

Men who have Sex with Men and PrEP For GUM Taster Day 14th October 2024

Dr Andy Williams

Consultant in Sexual Health and HIV Medicine

TPD North East and Central London

GUM SAC co-chair

My journey

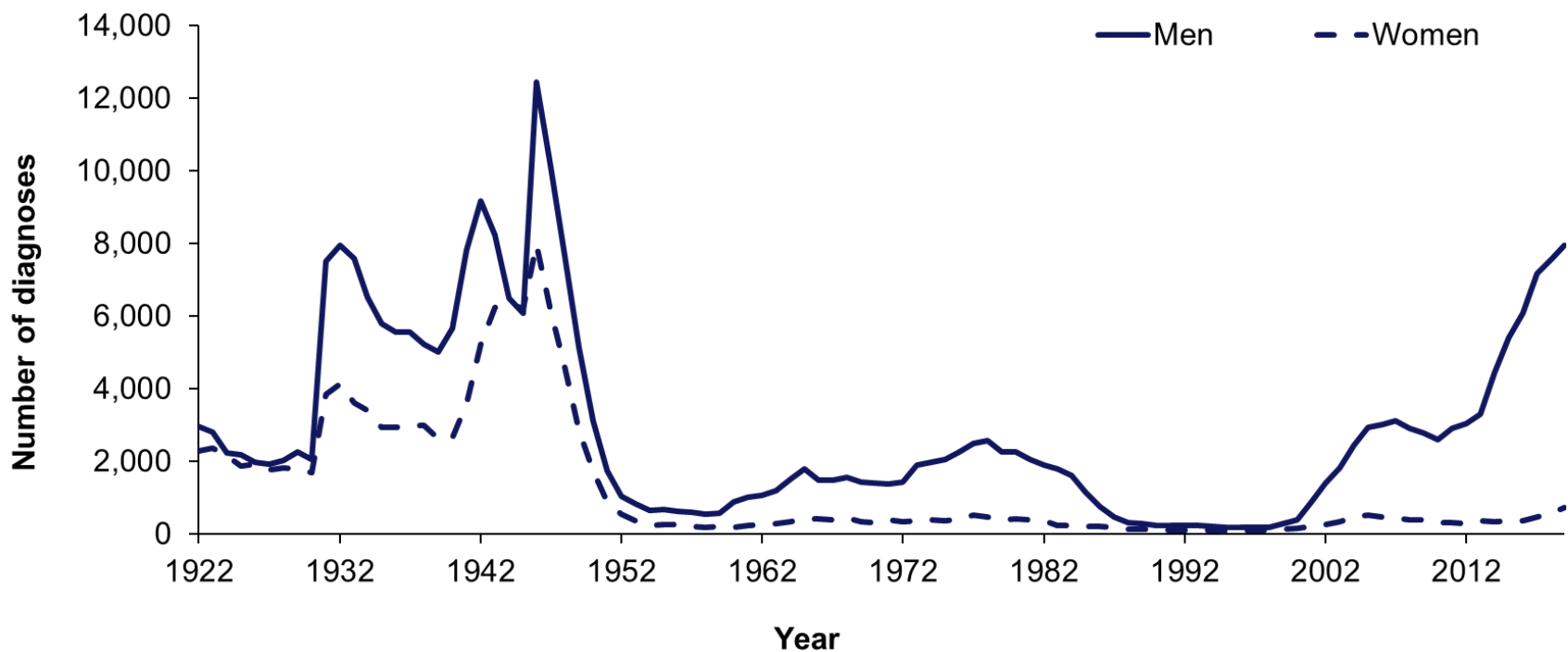
- Medical school in Bristol
- Medicine and surgery in Bristol
- GUM SHO job London – GSTT
- Medicine training...renal, stroke, derm, cardiology, care of the elderly....King's, London
- SpR rotation in GUM – East London
- Consultant in GUM – Barts from 2012



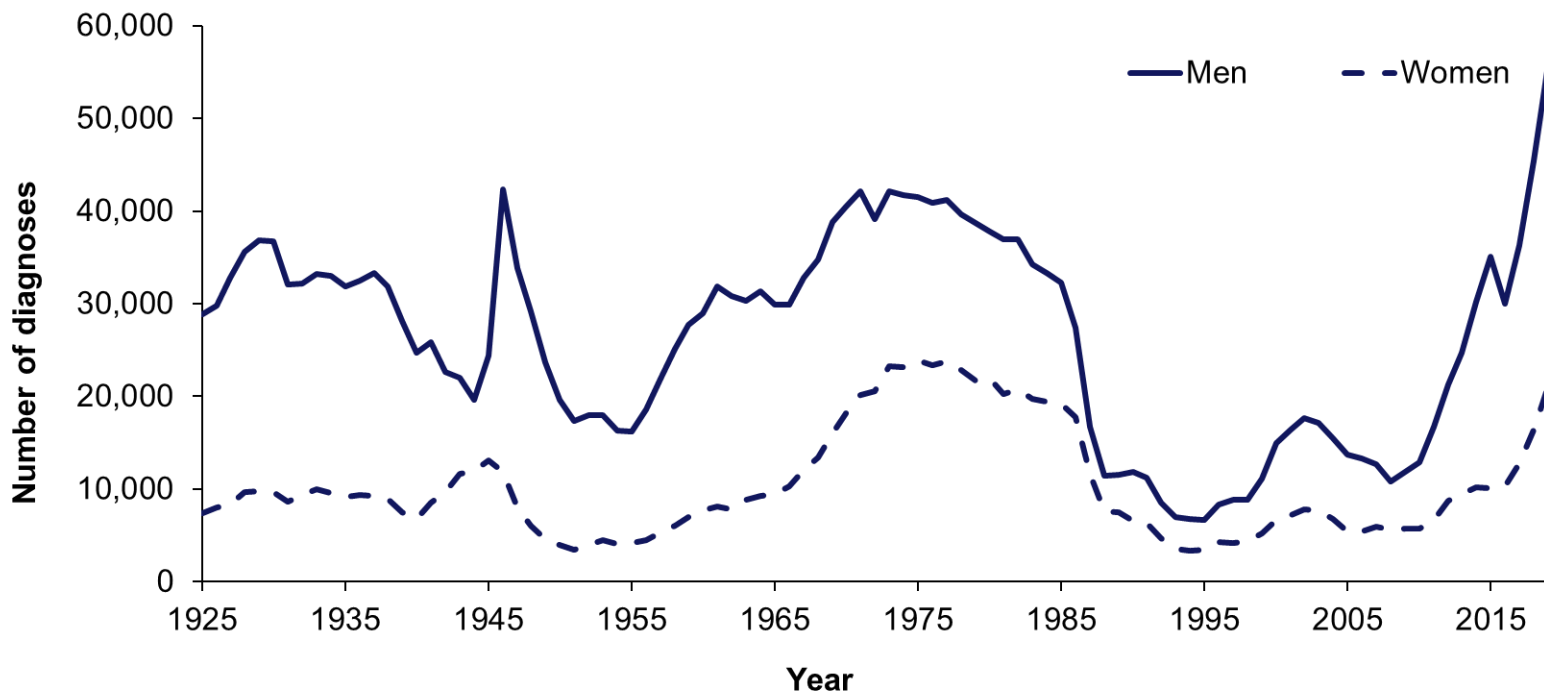
- Why are GBMSM a high risk group?
 - Sexual practices – AI, frequent change of partner
 - Recreational drug use – more of above and for longer
 - Prevalence of infections....

Hopefully not death by data.....

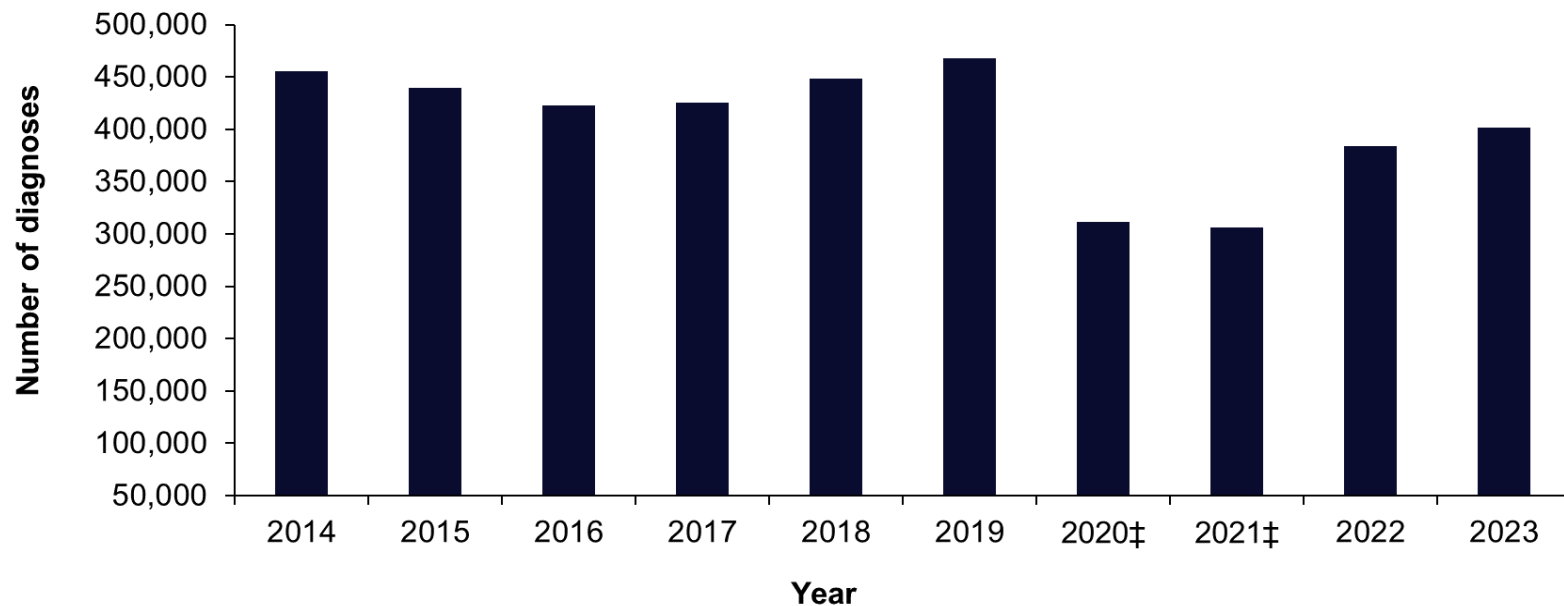
Number of infectious syphilis diagnoses by gender: UK, 1922 to 2019



