England and Wales that would not normally be published may still be included.

Sentinel surveillance of blood borne virus testing (SSBBV)

COVID-19 restrictions have prevented the collection and submission of data from two London laboratories. The team actively visit one hospital site to collate the data which has not been possible due to COVID-19 restrictions. Full data quality assurance processes have not been completed.

SSBBV hepatitis data are de-duplicated allowing test results for each individual to be linked over time. An individual can test in more than one service type. The proportion positive is calculated using number of individuals. Number of tests includes all tests until an individual is diagnosed positive, no tests are counted after a positive test.

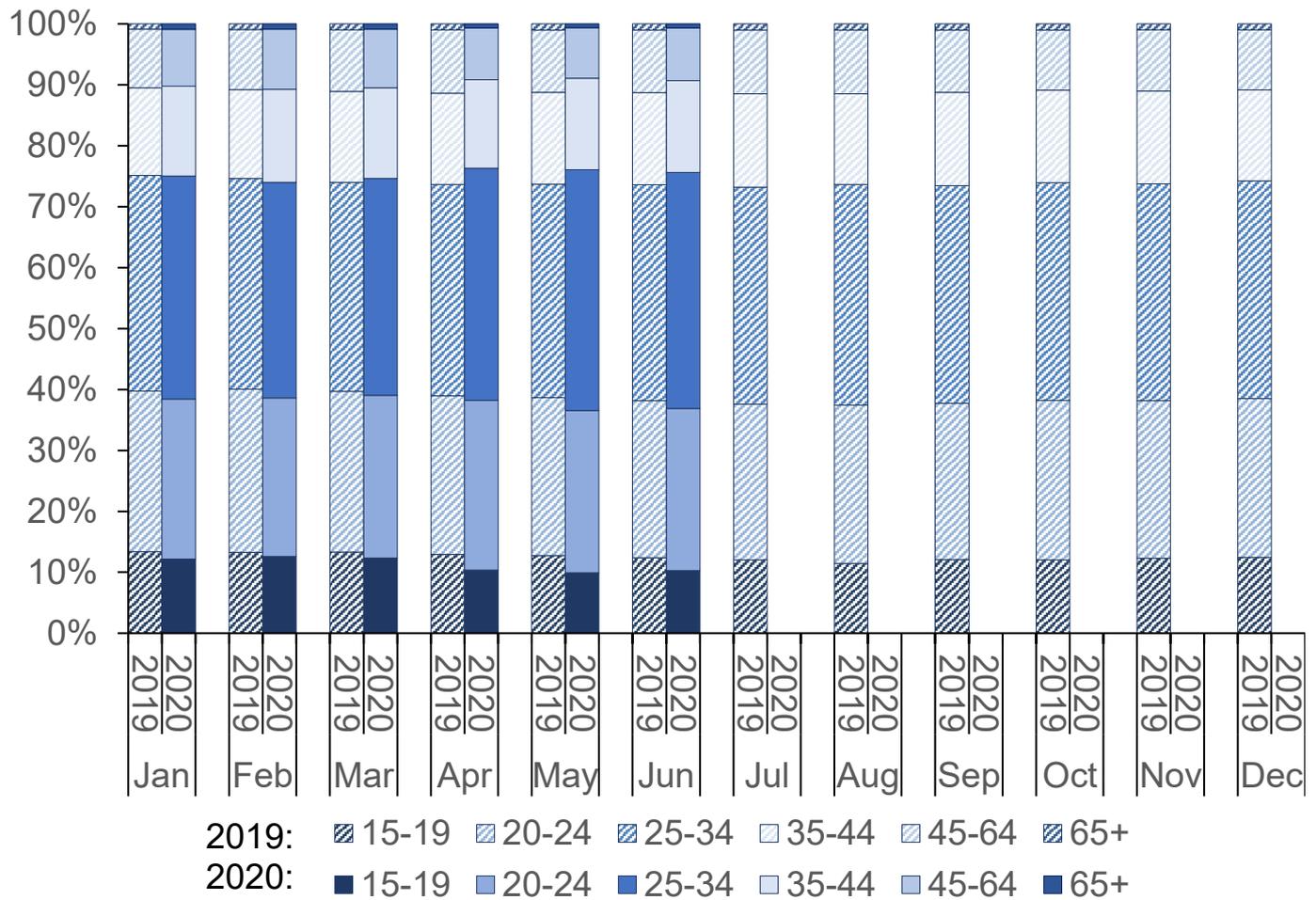
Hepatitis C patient registry and treatment outcome system

HCV treatment data has been partially processed and is presented deduplicated, but full quality assurance process have not been completed. Data from August may be incomplete due to delayed reporting of treatment initiations, not only declines in treatment initiations.

Additional analyses

Consultations undertaken by SHSs

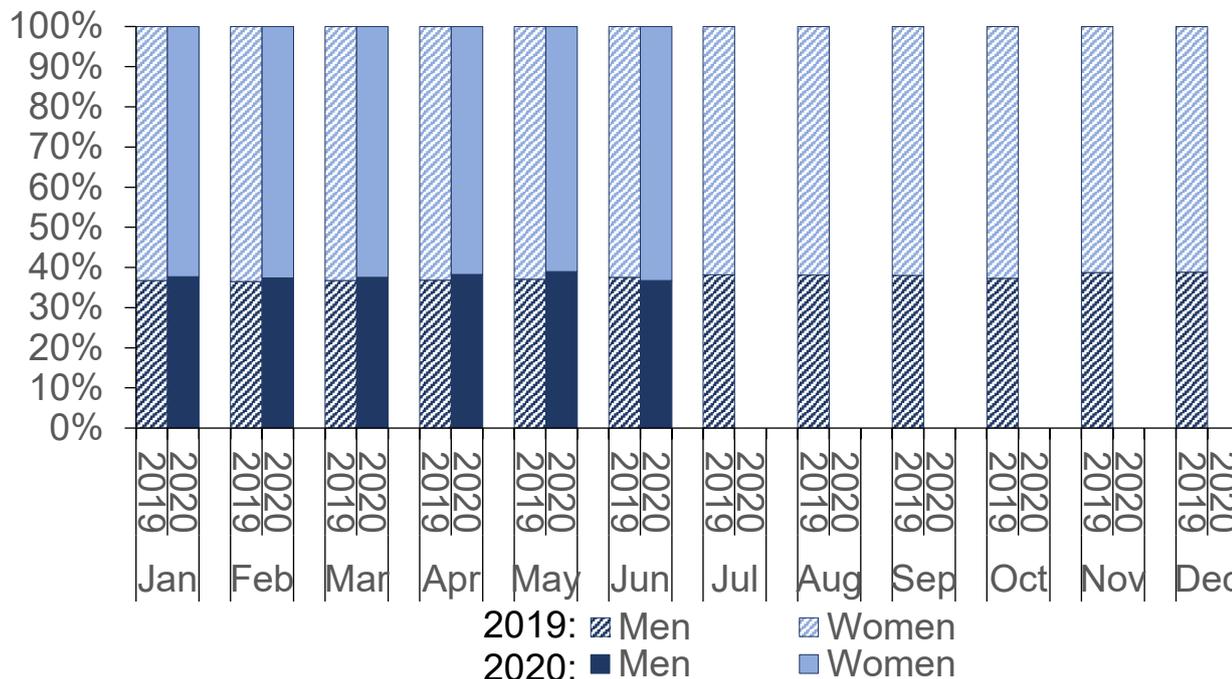
Appendix Figure 1: Proportion of consultations undertaken by sexual health services in England by age group, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

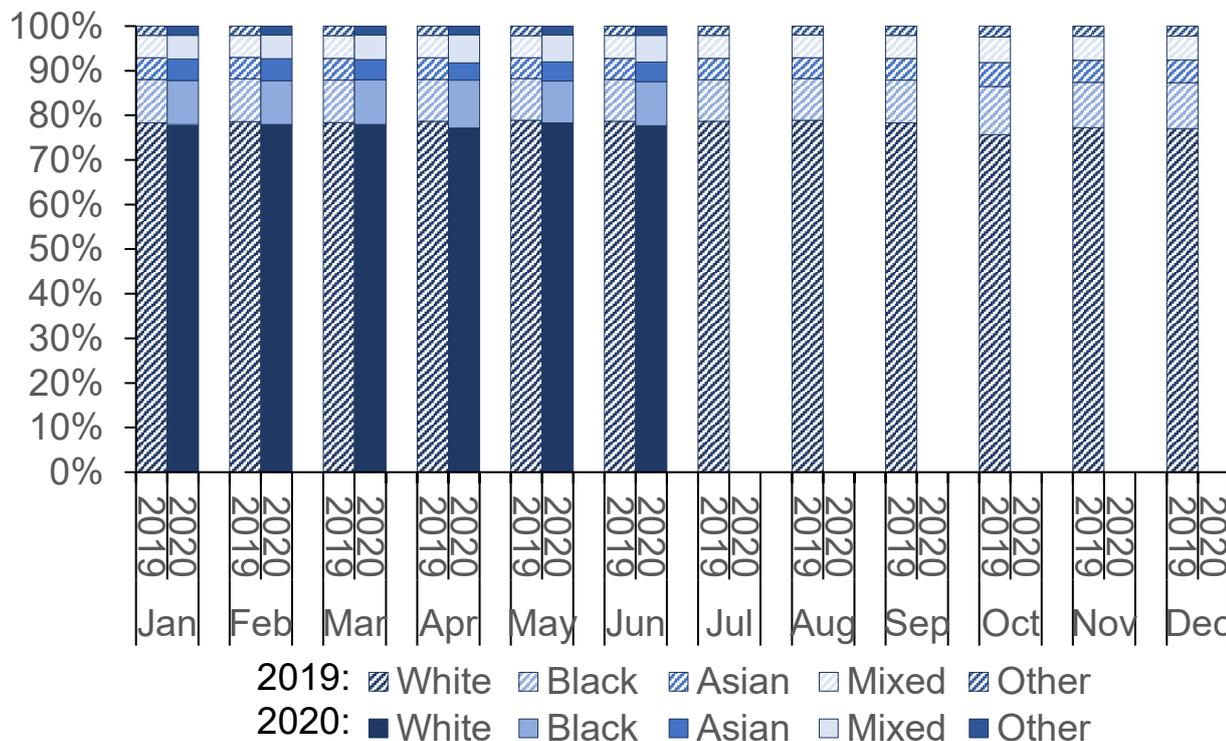
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Appendix Figure 2: Proportion of consultations undertaken by sexual health services in England by gender, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