Number of gonorrhoea diagnoses by gender: UK, 1925 to 2019

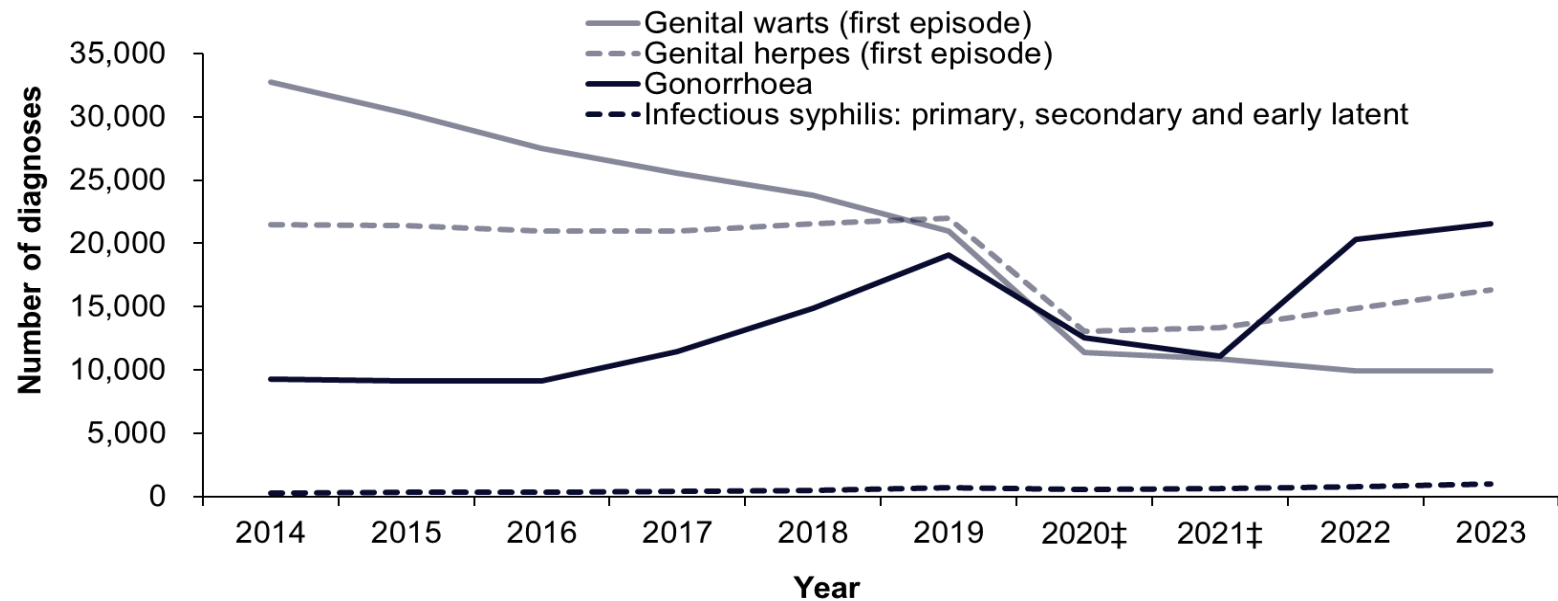


Number of New STI diagnoses: England, 2014 to 2023



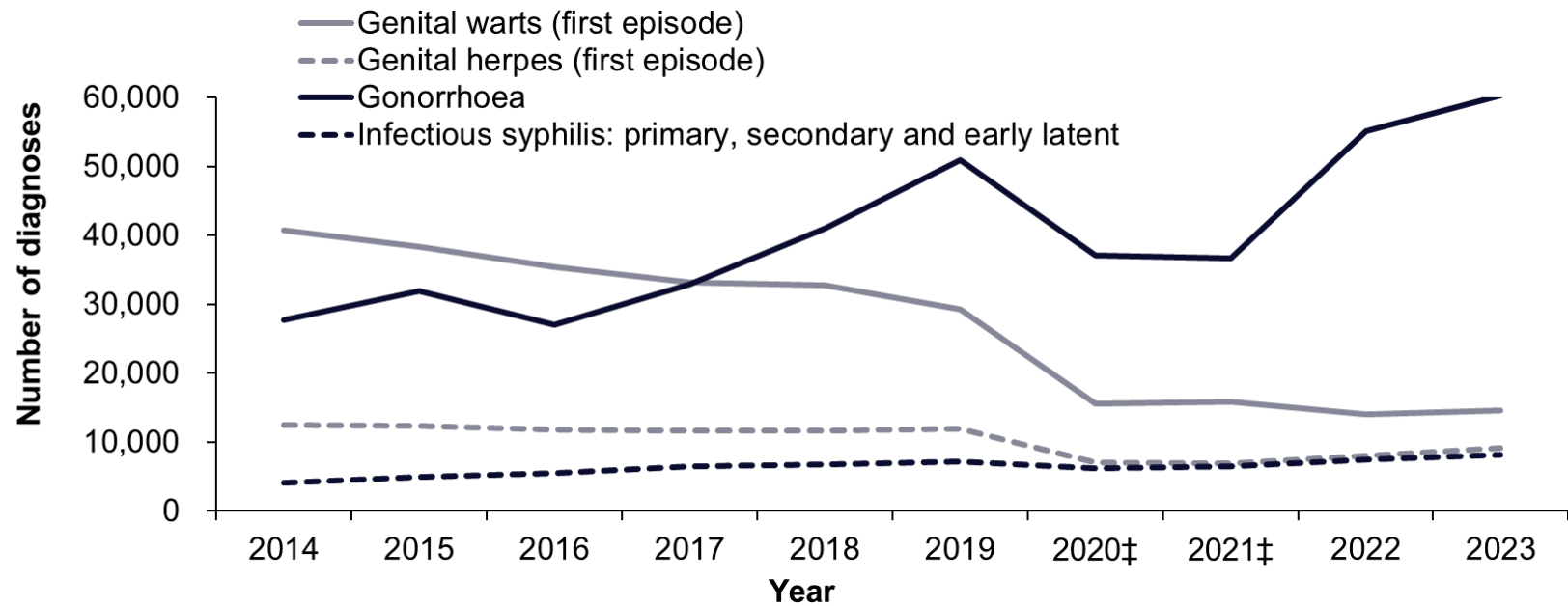
†Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of STI diagnoses among women: England, 2014 to 2023



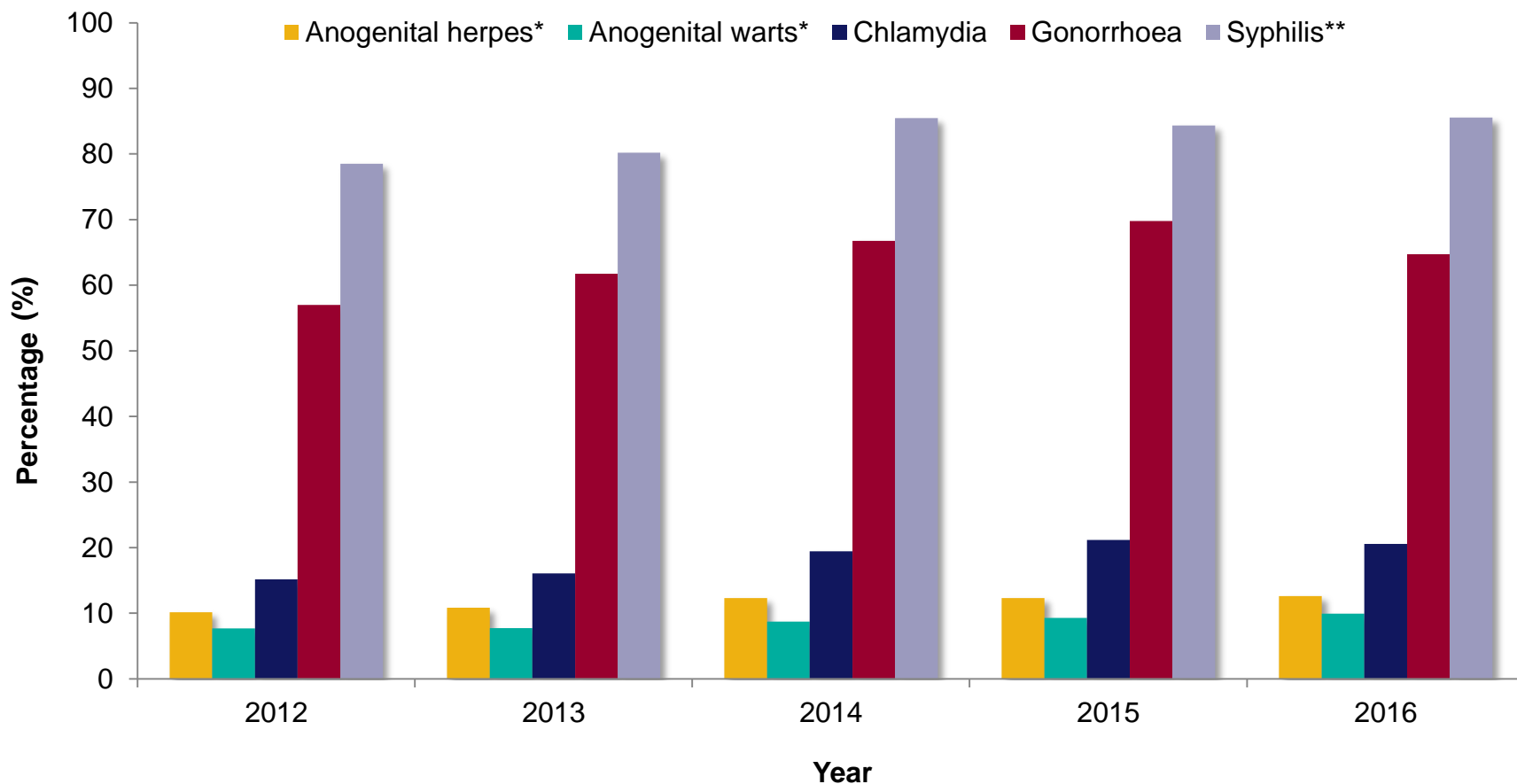
†Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of STI diagnoses among men: England, 2014 to 2023