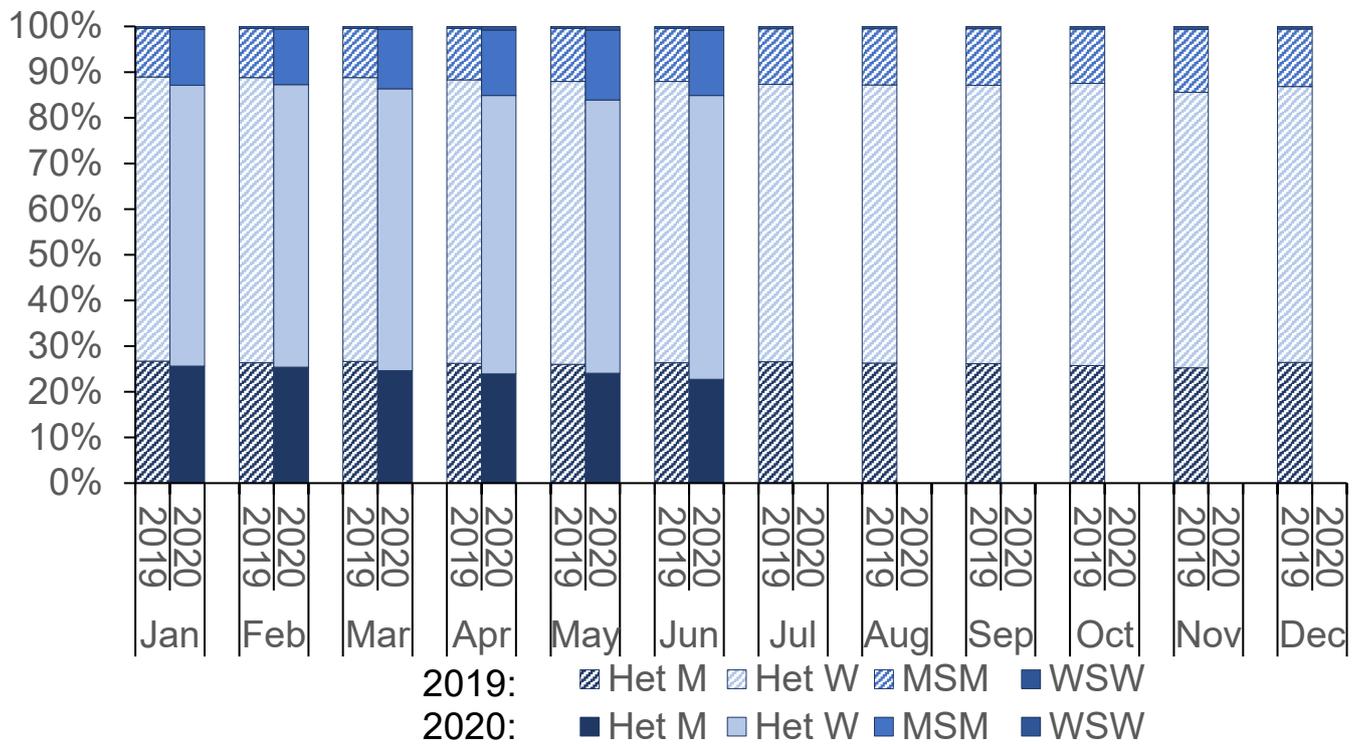
Appendix Figure 3: Proportion of consultations undertaken by sexual health services in England by ethnic group, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

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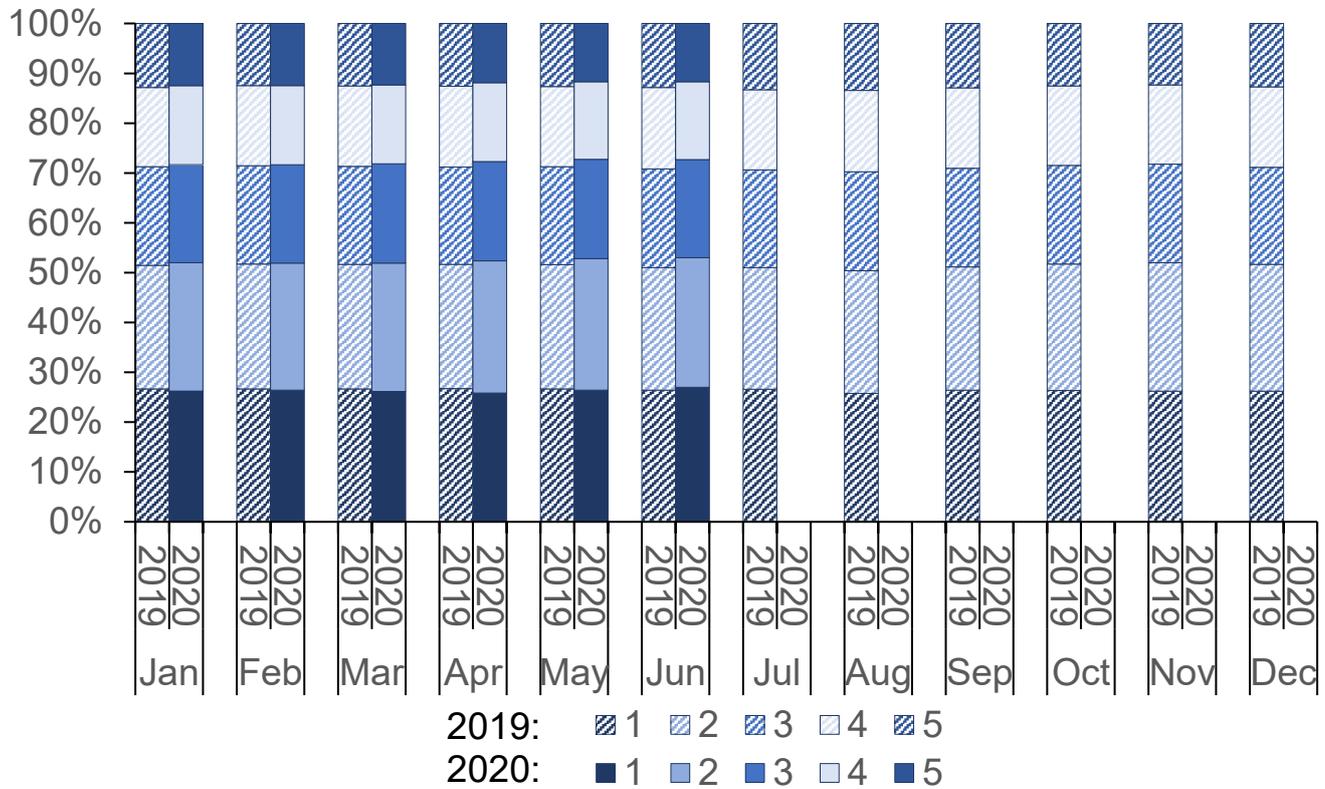
Appendix Figure 4: Proportion of consultations undertaken by sexual health services in England by sexual risk, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. Het M: Heterosexual men; Het F: Heterosexual women; MSM: Men who have sex with men; WSW: Women who have sex with women

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Appendix Figure 5: Proportion of consultations undertaken by sexual health services in England by Index of Multiple Deprivation (1 is most deprived), January 2019 to June 2020

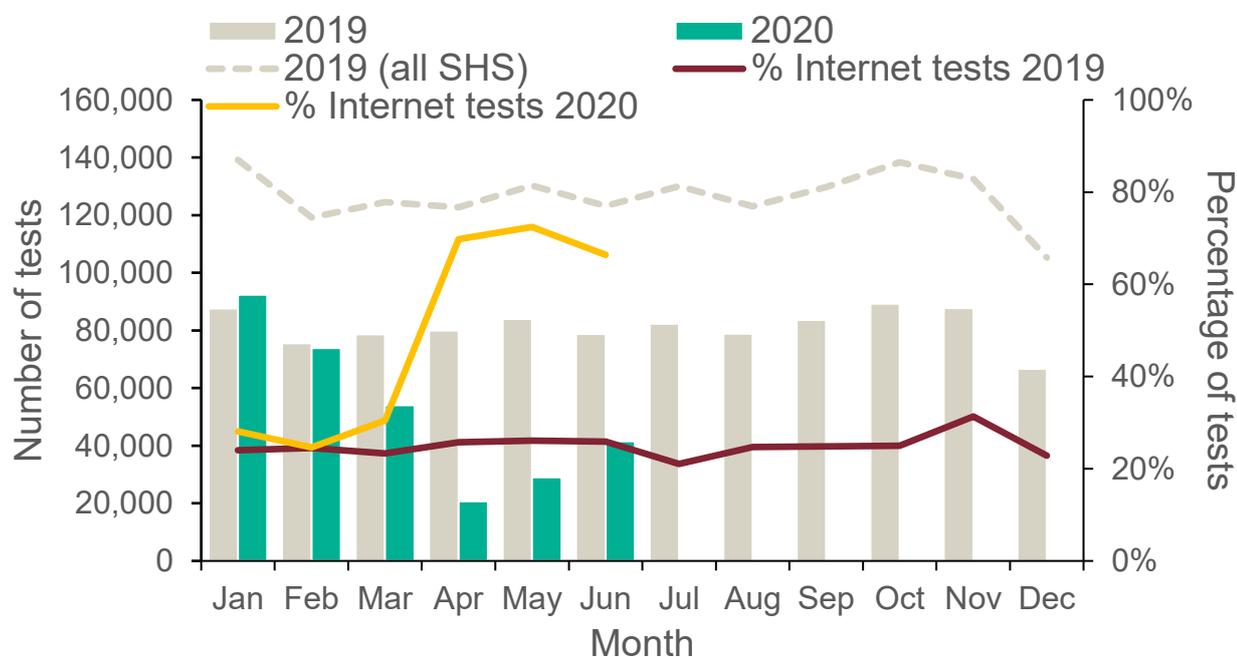


The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

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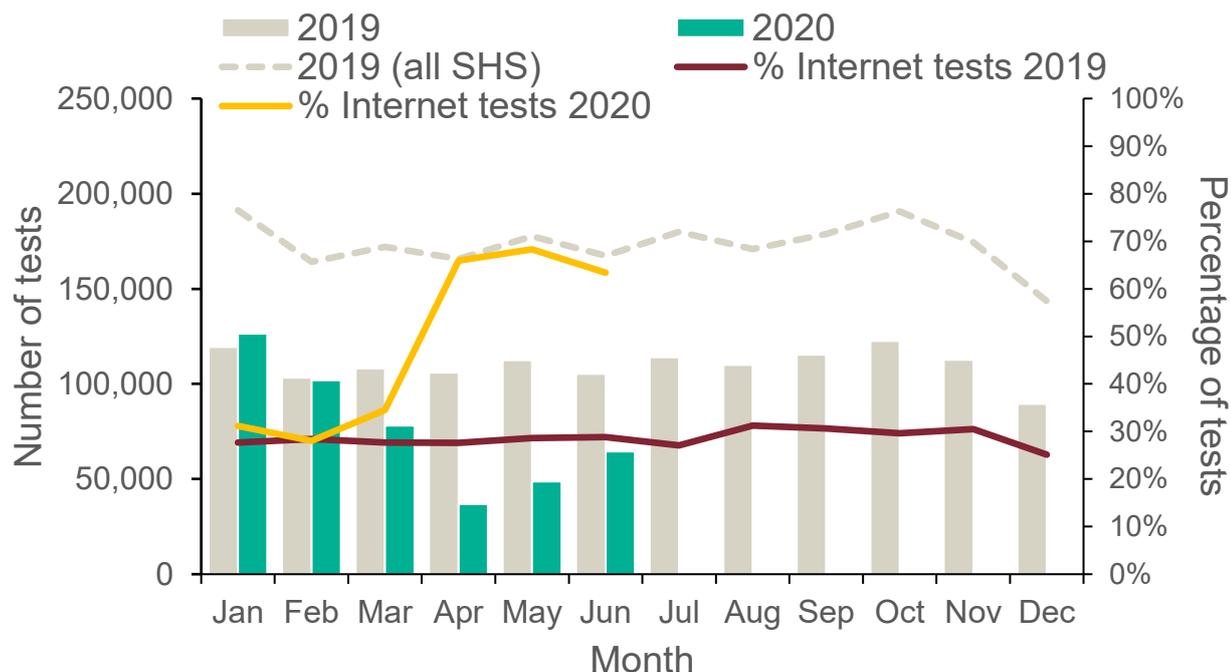
Testing for STIs and HIV

Appendix Figure 6: Number of syphilis tests, and proportion accessed via internet services, at sexual health services in England, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. The dotted line represents the total number of tests reported in each month in 2019.