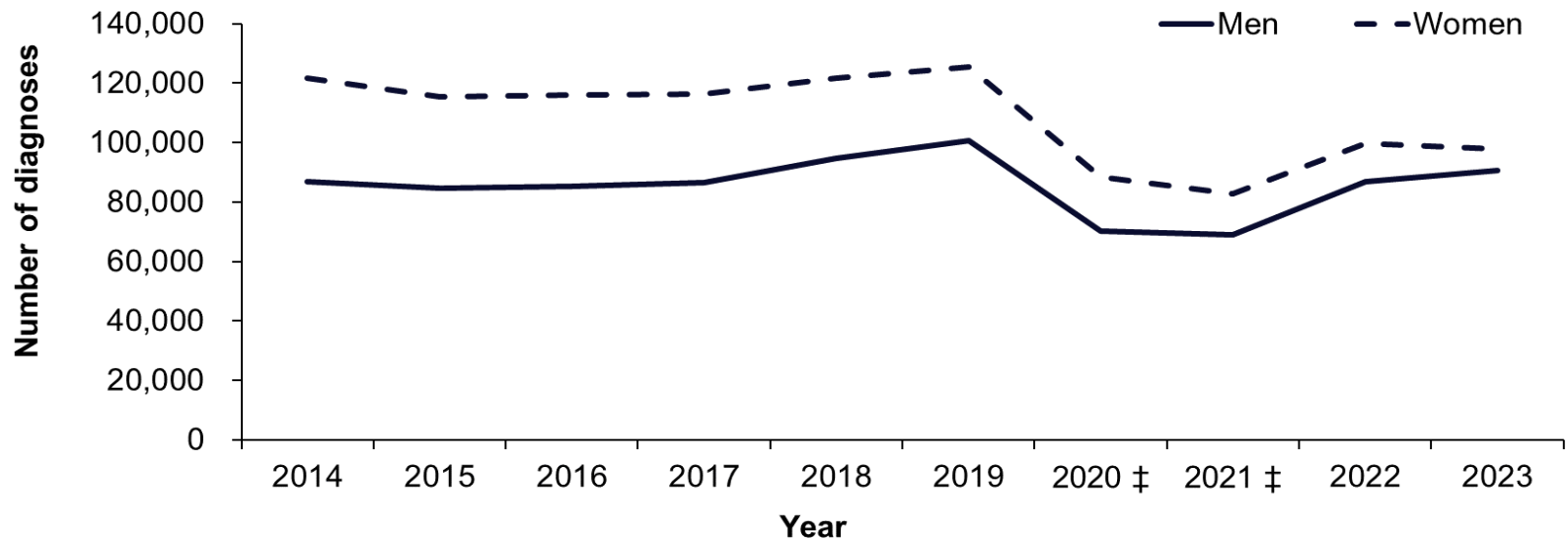
†Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Percentage of all STI diagnoses in men which were among MSM: England, 2012-2016



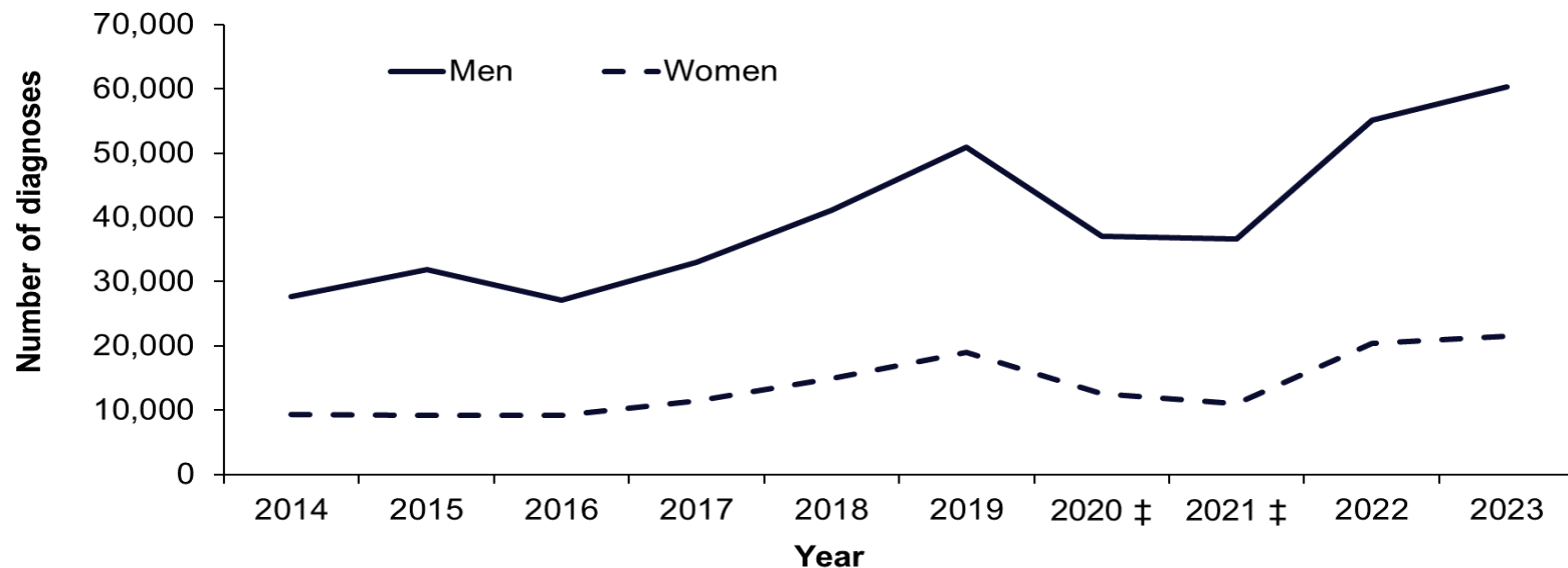
- Data from specialist and non-specialist services
- * First episode; **Includes diagnoses of primary, secondary & early latent syphilis
- Chlamydia data from 2012 onwards are not comparable to data from previous years (please see 'Notes' slide for more details)
- Data type: service data

Number of chlamydia diagnoses by gender: England, 2014 to 2023



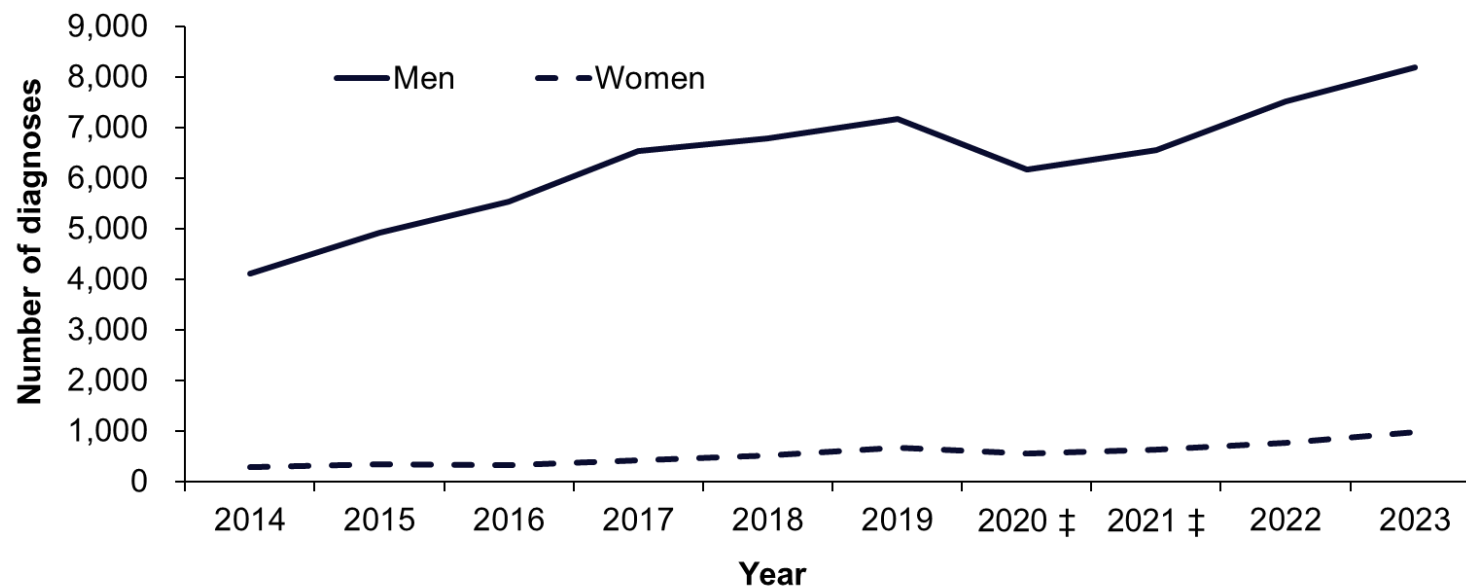
‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of gonorrhoea diagnoses by gender: England, 2014 to 2023



‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

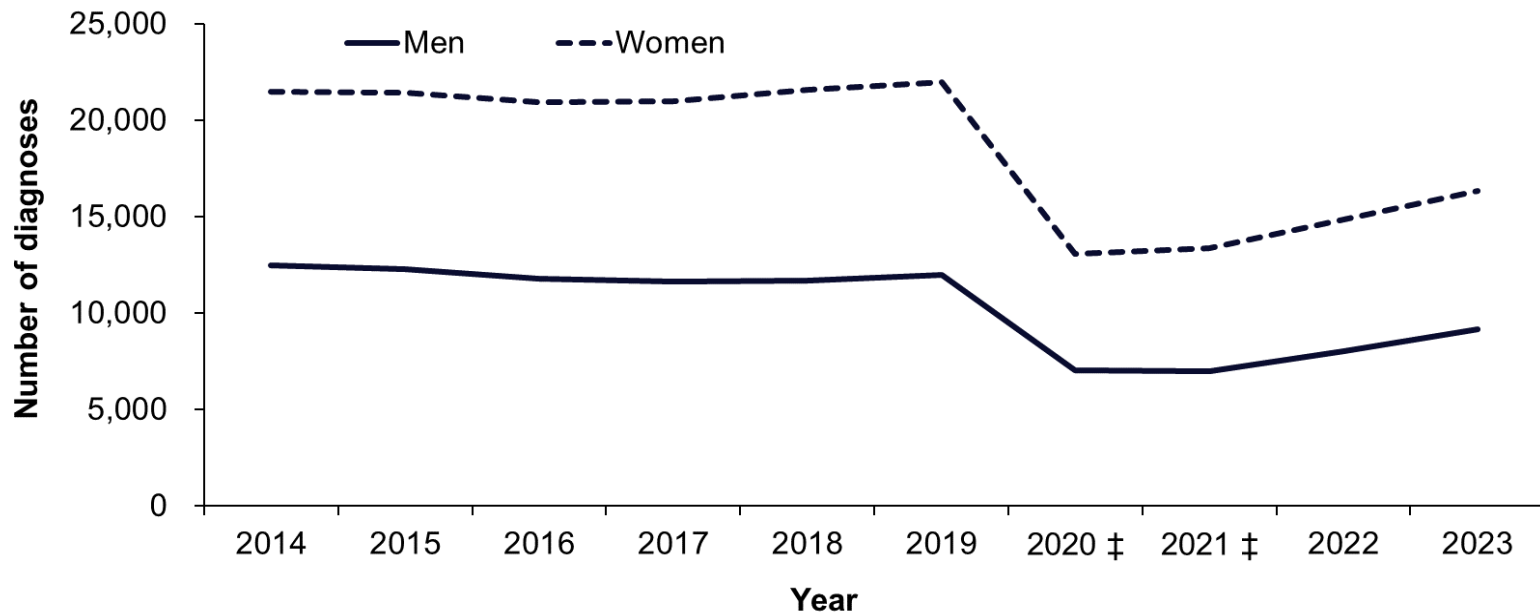
Number of infectious syphilis* diagnoses by gender: England, 2014 to 2023