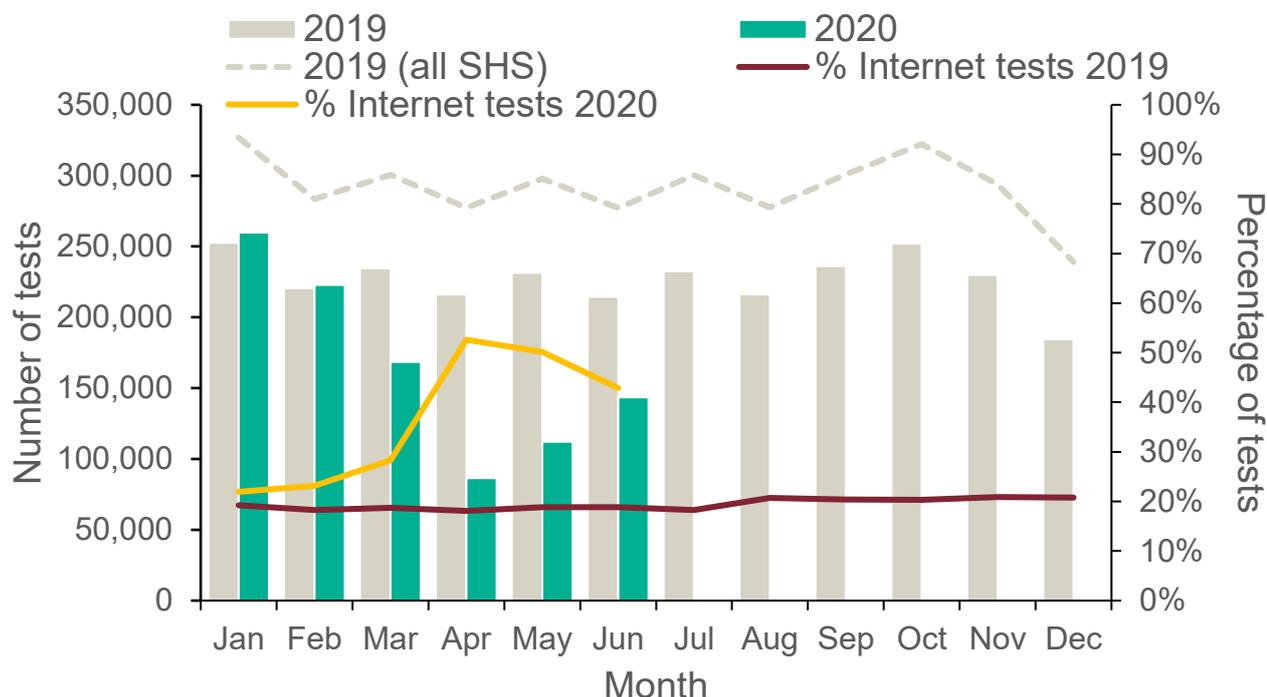
Appendix Figure 7: Number of gonorrhoea tests, and proportion accessed via internet services, at sexual health services in England, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. The dotted line represents the total number of tests reported in each month in 2019.

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Appendix Figure 8: Number of chlamydia tests, and proportion accessed via internet services, at sexual health services in England, January 2019 to June 2020



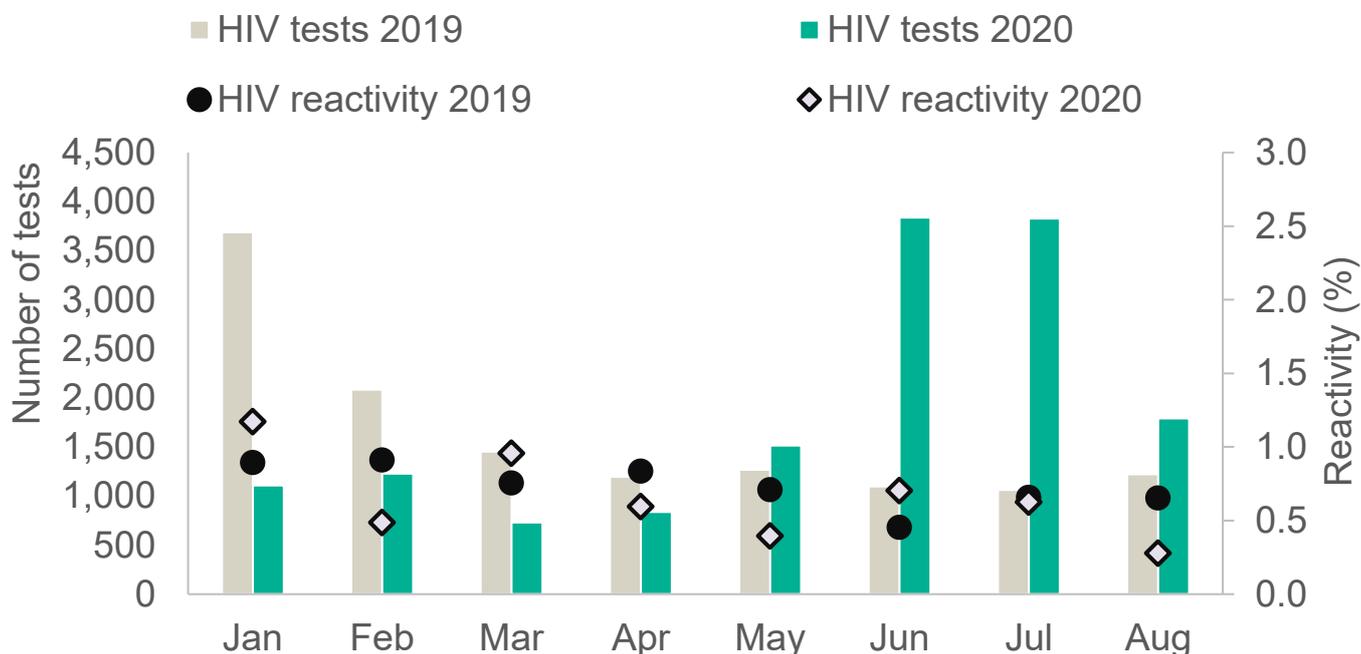
The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. The dotted line represents the total number of tests reported in each month in 2019.

Appendix Table 1: Kits ordered and tested during the Break the Chain: Time to Test Campaign, National HIV and Syphilis Self-Sampling Service, June to August 2020

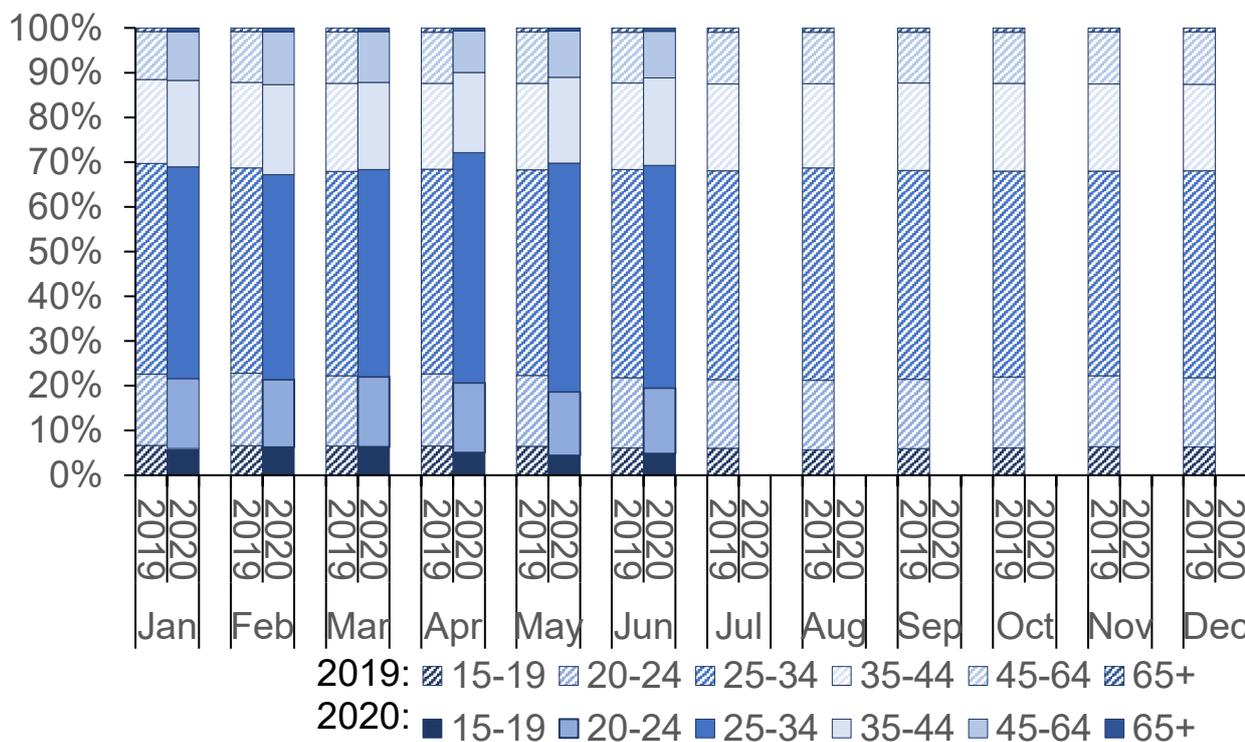
	June 2020	July 2020	August 2020	Total
Kits Ordered	8,741	637	-	9,378
Kits Returned	2,987	2,759	182	5,928
Overview				
Return rate	63.2%			
HIV Reactive (rate)	39 (0.7%)			
Syphilis Reactive (rate)	109 (2.1%)			

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Appendix Figure 9: HIV tests and reactivity, National HIV and Syphilis Self-Sampling Service, January to August 2019 and January to August 2020



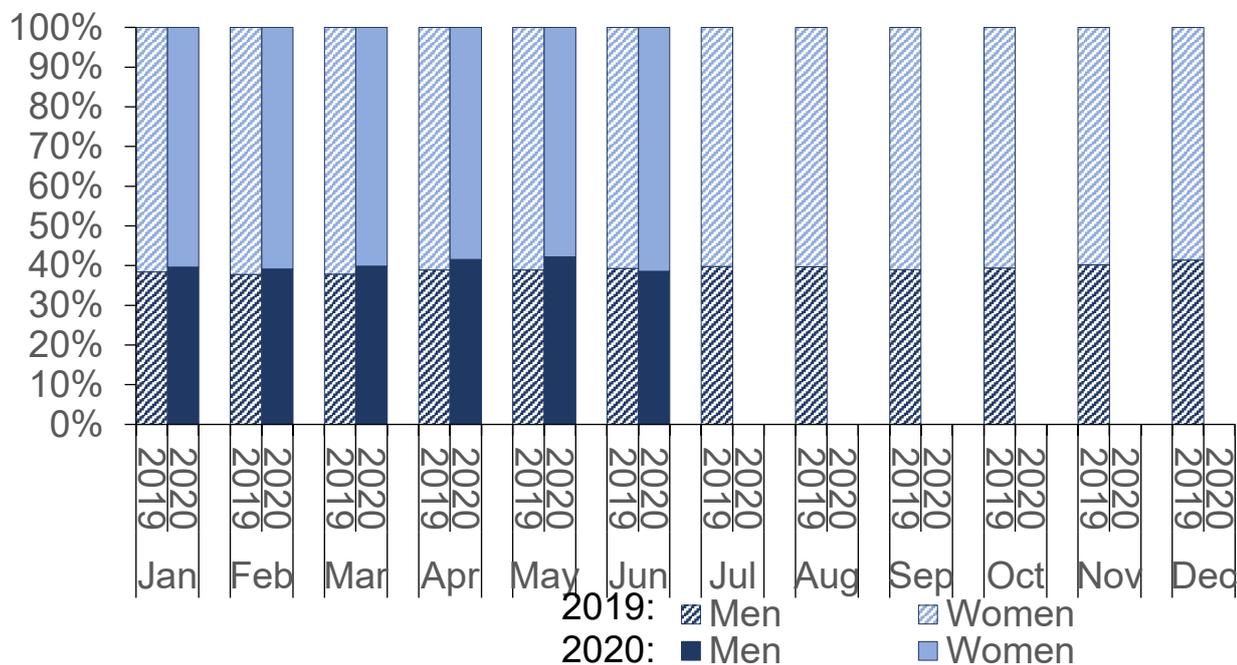
Appendix Figure 10: Proportion of bacterial STI tests (excluding chlamydia in <25 year olds) at sexual health services in England by age group, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