*The number of infectious syphilis diagnoses includes primary, secondary and early latent diagnoses

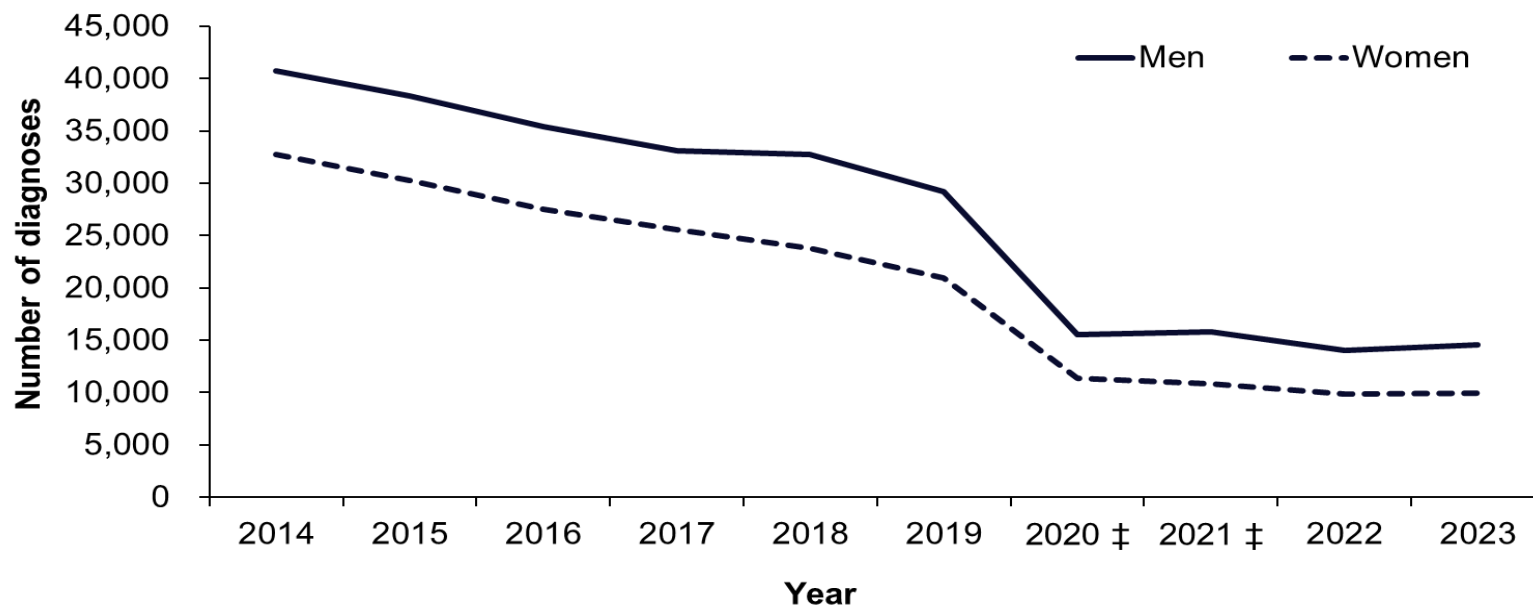
‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of genital herpes (first episode) diagnoses by gender: England, 2014 to 2023



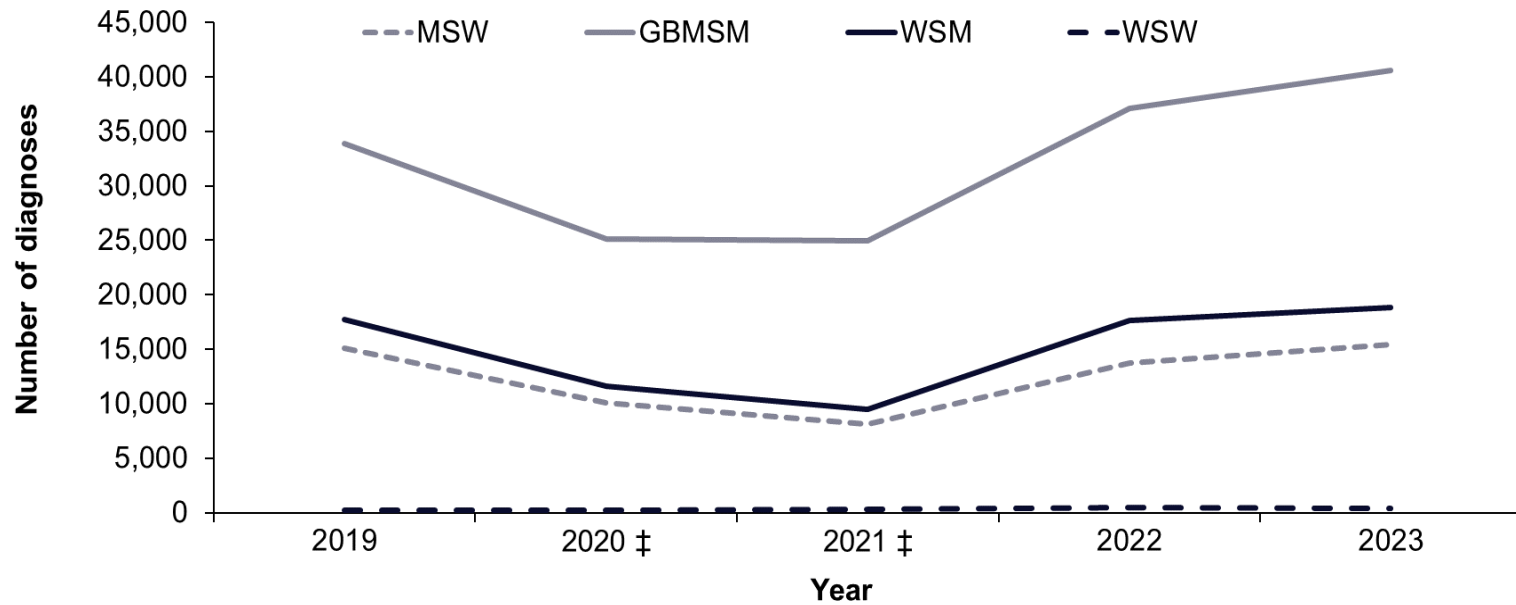
‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of genital warts (first episode) diagnoses by gender: England, 2014 to 2023



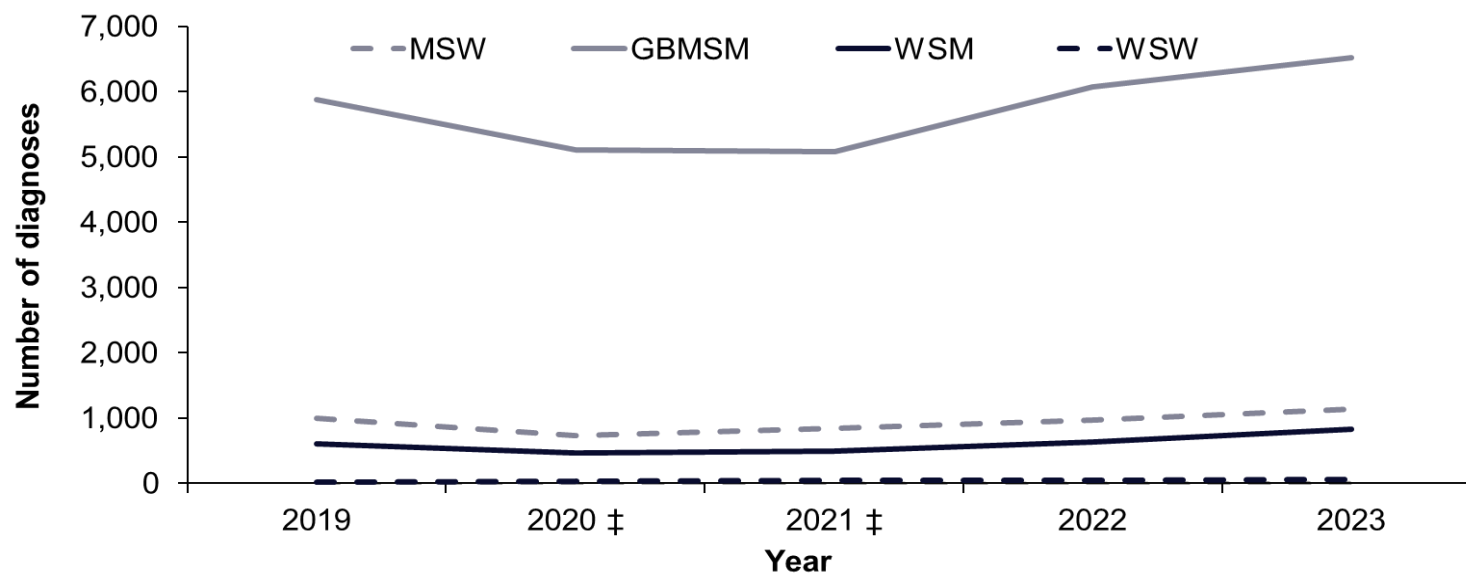
‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of gonorrhoea diagnoses by gender and sexual orientation: England, 2019 to 2023



‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

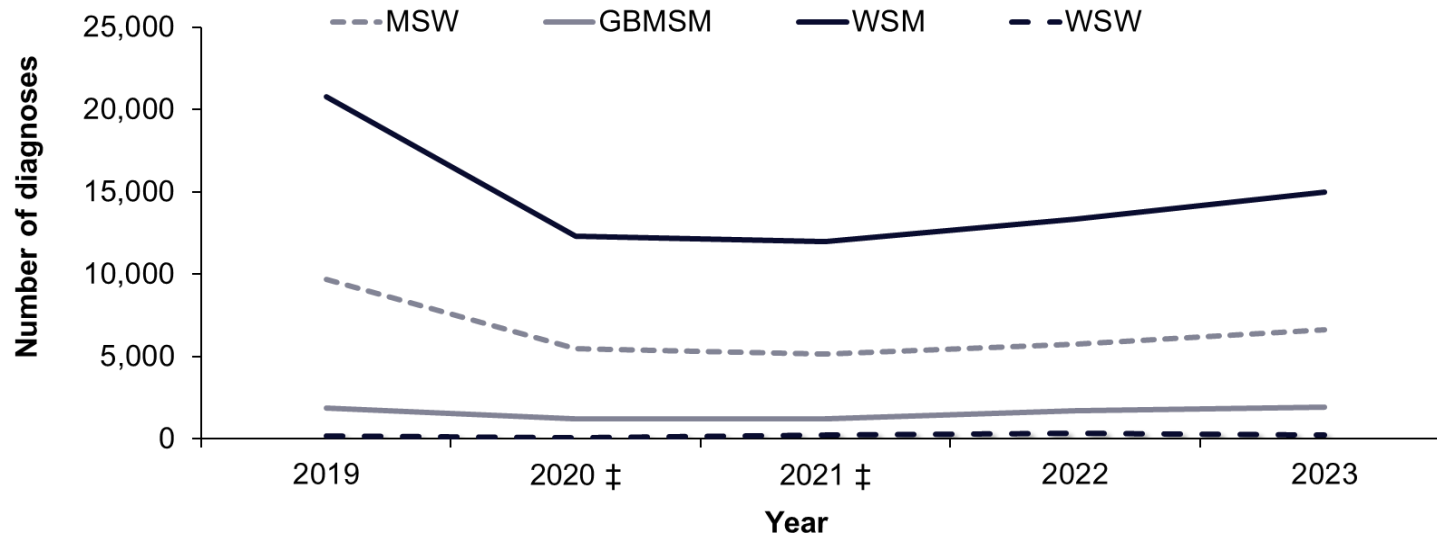
Number of infectious syphilis* diagnoses by gender and sexual orientation: England, 2019 to 2023



*The number of infectious syphilis diagnoses includes primary, secondary and early latent diagnoses

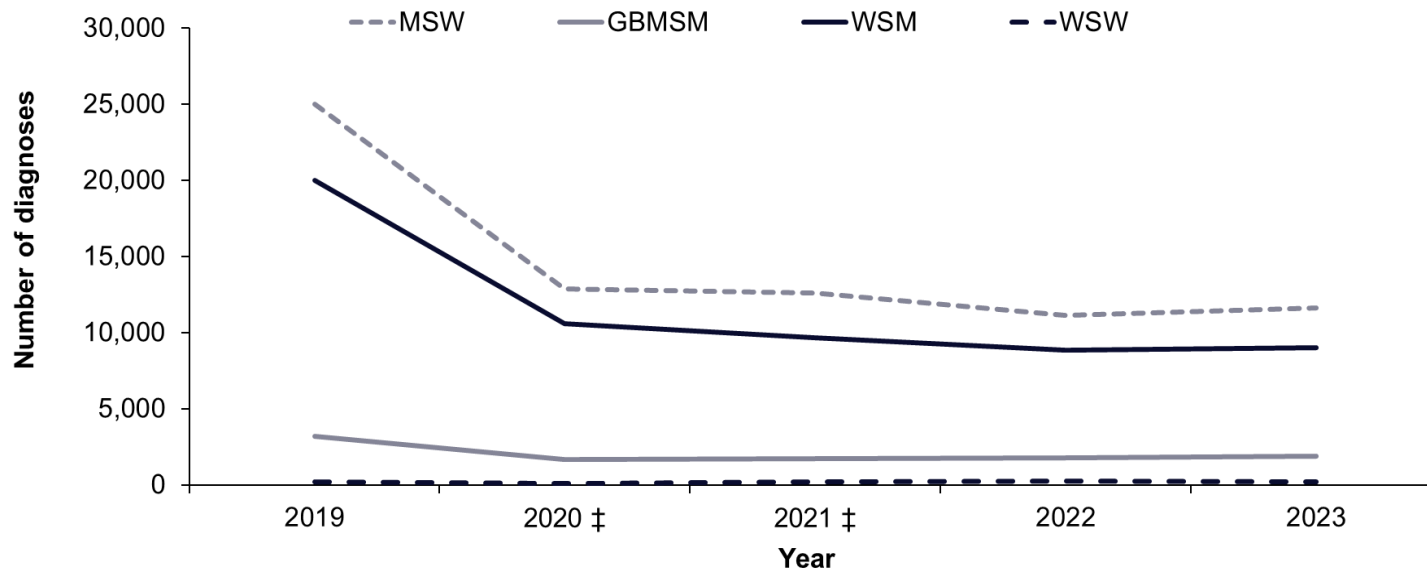
‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of genital herpes (first episode) diagnoses by gender and sexual orientation: England, 2019 to 2023



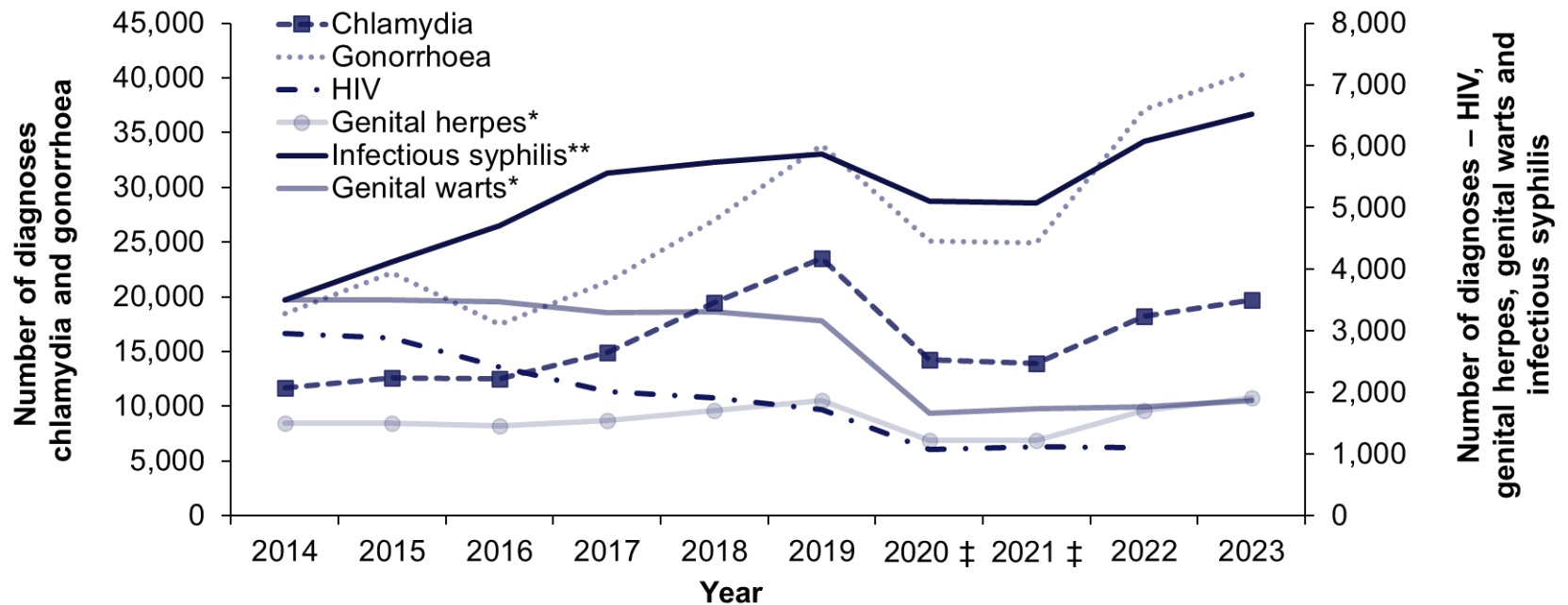
‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of genital warts (first episode) diagnoses by gender and sexual orientation: England, 2019 to 2023



‡ Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic

Number of STI diagnoses among GBMSM: England, 2014 to 2023



*First episode; **Includes diagnoses of primary, secondary and early latent infectious syphilis

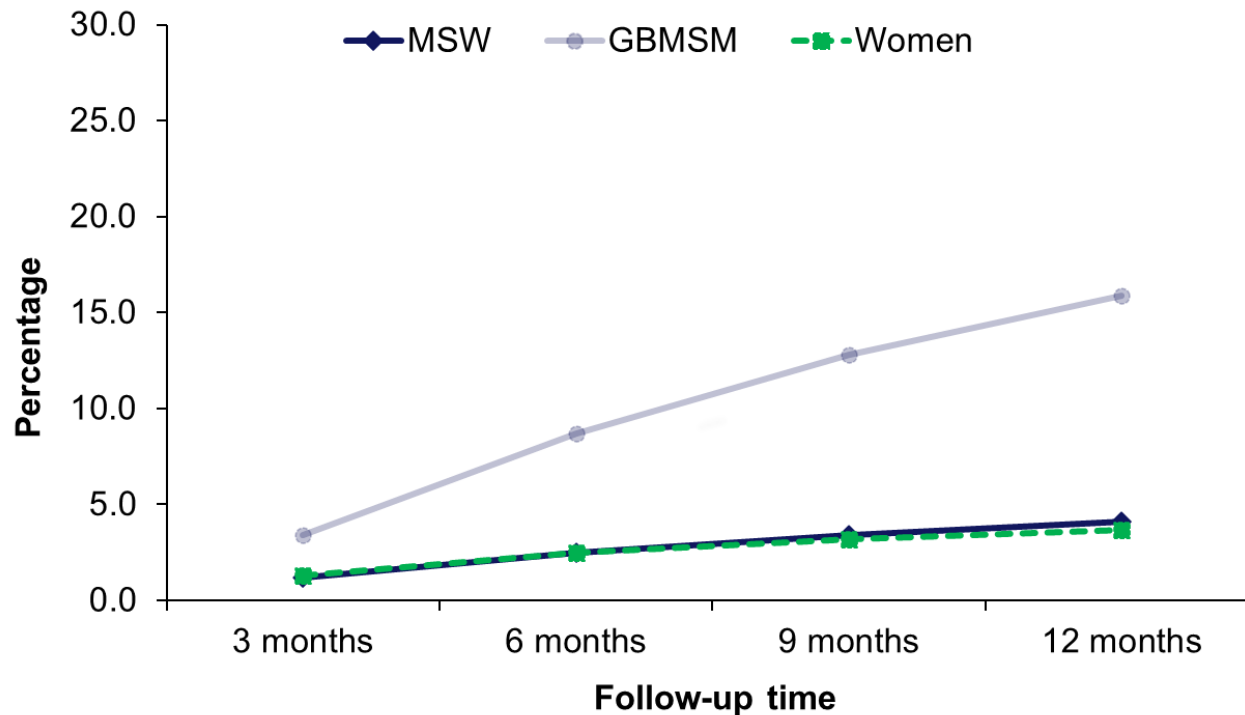
‡Figures reported in 2020 and 2021 are notably lower than previous years due to the disruption to SHSs during the national response to the COVID-19 pandemic