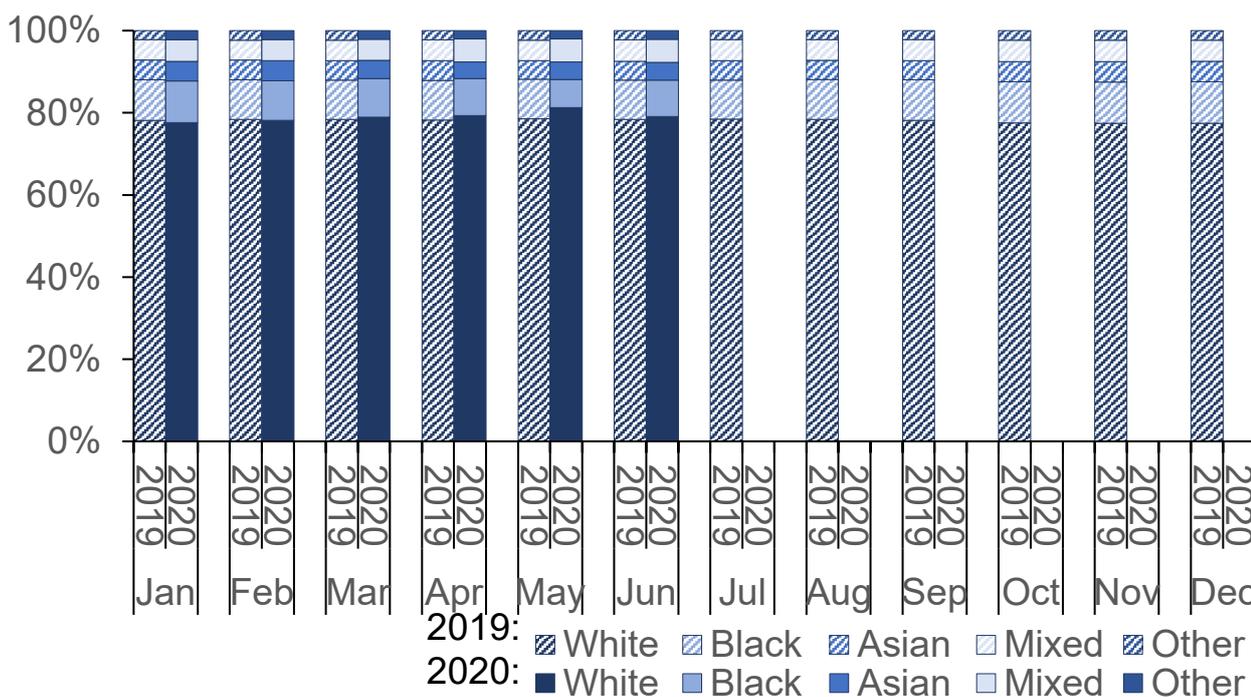
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Appendix Figure 11: Proportion of bacterial STI tests (excluding chlamydia in <25 year olds) at sexual health services in England by gender, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

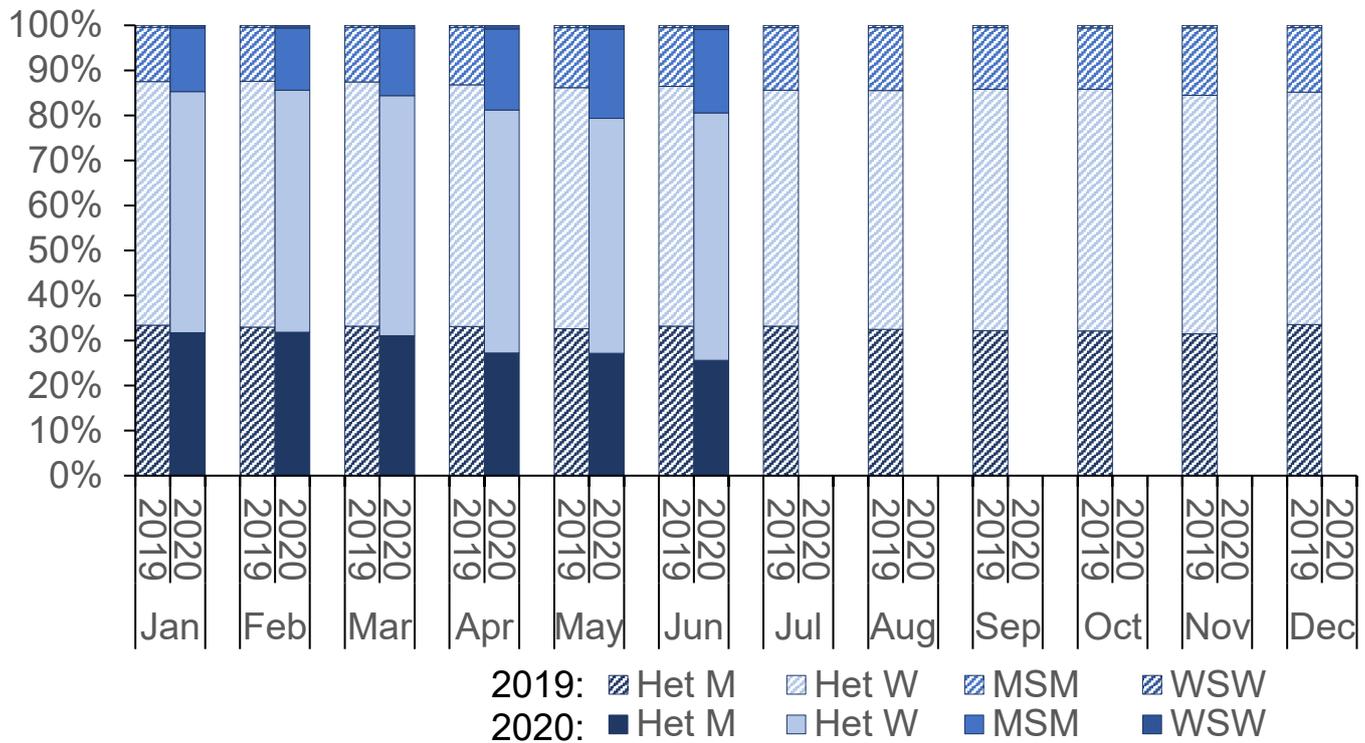
Appendix Figure 12: Proportion of bacterial STI tests (excluding chlamydia in <25 year olds) at sexual health services in England by ethnic group, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

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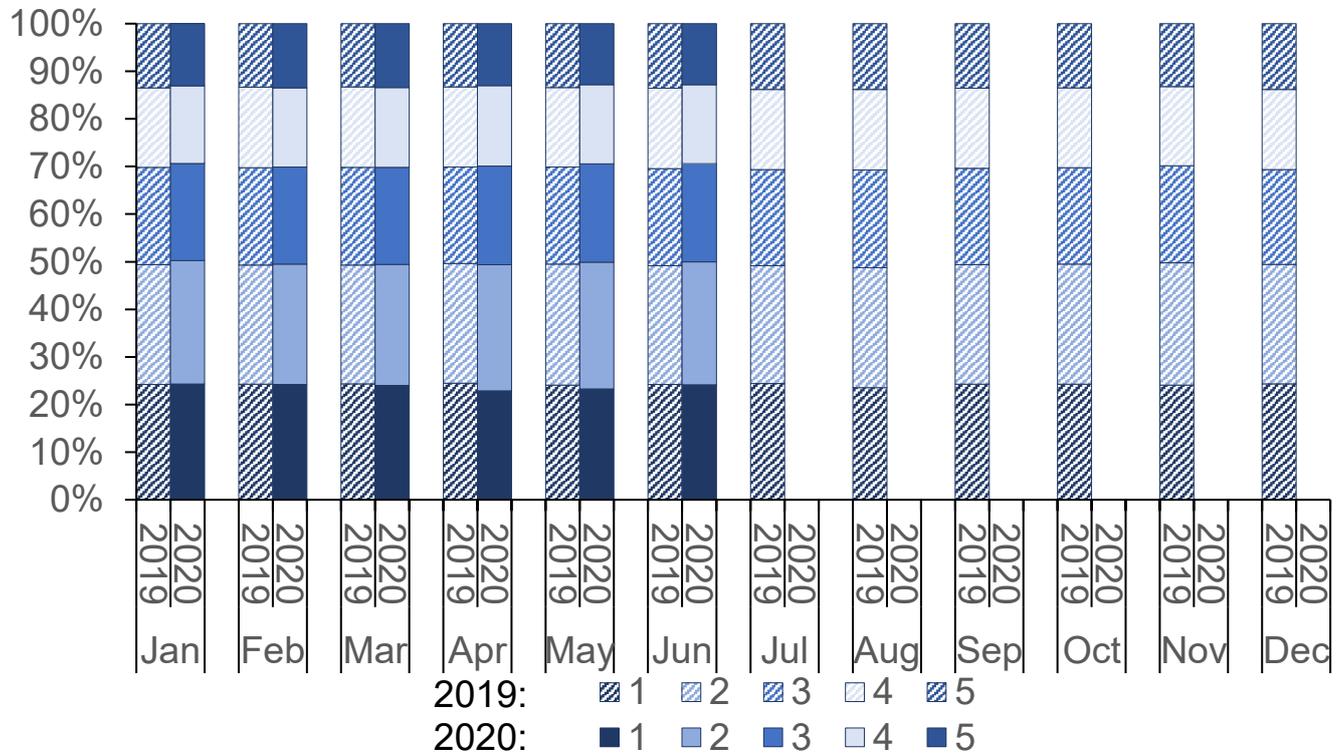
Appendix Figure 13: Proportion of bacterial STI tests (excluding chlamydia in <25 year olds) at sexual health services in England by sexual risk, January 2019 to June 2020



Includes data from routine specialist and non-specialist sexual health services' returns to the GUMCAD STI Surveillance System only. The CTAD Chlamydia Surveillance System does not collect information on sexual risk. The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. Het M: Heterosexual men; Het F: Heterosexual women; MSM: Men who have sex with men; WSW: Women who have sex with women

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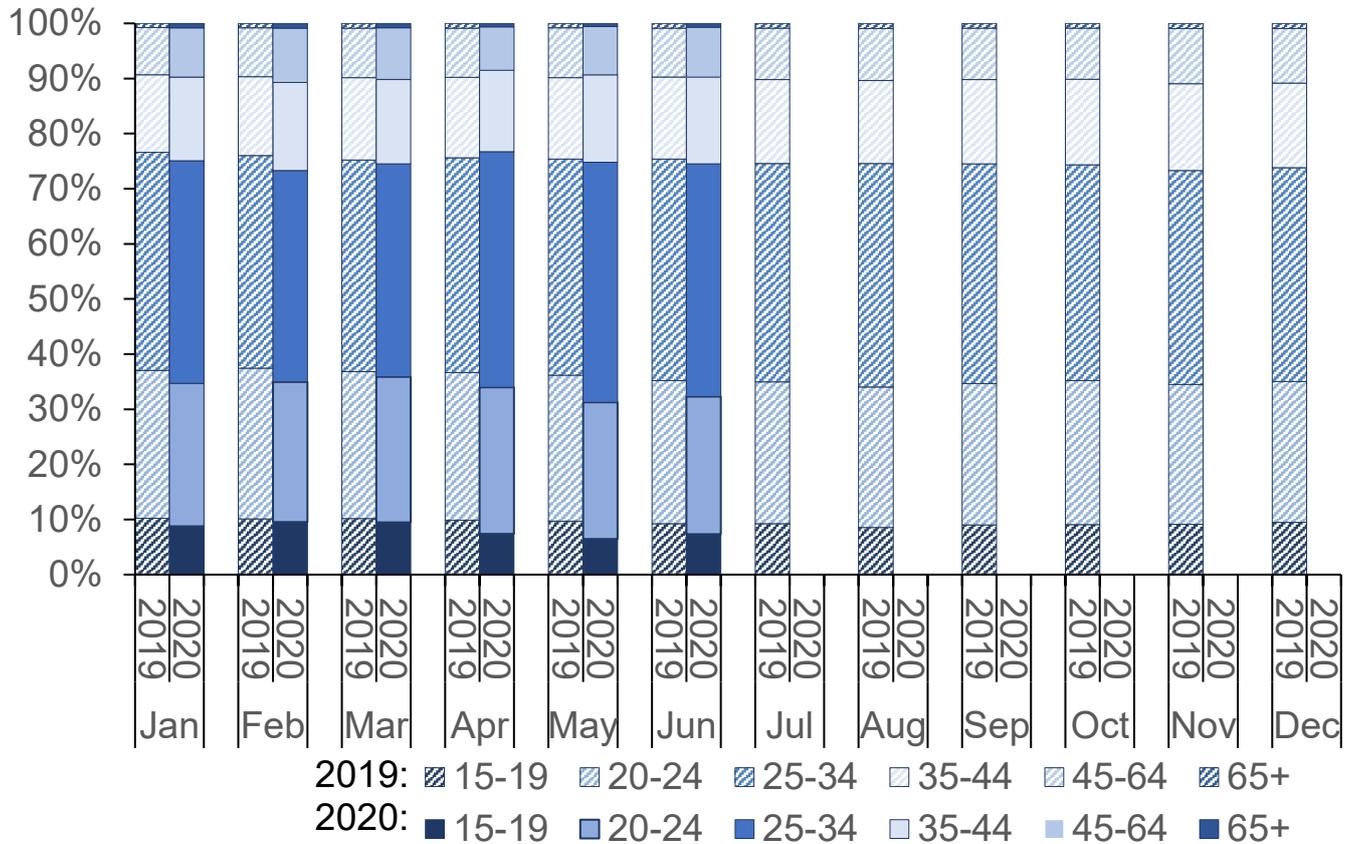
Appendix Figure 14: Proportion of bacterial STI tests (excluding chlamydia in <25 year olds) at sexual health services in England by Index of multiple Deprivation quintile (1 is most deprived), January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