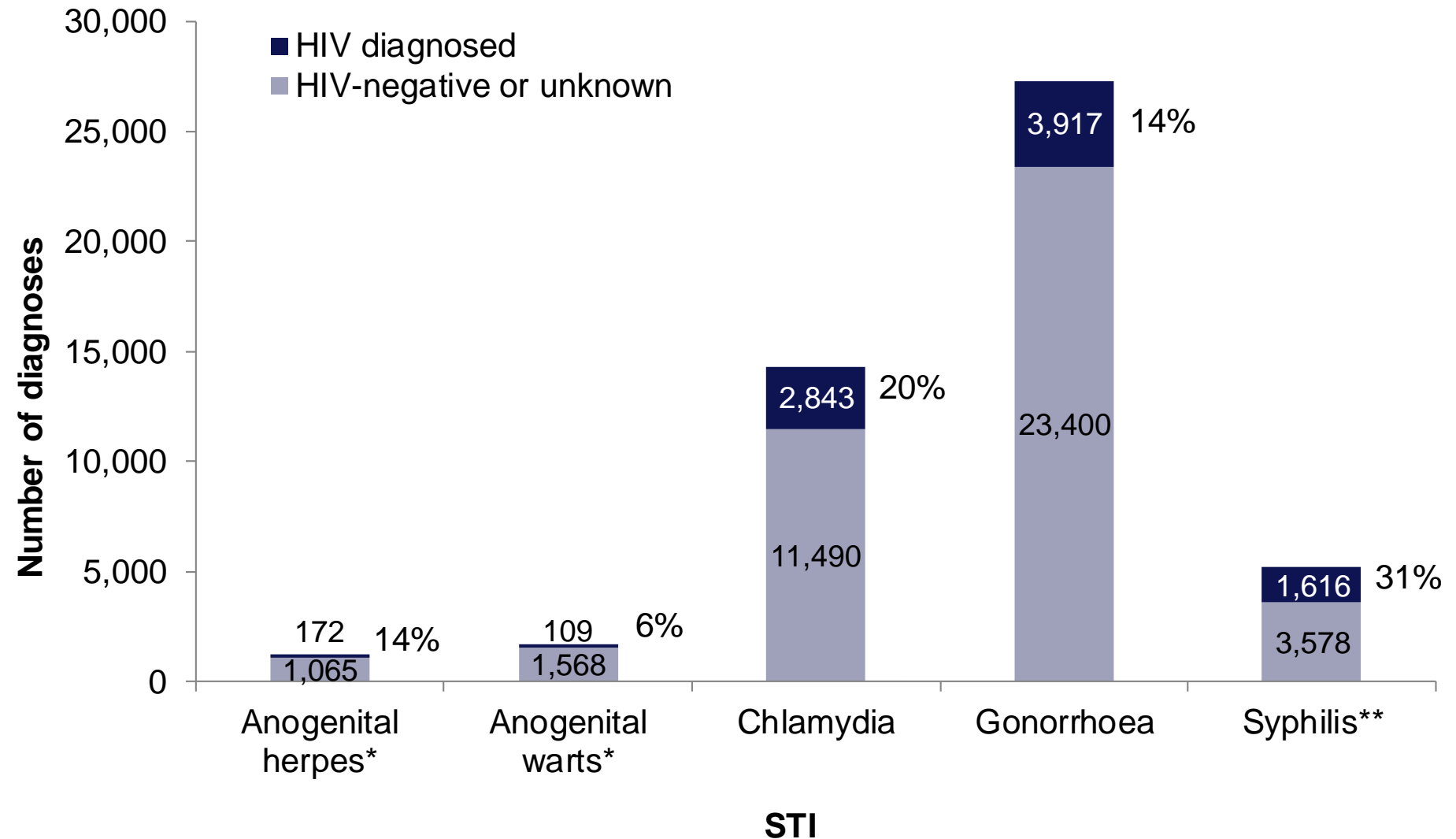
UK Health
Security
Agency

Section 8: Repeat infections

Repeat infection with gonorrhoea: England, 2019 to 2023

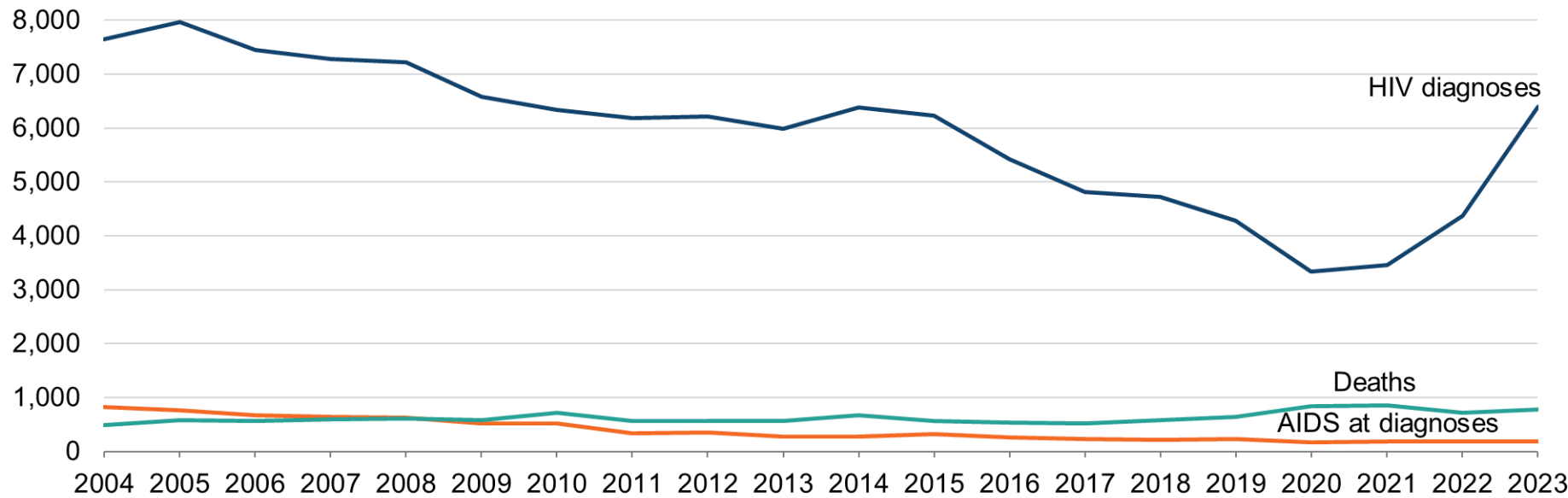


Number of STI diagnoses among MSM by HIV status: England, 2020

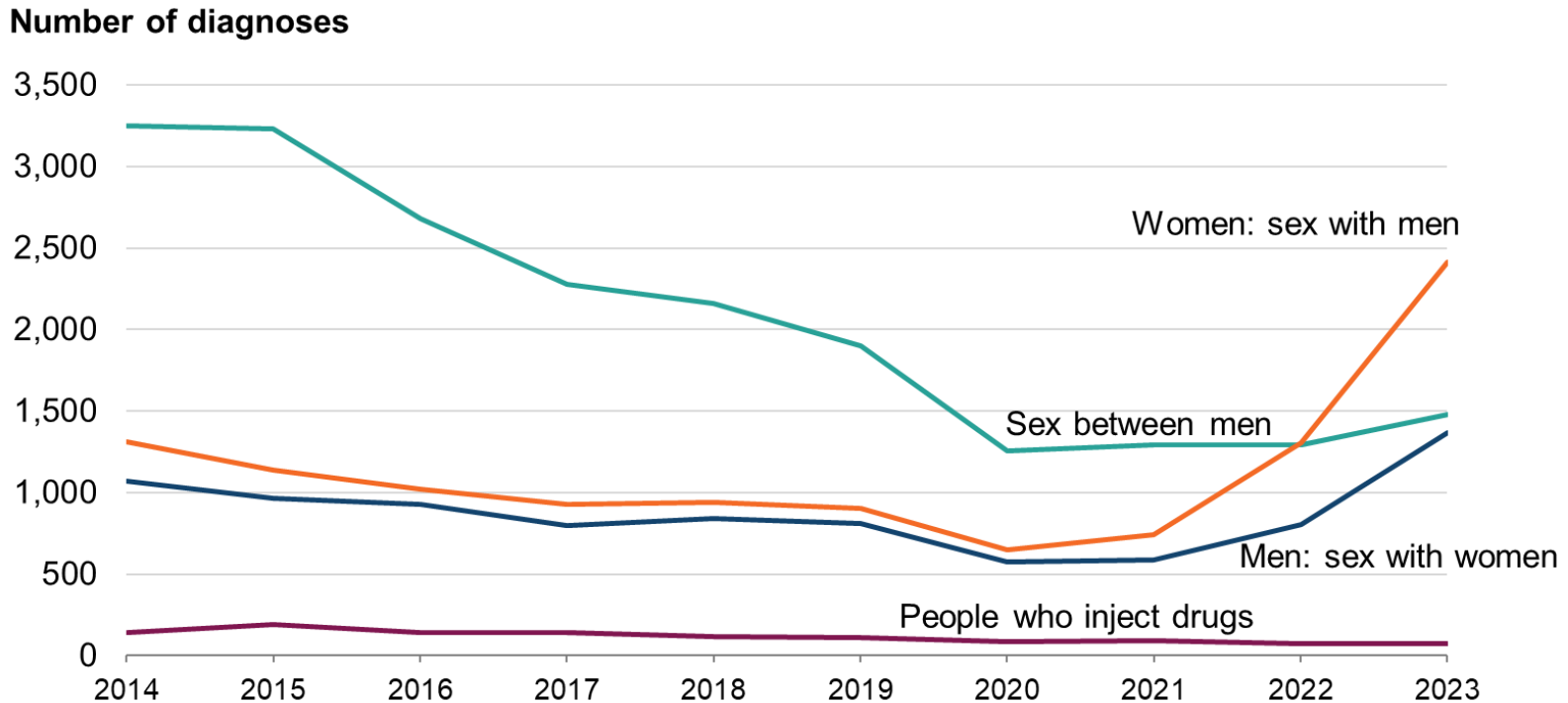


New HIV diagnoses, AIDS at diagnosis, and all-cause deaths in people with HIV: UK, 2004 to 2023

Number of diagnoses



New HIV diagnoses (all persons), by probable route of exposure and gender identity: UK, 2014 to 2023



- Why are GBMSM a high risk group?
 - Sexual practices – AI, frequent change of partner...
 - Recreational drug use – more of above and for longer...

GBMSM - Sexual Practices Definitions

- **Anal intercourse**
 - Receptive (RAI) = “passive” = “bottom”
 - Insertive (IAI) = “active” = “top”
- **Oral intercourse**
 - Receptive (ROI) = GIVING (GOI) oral sex
 - Insertive (IOI) = RECEIVING (ROI) oral sex
- **Fisting**
 - Inserting fist/object into rectum as a means of sexual stimulation
 - Receptive (bottom) / Insertive (top)
- **Rimming**
 - Oro-anal (Giving / Receiving)
- **Vaginal intercourse**
 - IVI

GBMSM - What questions do we need to ask in sexual history?

- AI (RAI/IAI, PAI/UPAI for both, last UPAI)
- OI (GOI/ROI, POI/UPOI)
- VI (PVI/UPVI)
- Fisting / Rimming (P/UP)
- Sex Toys
- SW (ever paid or been paid, P/UP)
- Any non-consensual sex?
- Recreational drug use (type, route, frequency, amount)

Appendix Table 1 Drugs commonly associated with chem-sex amongst gay men (from South London Chemsex study <http://www.sigmaresearch.org.uk/projects/project59/>)

TABLE 1 *Drugs commonly associated with chemsex among gay men*

NAME OF DRUG	STREET NAMES	HISTORY	DELIVERY	EFFECTS	POSSIBLE SIDE-EFFECTS
Mephedrone	Meow Meow, MCAT, plant food	A class B drug that has been illegal in the UK since 2010. It has been popular in the UK since 2008, when it first reached the UK market as a "legal high".	Swallowed in tablet form, snorted as a powder, injected, or administered rectally ('booty bumping').	Euphoria, enhanced appreciation for music, elevated mood, decreased hostility, improved mental function and sexual stimulation.	Anxiety and paranoia, overstimulation of the heart, circulation and nervous system, leading to a risk of fits.
GHB/GBL	G, Gina, liquid ecstasy	Gammahydroxybutyrate (GHB) and GBL (gamma-butyrolactone) have closely related effects. Both are class C drugs.	Swallowed in small liquid doses, or added as a powder to a soft drink. Occasionally injected.	Euphoria, lowered inhibitions, increased sex drive. Often used to boost the effect of other drugs. Relaxant effects can make receptive anal intercourse easier or more pleasurable.	Memory lapses, clumsiness, drowsiness, tremors, agitation. Very risky to take in combination with alcohol and/or amphetamines. Overdose can trigger a 'G sleep' - a state of unconsciousness that may require medical intervention.
Crystal methamphetamine	Crystal, tina, meth, ice, T	Essentially a more pure form of methamphetamine (a stimulant). Class A drug.	Smoked in a glass pipe, snorted as a powder, mixed with water and injected or administered rectally.	Euphoria, increased energy during sex or dancing, enhanced confidence, feelings of invincibility and impulsivity, reduced experience of pain, intense sexual stimulation, and lowered inhibitions.	Sleep disruption, loss of appetite, tremors or convulsions, irregular heartbeat, Comedown associated with feelings of depression, exhaustion and paranoia.
Ketamine*	K, special K, vitamin K	Classified as a Class C drug in 2006 but recently (12 February 2014) reclassified as a Class B drug.	Swallowed in tablet form, snorted as a powder, or injected.	At sub-anaesthetic doses, ketamine produces a dissociative state, characterised by a sense of detachment from one's physical body and the external world. At sufficiently high doses, users may experience what is called the "K-hole", a state of extreme dissociation with visual and auditory hallucinations.	Confusion, agitation, panic attacks, impairment in short and long term memory and depression (in long-term users). Can cause hardening of the walls of the bladder and problems urinating among regular users (ketamine bladder).
Cocaine*	Coke, Charlie, snow, blow	Class A stimulant drug, illegal to possess since 1916.	Snorted as a powder or smoked (typically as 'crack cocaine').	Increased energy, confidence, and feelings of exhilaration. People using cocaine often describe feeling more sociable, talkative and physically strong.	Raised body temperature and heart rate, with associated risk of heart attack. Longer-term damage to cartilage separating nostrils.

* These drugs are not as commonly associated with chemsex, although they were mentioned by some men interviewed in this study and are thus included here for information

MSM - Investigations

- If IAI, ROI, IVI
 - Urethral samples (Urine NAATs +/- urethral smear)
- If RAI
 - If 1st presentation or rectal symptoms - Proctoscope exam and swabs
 - If asymptomatic – blind rectal swabs (no proctoscope)
 - Rectal CT/GC NAAT
 - ?Rectal micro and Rectal GC culture
 - ?Other investigations e.g. DGM / HSV / LGV where appropriate
- If GOI
 - Pharyngeal CT/GC NAAT
 - Pharyngeal GC culture

MSM specific management

- **Vaccinate against HPV and Hepatitis B** + check antibody response
- **Consider screening for Hep A** particularly if
 - Patient has hepatitis B / C or other chronic liver disease
 - In region where outbreak of hepatitis A has been reported
 - Intravenous drug users
- **Consider screening for Hep C** particularly if
 - HIV +ve patients
 - Sexual partners of HCV +ve people
 - Injecting drug users
 - Recipients of blood/blood products/ needlestick injury
 - Frequent change of partner +/- sex on premises venues +/- chemsex

Mpox



- <https://www.nhs.uk/conditions/mpox/>

PrEP (and PEP)

Why should PEP work?

- “Window of opportunity”
 - Up to 48- 72 hours before HIV detectable in regional LN
 - Up to 5 days before detectable in Blood

Evidence for PEP

- Animal studies
 - Tenofovir (TDF) in macaques (SIV)
 - Decline in protection if started longer than 24 hours after exposure or not for 28 days
- Human studies
 - Reduces infection after occupational exposure
 - Prevention of vertical transmission with AZT
 - Brazilian studies showing reduced infection post PEPSE in MSM

Risk that source is HIV positive

Table 1: Estimated HIV prevalence (diagnosed and undiagnosed infection) in adults aged 15-59 years in the UK in 2014

Population group (aged 15-59 years) [‡]	HIV prevalence (%)	
	Men	Women
Men who have sex with men (MSM)[†]		
UK	5.9	–
London	12.5	–
Brighton	13.7	
Manchester	8.6	
Elsewhere in the UK	3.8	–
Heterosexuals		
Black African Ethnicity	4.1	7.1
Non Black African Ethnicity	0.06	0.06
Injecting drug users (IDU)	0.67 - 1.1	0.67 – 1.1

[‡] These data are for England and Wales only

[†]The prevalence of HIV among MSM varies across the UK and is higher in metropolitan areas with large MSM populations^{6,7}

Table 2 Risk of HIV transmission per exposure from a known HIV-positive individual not on ART

Type of exposure	Estimated risk of HIV transmission per exposure from a known HIV-positive individual not on ART	References
Receptive anal intercourse	1 in 90	(10-16)
Receptive anal intercourse with ejaculation	1 in 65	(10-17)
Receptive anal intercourse no ejaculation	1 in 170	(17)
Insertive anal intercourse	1 in 666	(10, 12, 13, 18)
Insertive anal intercourse not circumcised	1 in 161	(17)
Insertive anal intercourse and circumcised	1 in 909	(17)
Receptive vaginal intercourse	1 in 1000	(10, 15, 19-25)
Insertive vaginal intercourse	1 in 1,219	(14, 15, 19-25)
Semen splash to eye	<1 in 10,000	(26)
Receptive oral sex (giving fellatio)	< 1 in 10,000	(13, 20, 25, 27)
Insertive oral sex (receiving fellatio)	< 1 in 10,000	(12, 25)
Blood transfusion (one unit)	1 in 1	(28)
Needlestick injury	1 in 333	(27, 29, 30)
Sharing injecting equipment (includes chemsex)	1 in 149	(26)
Human bite	< 1 in 10,000	(31, 32)

Table 3: Summary table of PEPSE prescribing recommendations

	Source HIV status			
	HIV positive		Unknown HIV status	
	HIV VL unknown / detectable (>200copies/ml)	HIV VL undetectable (<200copies/ml)	From high prevalence country / risk-group (e.g. MSM) *	From low prevalence country / group
Receptive anal sex	Recommend	Not recommended% <i>Provided source has confirmed HIV VL<200c/ml for >6 months</i>	Recommend	Not recommended
Insertive anal sex	Recommend	Not recommended	Consider [†]	Not recommended
Receptive vaginal sex	Recommend	Not recommended	Consider [†]	Not recommended
Insertive vaginal sex	Consider ^{&}	Not recommended	Consider [†]	Not recommended
Fellatio with ejaculation[‡]	Not recommended	Not recommended	Not recommended	Not recommended
Fellatio without ejaculation[‡]	Not recommended	Not recommended	Not recommended	Not recommended
Splash of semen into eye	Not recommended	Not recommended	Not recommended	Not recommended
Cunnilingus	Not recommended	Not recommended	Not recommended	Not recommended
Sharing of injecting equipment**	Recommended	Not recommended	Consider	Not recommended
Human bite[§]	Not recommended	Not recommended	Not recommended	Not recommended
Needlestick from a discarded needle in the community			Not recommended	Not recommended

Other factors to consider

- Concurrent STI



- Breaches in mucous membrane

- Viral Load of HIV positive partner (U=U)

What is PEP?

1. Current regimen:

1. Truvada + Raltegravir

2. Better side effect and interactions profile

- 28 Days

HIV Pre-Exposure Prophylaxis (PrEP)

What is PrEP?

- Drug given to HIV uninfected individuals before exposure to HIV
- Pills, gels (vaginal/rectal), intravaginal rings, long-acting injectables

PrEP history

First animal study: 1995¹

First study in infants: 2003²

First adult study (terminated): Cambodia, 2004³

First result (65% reduction in infections, but not significant): Ghana, 2006⁴

First significant result (44% effectiveness): iPrEx, 2010⁵

1. Tsai CC et al. Science 270: 1197-1199, 1995.
2. Vyankandondera J et al. (Simba study). 2nd IAS Paris, abstract LB7, 2003.
3. Singh JA and Mills EJ PLoS Med 2005
4. Peterson L et al. 16th International AIDS Conference, Toronto, abst ThLb0103, 2006
5. Grant RM et al. iPrex Study Lancet 2010

HIV Incidence



Group	No. of infections	Follow-up (PY)	Incidence (per 100 PY)	90% CI
Overall	23	465.6	4.9	3.4–6.8
Immediate	3	243.5	1.2	0.4–2.9
Deferred	20	222.1	9.0	6.1–12.8

Effectiveness = 86% (90% CI: 64 – 96%)