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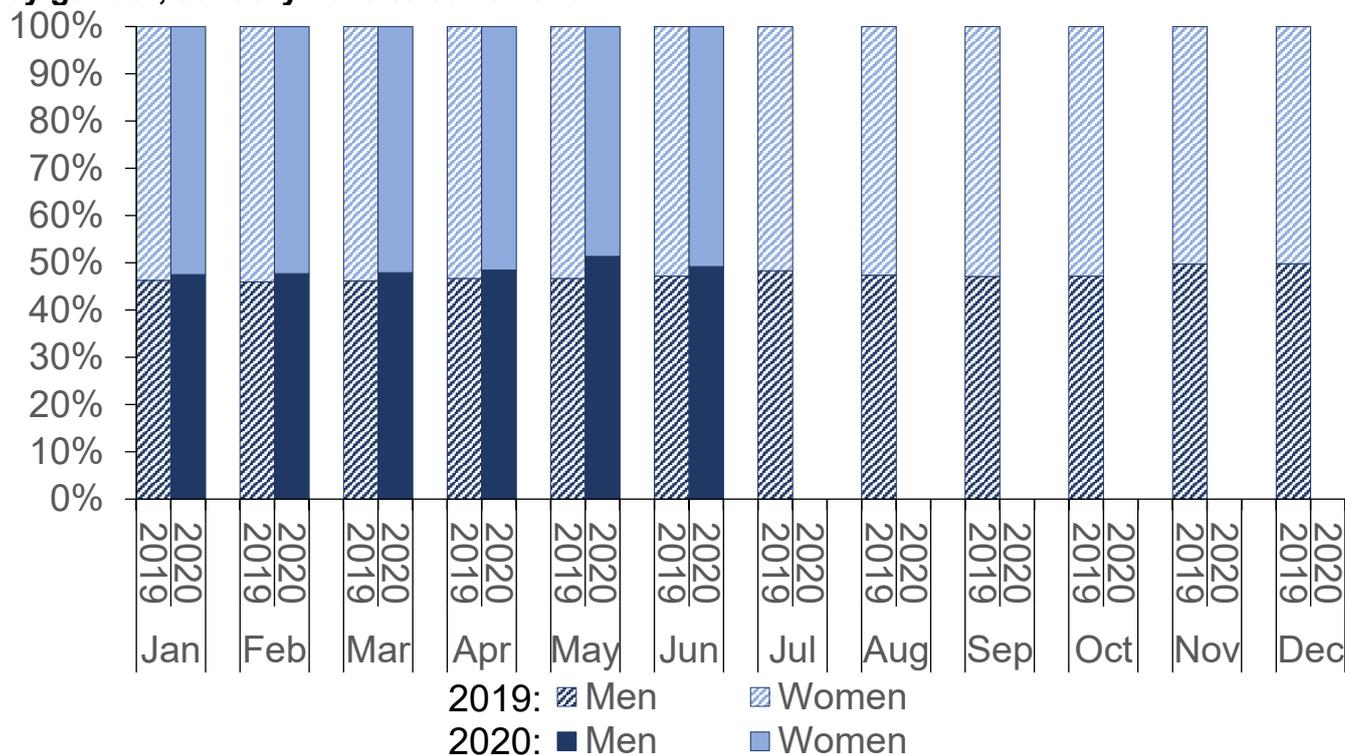
Appendix Figure 15: Proportion of HIV tests at sexual health services in England by age group, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

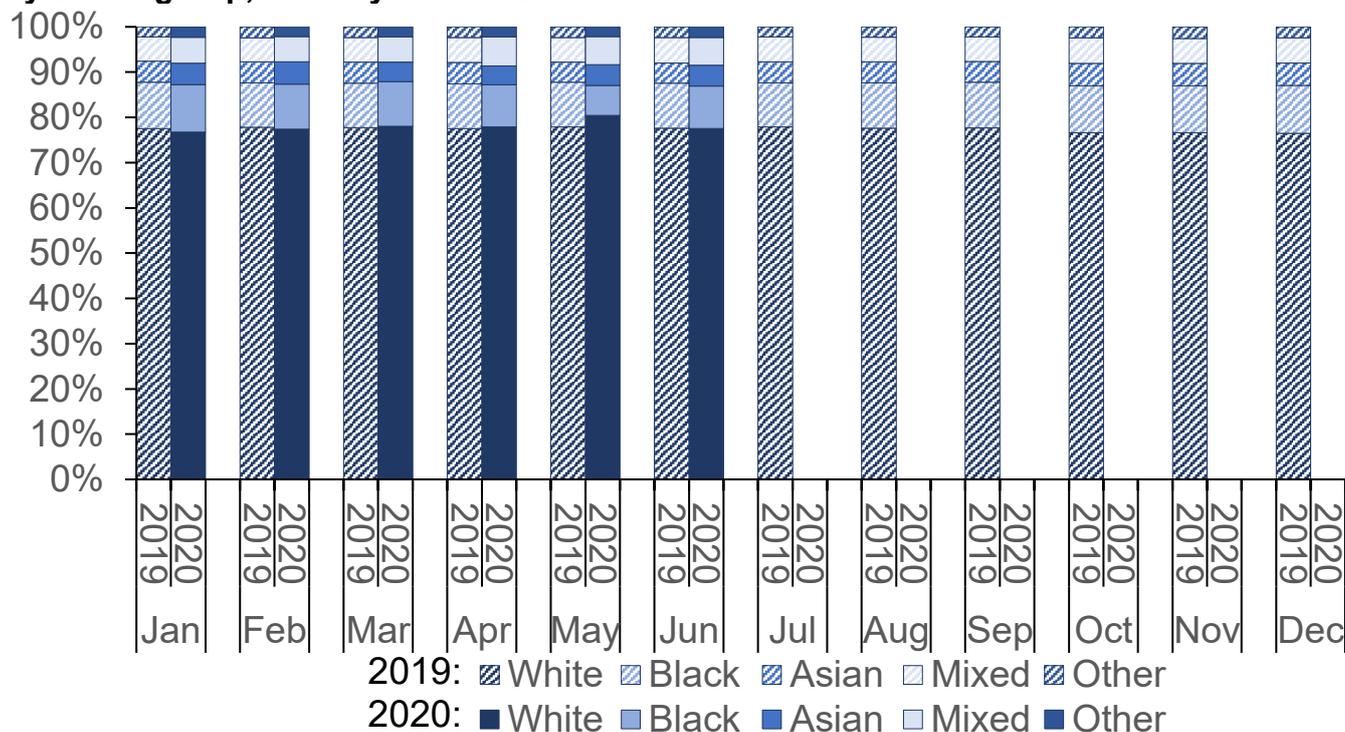
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Appendix Figure 16: Proportion of HIV tests at sexual health services in England by gender, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

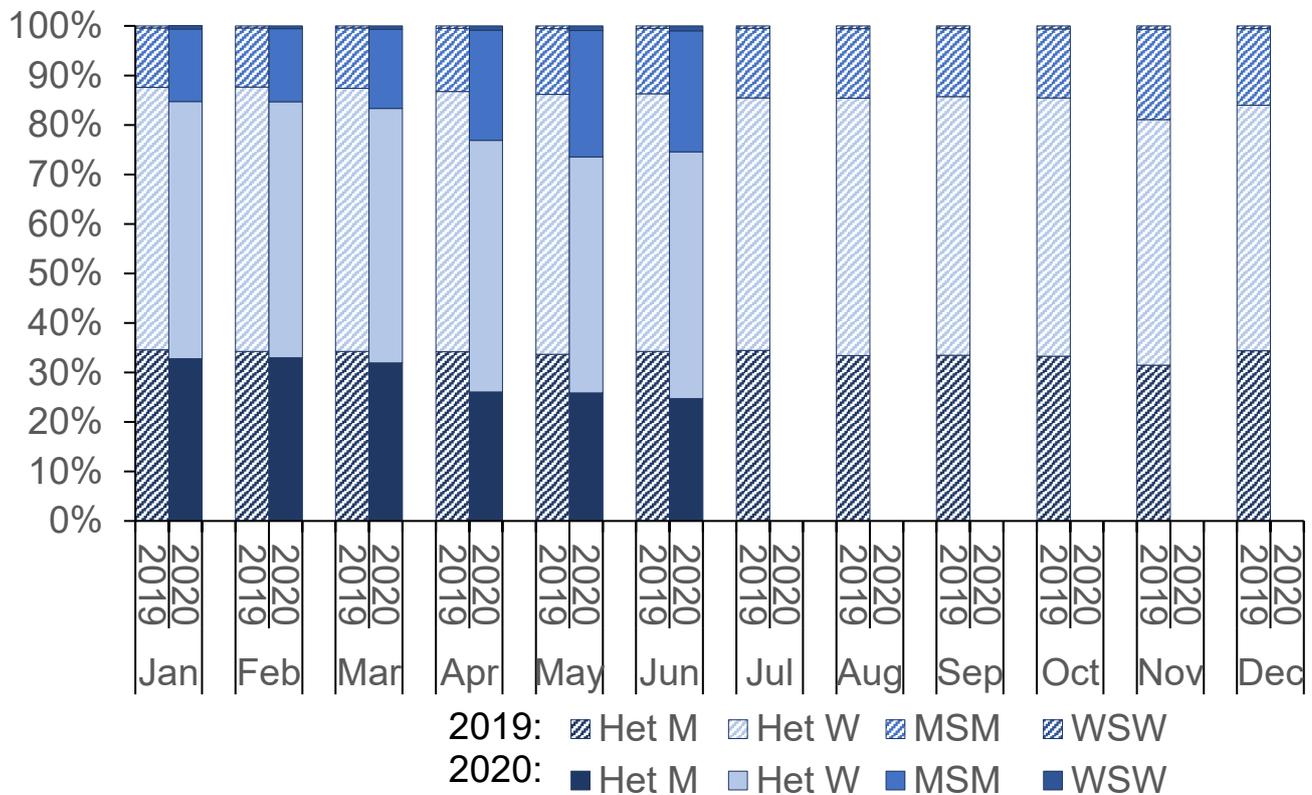
Appendix Figure 17: Proportion of HIV tests at sexual health services in England by ethnic group, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

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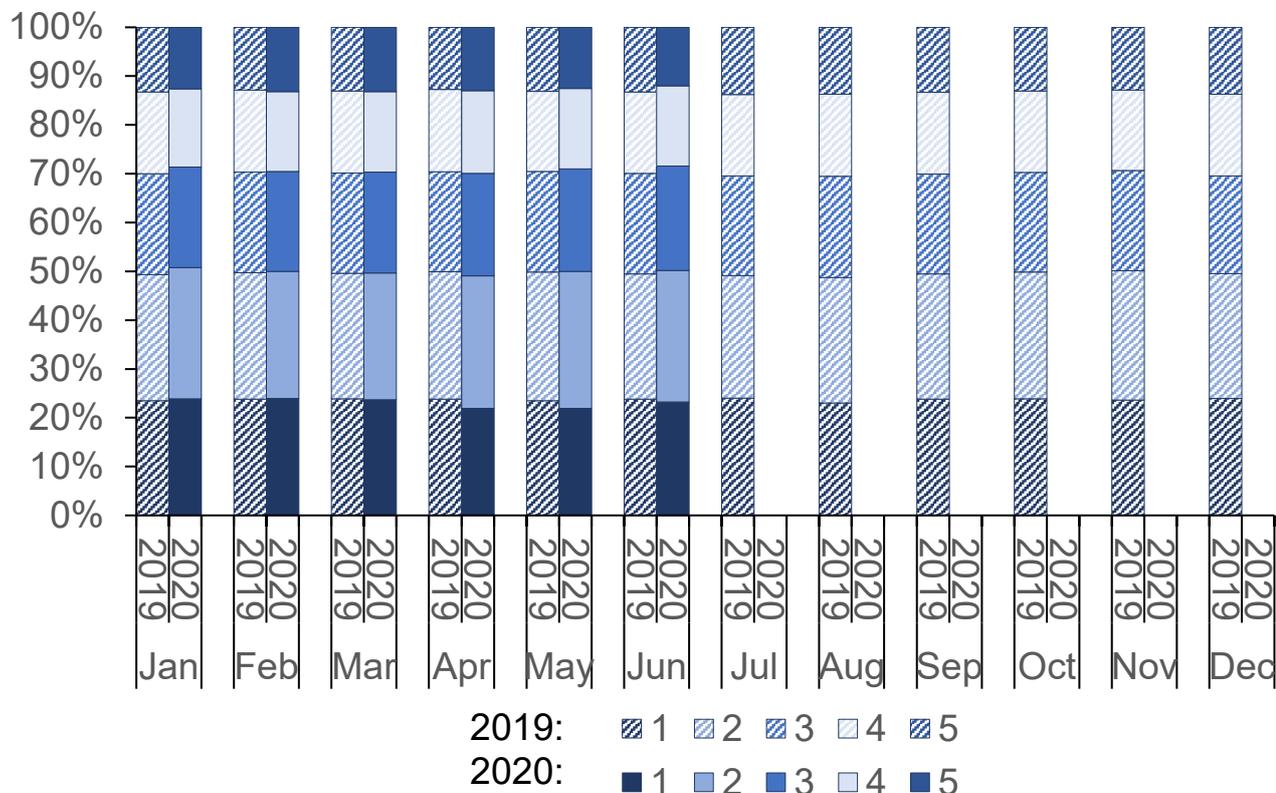
Appendix Figure 18: Proportion of HIV tests at sexual health services in England by sexual risk, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

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Appendix Figure 19: Proportion of HIV tests at sexual health services in England by Index of multiple Deprivation quintile (1 is most deprived), January 2019 to June 2020



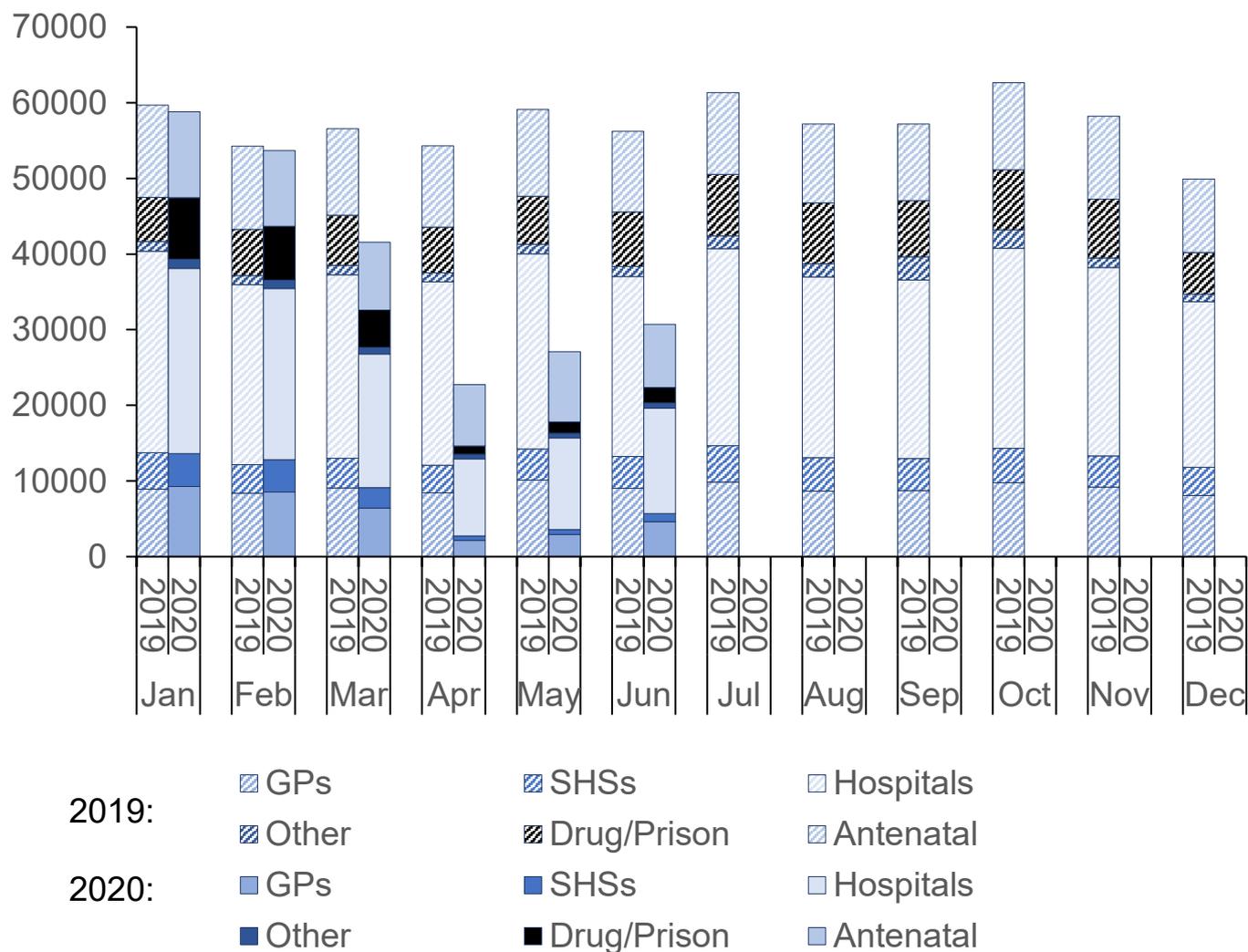
The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020.

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Testing for HAV, HBV and HCV

More detailed analysis of the impact of COVID-19 on hepatitis A, B and C surveillance will be available in a hepatitis-specific report, soon to be published on gov.uk

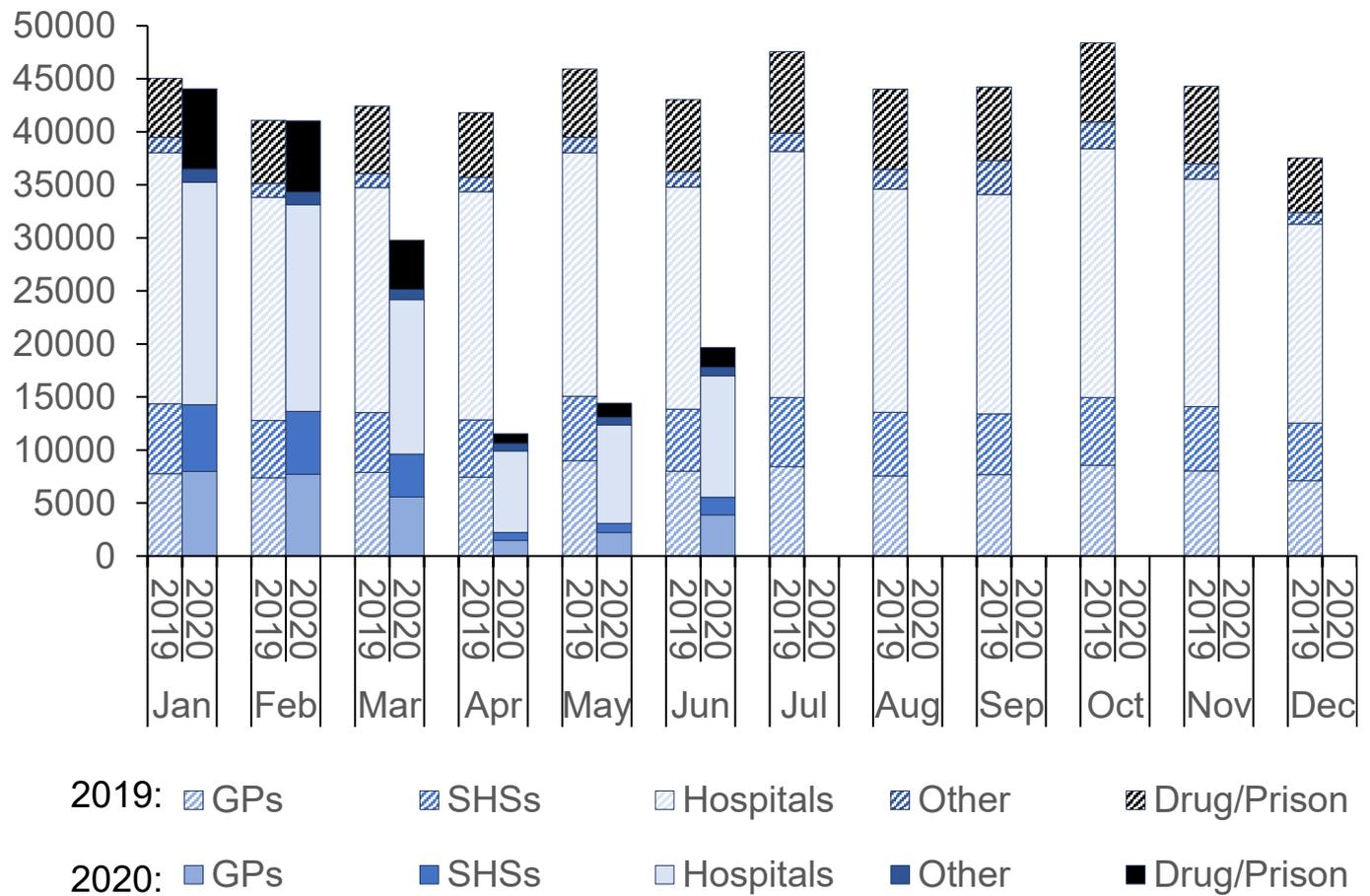
Appendix Figure 20: Number of hepatitis B virus (HBV) tests by setting of test, January 2019 to June 2020



There were 2,478 hepatitis B tests in 2019 and 1,224 in 2020 with unknown setting. "Other" includes occupational health and pharmacy settings. "Drug/Prison" refers to drug services or prisons/detention centres.