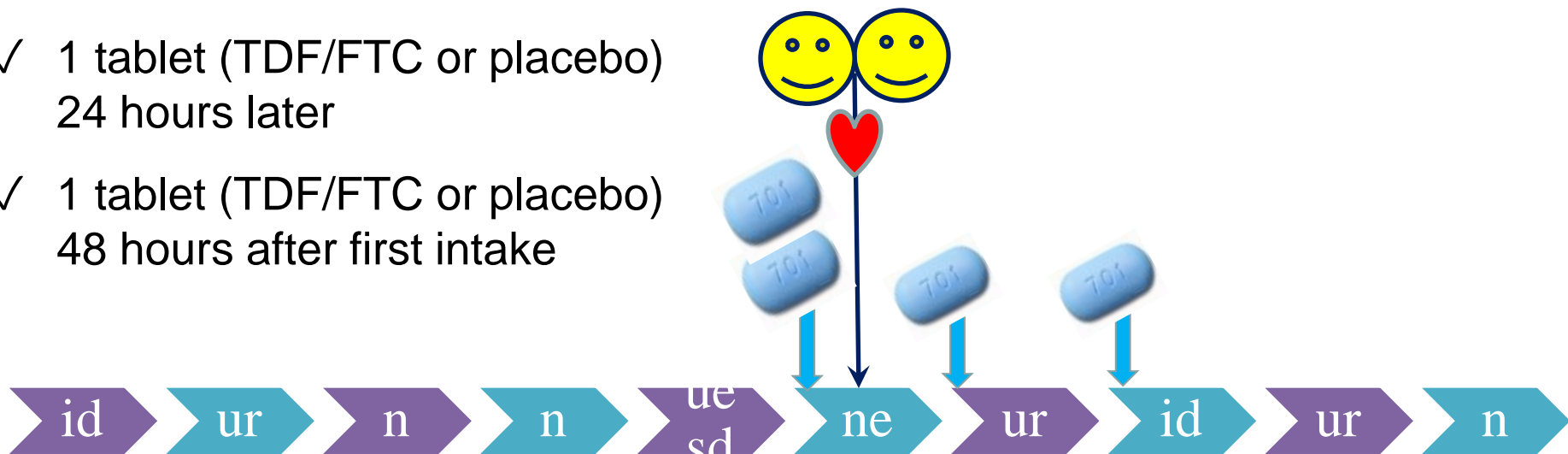
P value = 0.0001

Rate Difference = 7.8 (90% CI: 4.3 – 11.3)

Number Needed to Treat = 13 (90% CI: 9 – 23)

Ipergay : Event-Driven iPrEP

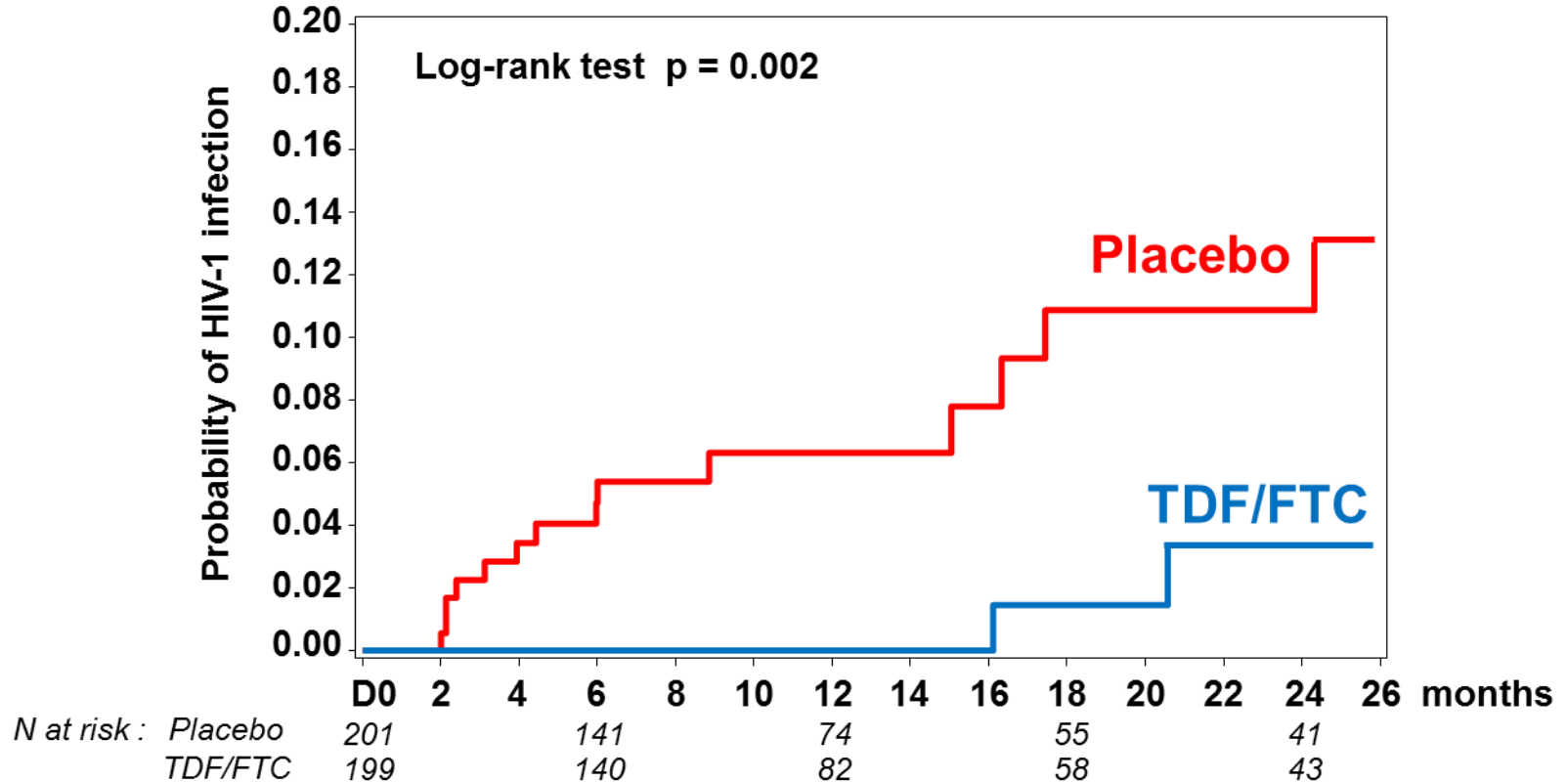
- ✓ 2 tablets (TDF/FTC or placebo)
2-24 hours before sex
- ✓ 1 tablet (TDF/FTC or placebo)
24 hours later
- ✓ 1 tablet (TDF/FTC or placebo)
48 hours after first intake





ipergay
ANRS
Intervention Préventive
de l'Exposition aux Risques
avec et pour les Gays

KM Estimates of Time to HIV-1 Infection (mITT Population)



Mean follow-up of 13 months: 16 subjects infected

14 in placebo arm (incidence: 6.6 per 100 PY), **2 in TDF/FTC arm** (incidence: 0.94 per 100 PY)

86% relative reduction in the incidence of HIV-1 (95% CI: 40-99, $p=0.002$)

NNT for one year to prevent one infection : 18

Concerns/caveats

Adherence

Resistance

Safety

Risk compensation

Women*

Cost

Karris CID 2014

Blumenthal AIDS Bhav 2015

Sharma PLoS One 2014

Implementing PrEP in the UK

- Truvada was not licensed for use as PrEP
 - Gilead indicated willingness to file with EMA
 - ?tiered pricing
- PrEP programme was initially not commissioned in England cf Scotland and Wales
- National Guideline
- Remember - Risk reduction package
- Raise awareness, written information – ibase etc

Lifestyle > Health & Families > Health News

Jeremy Hunt said 'what will the Daily Mail say?' when told about funding of HIV prevention drug

Exclusive: A daily dose of the new drug has been shown to reduce HIV infection by 86 per cent

Katie Forster | @katieforster | Friday 2 September 2016 | 183 comments

Facebook, Twitter, Email icons and 736 shares

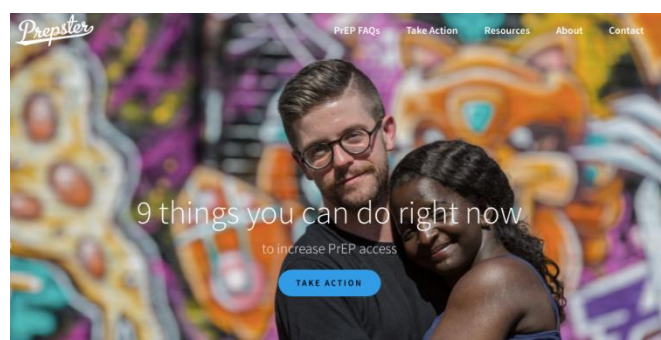




Educating and agitating for PrEP

In England and beyond

Prepster



9 things you can do right now

to increase PrEP access

TAKE ACTION



I Want PrEP Now

Share

605

Tweet

Like

Home

About PrEP

How To Get PrEP

Buy PrEP Now

PrEP Cycle

News

About Us

Buy PrEP Now

Where to get PrEP online

So far we have verified 3 different companies who sell the generic equivalent of Truvada which is produced by Cipla.

[United Pharmacies UK](#) (£44 per month)

Buy Now



United Pharmacies UK is our personally recommended supplier of PrEP, you do not need to upload a prescription after purchasing, and they have some of the cheapest prices on the internet. We have talked to one of their customers who uses them to get PrEP, who has also afterwards had the blood test which tests the amount of PrEP in your blood, and came back with perfect results. We have also used United Pharmacies to buy PrEP ourselves with no problems.

1 months supply = £45.79 per month.

3 months supply = £41.69 per month, (£125.07 in total).

Delivery to the UK costs £6.75 and takes 7 - 14 business days.



PrEP Impact Trial

A pragmatic health technology assessment of PrEP and implementation

[Home](#)

[The PrEP Impact Trial](#)

[FAQs](#)

[Join the Trial](#)

[Contact](#)



Welcome to the PrEP Impact Trial website

PrEP is a new way for people to reduce their risk of acquiring HIV.

The PrEP Impact Trial is recruiting 10,000 participants who are at a high risk of HIV, across England.

ABOUT PrEP

What is PrEP?

PrEP (HIV Pre-exposure Prophylaxis) is a medicine for HIV negative people, is taken before sex, so it is pre-exposure. Prophylaxis means to prevent infection – in this case HIV. It can reduce the risk of acquiring HIV when taken as instructed.

PrEP is made up of two drugs, Tenofovir and Emtricitabine. These drugs are known as antiretroviral medicines and have been used as part of HIV treatment for many years. You may know this medicine by its brand name, Truvada, however there are generic forms of the drug with the same active ingredients.

→ [Coronavirus \(COVID-19\)](#) | Guidance and support

[Home](#) > [Health and social care](#) > [National Health Service](#)

News story

HIV drug PrEP to be available across England

PrEP will be routinely available across England as part of the government's aim to end HIV transmission by 2030.

From: [Department of Health and Social Care](#)

Published 15 March 2020



Related content

[HIV surveillance systems](#)

[HIV: self-testing](#)

[Health matters: increasing the uptake of](#)

GBMSM PrEP in 2024

- Now standard of care in Sexual Health clinics
- Challenges around service implementation
- Complex PrEP services – Renal/bone concerns, TAF, commissioning etc
- Need to ensure linked in to STI care and PN
- Drug and alcohol services/sexual wellbeing/consensual sex
- Education re STI burden
- Other forms of HIV prevention coming – LA inj
- ePrEP consequences

Any Questions?



~~@DrAndyWilliams~~



ajwilliams@nhs.net