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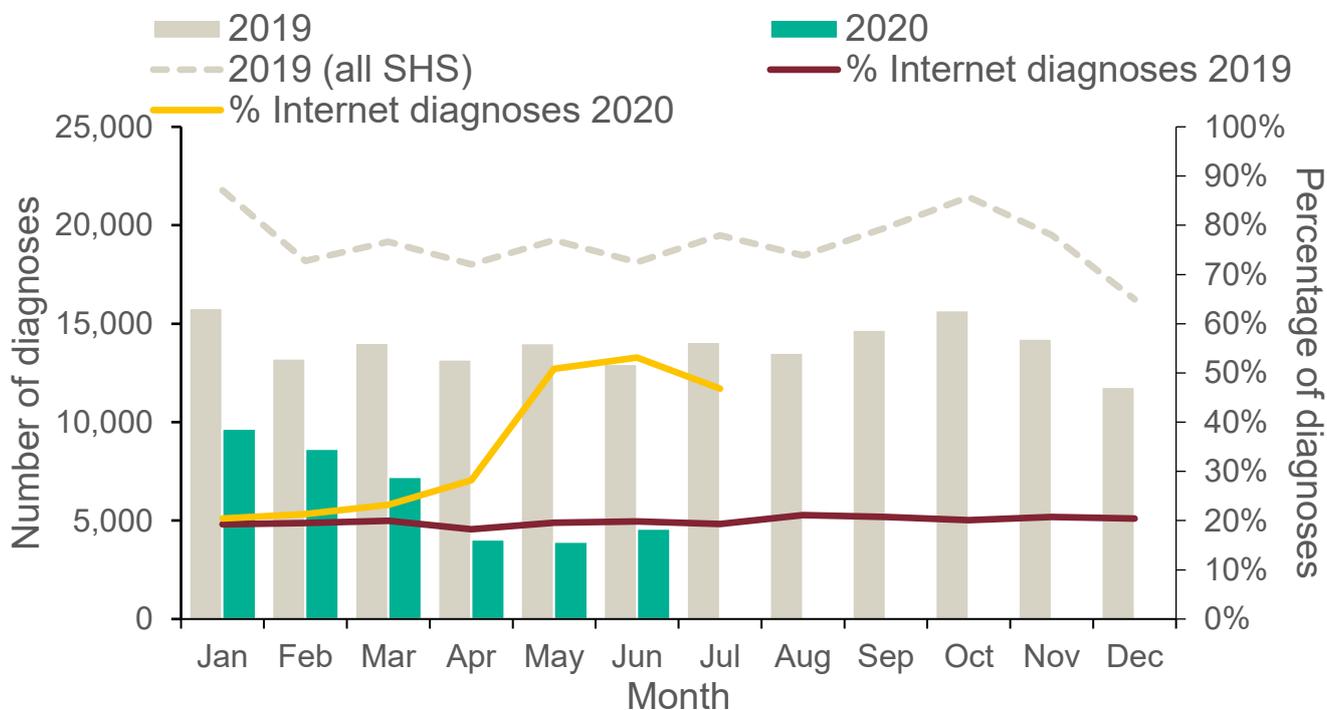
Appendix Figure 21: Number of hepatitis C virus (HCV) tests by setting of test, January 2019 to June 2020



There were 2,119 hepatitis C antibody tests in 2019 and 620 in 2020 with unknown setting. "Other" includes occupational health, antenatal services and pharmacy settings. "Drug/Prison" refers to drug services or prisons/detention centres.

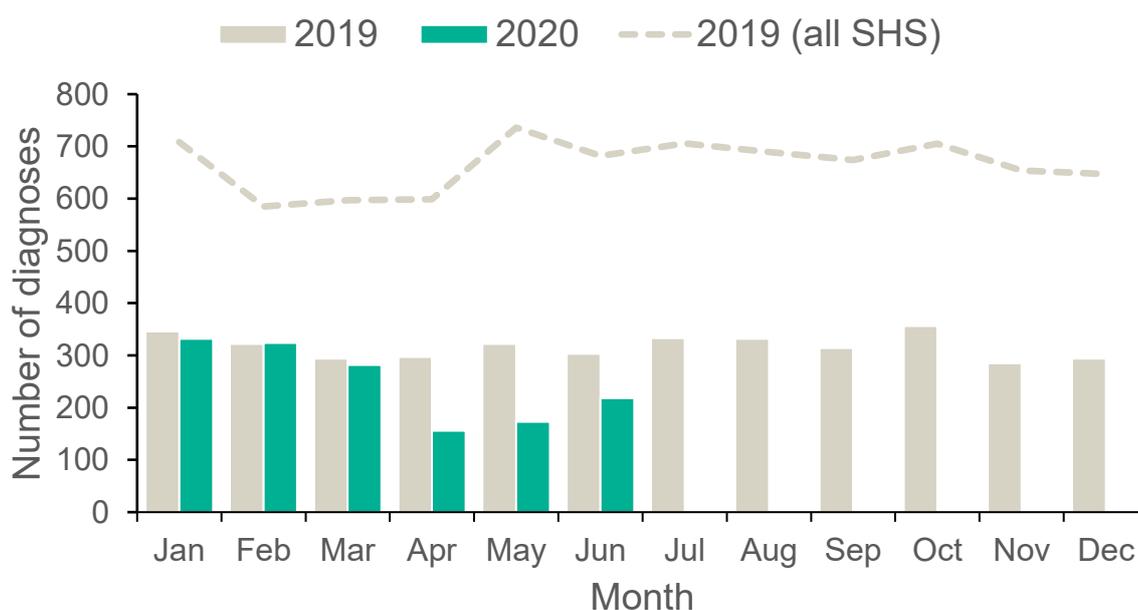
STI and HIV diagnoses

Appendix Figure 22: Number of chlamydia diagnoses at sexual health services, and proportion diagnosed via internet services, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. The dotted line represents the total number of diagnoses reported in each month in 2019

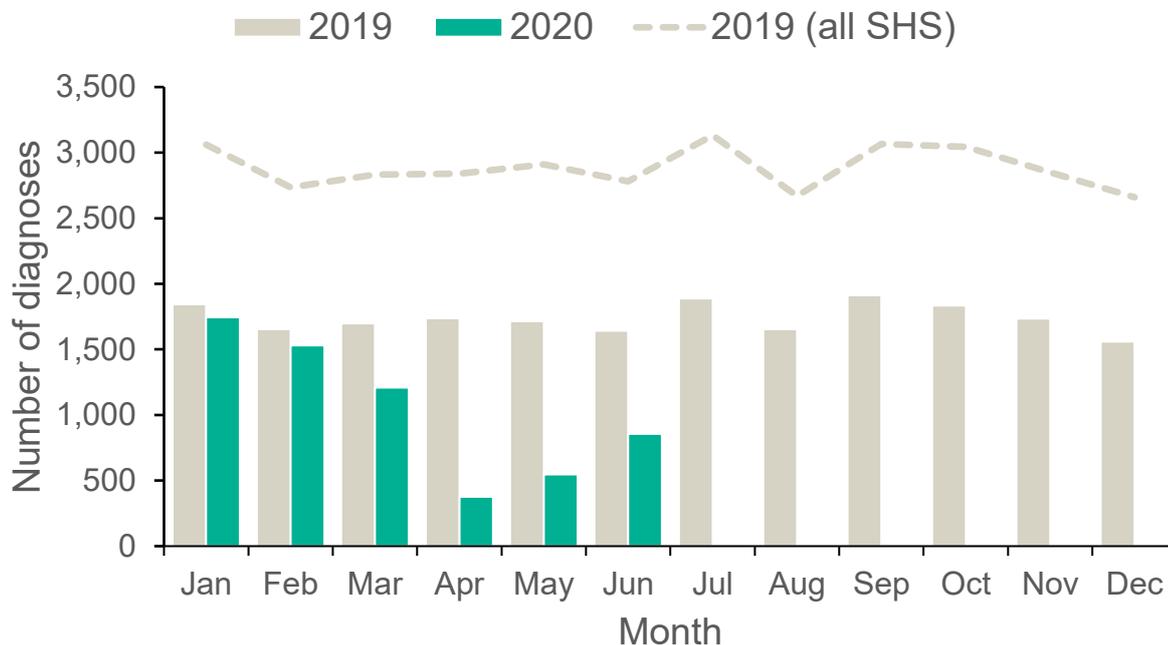
Appendix Figure 23: Number of syphilis diagnoses at sexual health services, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. The dotted line represents the total number of diagnoses reported in each month in 2019

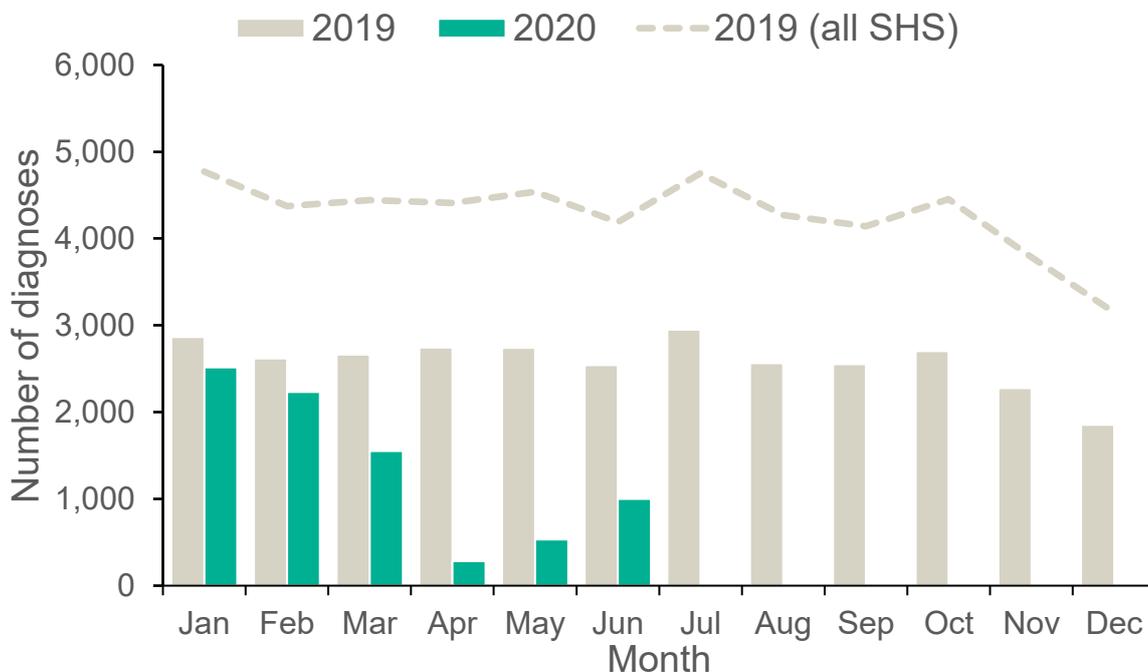
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Appendix Figure 24: Number of genital herpes diagnoses (first episode) at sexual health services in England, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. The dotted line represents the total number of diagnoses reported in each month in 2019

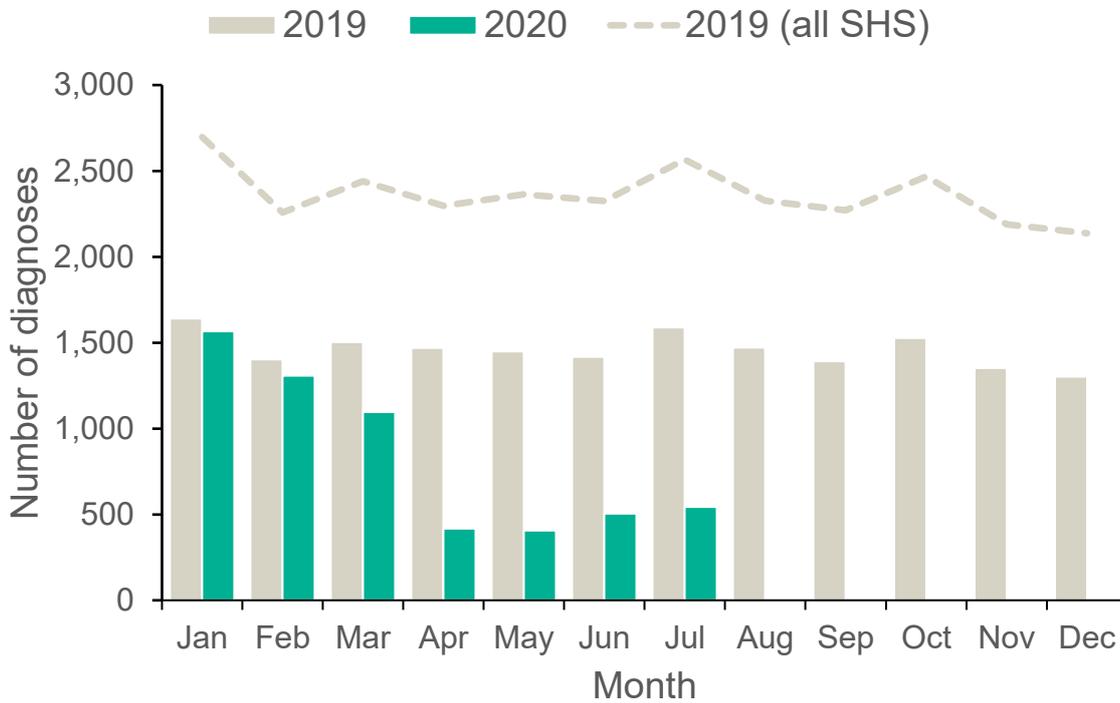
Appendix Figure 25: Number of genital warts diagnoses (first episode) at sexual health services in England, January 2019 to June 2020



The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. The dotted line represents the total number of diagnoses reported in each month in 2019

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Appendix Figure 26: Number of diagnoses of non-specific genital infection at sexual health services in England, January 2019 to June 2020



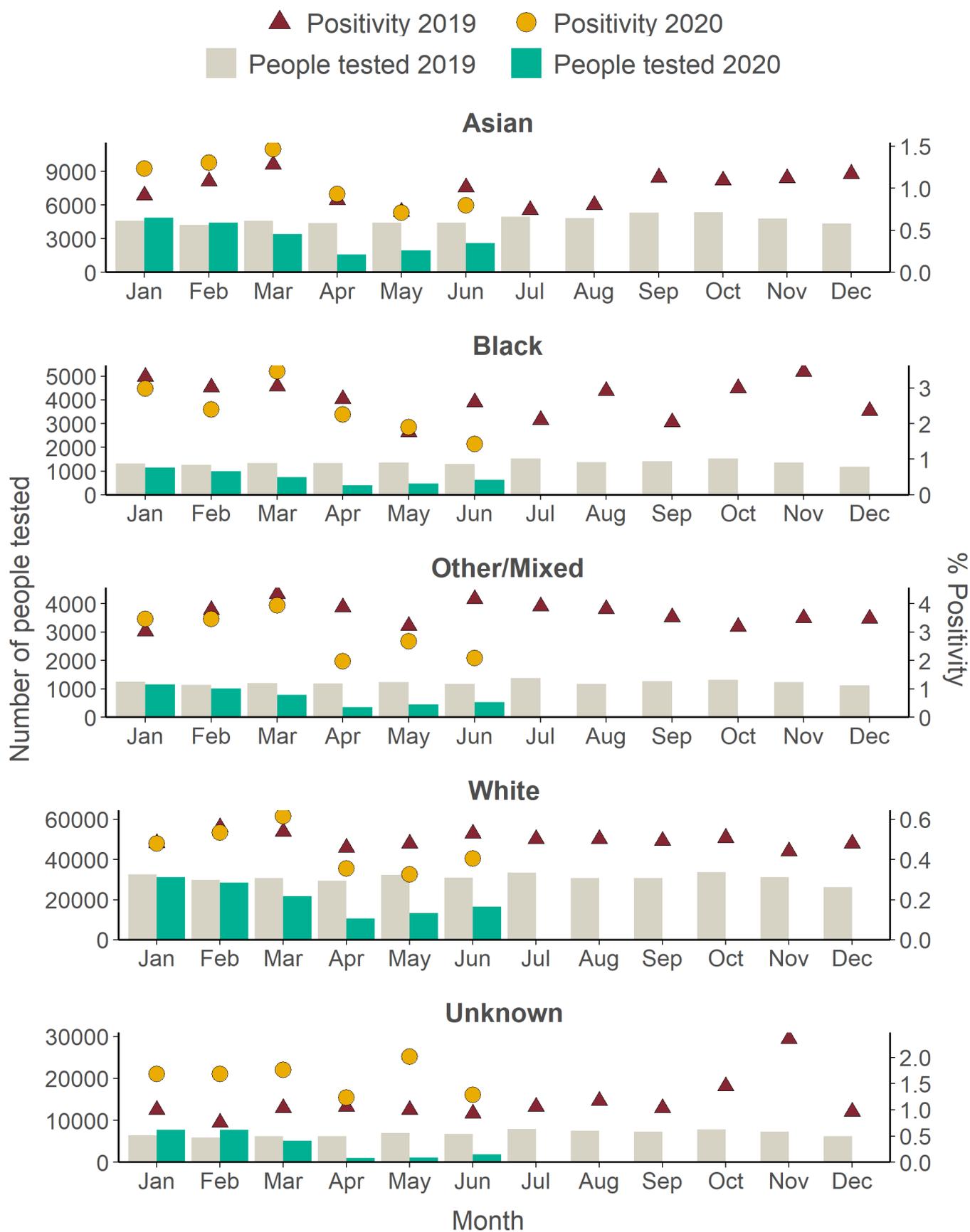
The bars compare data from SHSs with complete data reported for both January to June in 2019 and January to June in 2020. The dotted line represents the total number of diagnoses reported in each month in 2019

Positivity for HBV and HCV

More detailed analysis of the impact of COVID-19 on hepatitis A, B and C surveillance will be available in a hepatitis-specific report, soon to be published on gov.uk

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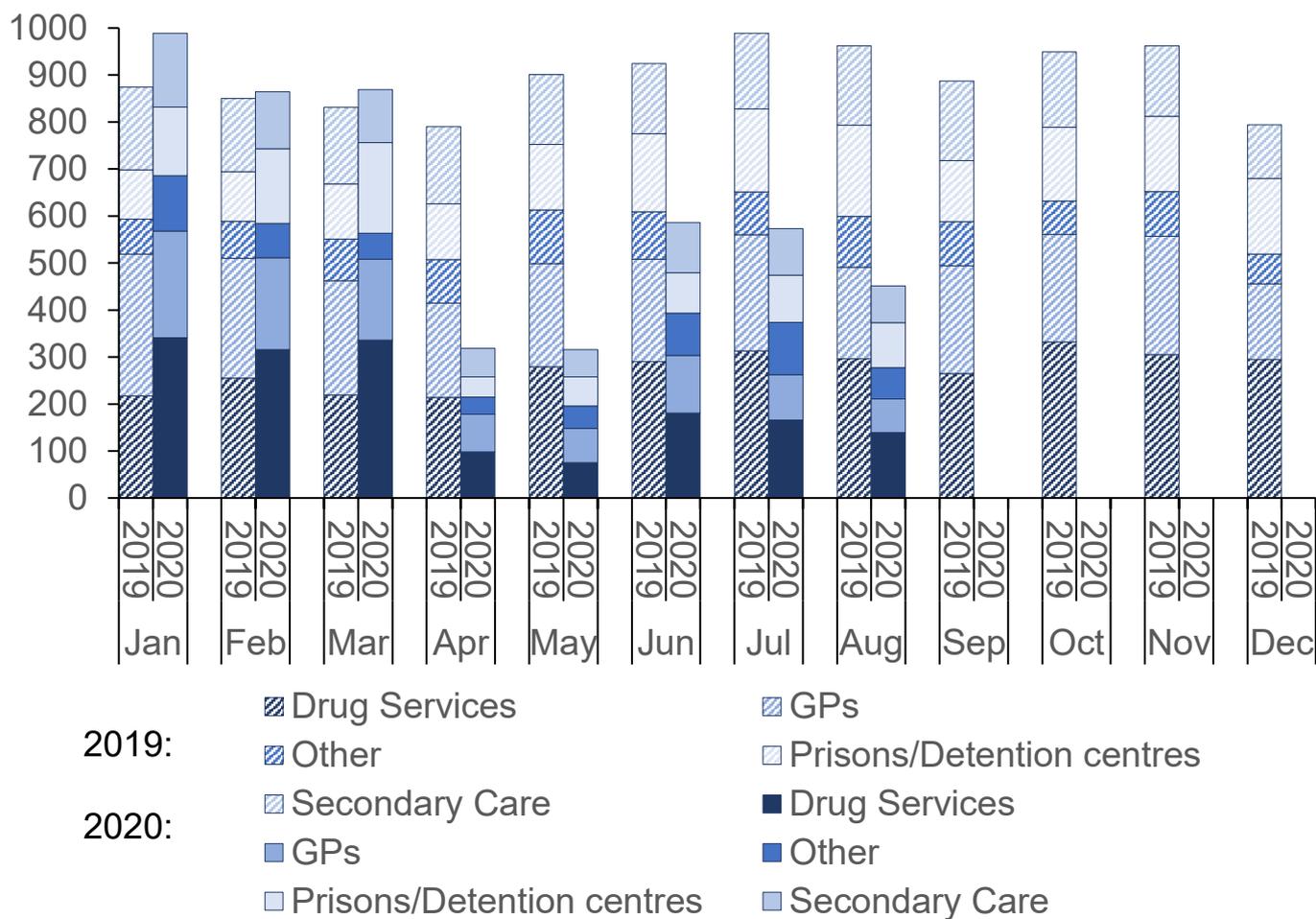
Appendix Figure 27: Hepatitis B virus (HBV) people tested and positivity in England by ethnic group, January 2019 to June 2020



Hepatitis C treatment

Further information on the impact of COVID-19 on hepatitis C elimination in UK countries is in the Hepatitis C in the UK 2020 report, which will shortly be available [here](#).

Appendix Figure 28: Hepatitis C treatment initiations by source of referral for treatment, January 2019 to August 2020



There were 9 hepatitis C treatment initiations in 2019 and 3 in 2020 with unknown source of referral for treatment.

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Further resources

STI data are available on the PHE STI annual data tables web page in the form of tables, an infographic, and a slide set:

<https://www.gov.uk/government/statistics/sexually-transmitted-infections-stis-annual-data-tables>

Data on chlamydia tests and diagnoses in 15 to 24 year olds are available on the PHE NCSP annual data tables web page: <https://www.gov.uk/government/statistics/national-chlamydia-screening-programme-ncsp-data-tables>

Interactive tables, charts, and maps showing local-area STI data are available on the Sexual and Reproductive Health Profiles: <http://fingertips.phe.org.uk/profile/sexualhealth>

Further information on the GUMCAD and CTAD surveillance systems is available at <https://www.gov.uk/guidance/gumcad-sti-surveillance-system> and <https://www.gov.uk/guidance/ctad-chlamydia-surveillance-system>, respectively

Further information on trends in HIV diagnoses in the UK is available at: www.gov.uk/government/statistics/hiv-annual-data-tables, and <https://www.gov.uk/government/statistics/hiv-in-the-united-kingdom>

The latest guidance and data on *Shigella* spp are available at: <https://www.gov.uk/government/collections/shigella-guidance-data-and-analysis>

Annual reports and data on sentinel surveillance of blood-borne virus testing are available at: <https://www.gov.uk/government/publications/sentinel-surveillance-of-blood-borne-virus-testing-in-england-2018>

Annual and quarterly Health Protection Reports on hepatitis A laboratory surveillance are available at: <https://www.gov.uk/government/publications/hepatitis-a-england-and-wales-2019>

Annual and quarterly Health Protection Reports on acute hepatitis B enhanced surveillance are available at: <https://www.gov.uk/government/publications/acute-hepatitis-b-england-enhanced-surveillance-reports>

Annual reports on hepatitis C in England and the UK are available at: <https://www.gov.uk/government/publications/hepatitis-c-in-the-uk>

Annual reports and data on infections among people who inject drugs are available at: <https://www.gov.uk/government/publications/shooting-up-infections-among-people-who-inject-drugs-in-the-uk>

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Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000

www.gov.uk/phe

Twitter: [@PHE_uk](https://twitter.com/PHE_uk)

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Prepared by: Prepared by: Blood Safety, Hepatitis, Sexually Transmitted Infections (STI) and HIV Division, National Infection Service and Sexual Health, Reproductive Health and HIV Priorities and Programmes Division, Health Improvement Directorate

Natasha Ratna, Holly Mitchell, Tatiana Vilaplana, Ana Harb, Megan Glancy, Ammi Shah, Galena Kuyumdzhieva, Alireza Talebi, Stephen Duffell, Mateo Prochazka, Louise Thorn, Hannah Charles, Freja Kirsebom, Celia Penman, Annastella Costella, Koye Balogun, Rebecca Wilkinson, Ruth Simmons, Sara Croxford, Claire Edmundson, Alison Brown, Mark McCall, Louise Logan, Adam Winter, Helen Harris, Kate Folkard, Valerie Delpech, Emily Phipps, Hamish Mohammed, Katy Sinka, Sema Mandal and Gwenda Hughes

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