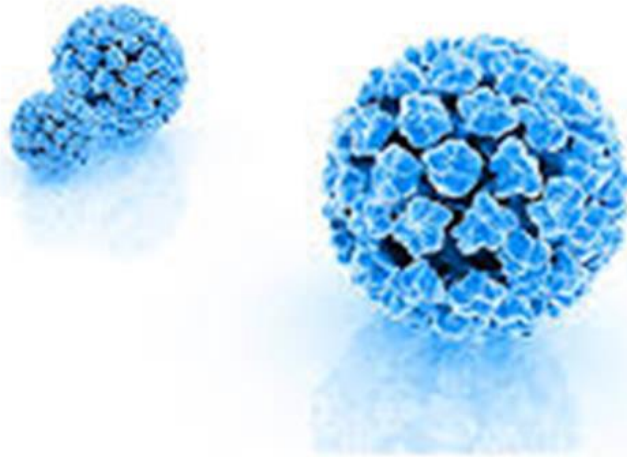


STI surveillance in Northern Ireland 2020

An analysis of data for the calendar year 2019



STI surveillance in Northern Ireland

An analysis of data for the calendar year 2019

<http://www.publichealthagency.org/directorate-public-health/health-protection/sexually-transmitted-infections>

STI surveillance in Northern Ireland

Summary Points 2019

- New diagnoses of chlamydia increased by 4%; 1,863 diagnoses in 2019 compared with 1,787 in 2018.
- New diagnoses of gonorrhoea increased by 8%; 951 in 2019 compared with 882 in 2018.
- New diagnoses of genital herpes simplex (first episode) decreased by 3%; 487 in 2019 compared with 501 in 2018.
- New diagnoses of genital warts (first episode) decreased by 5%; 1,367 in 2019 compared with 1,436 in 2018.
- New diagnoses of infectious syphilis increased by 32%; 66 in 2019 compared with 50 in 2018.

Sexual health service developments

There have been a number of service developments that may have some impact on STI testing and surveillance results during 2019, and going forward

- HIV PrEP clinic opened in July 2018, with requirements for 3 monthly STI testing in those prescribed PrEP.
- SH:24 is a free online sexual health testing service that provides confidential home-testing for chlamydia, gonorrhoea, syphilis and HIV. The service became available to residents in Northern Ireland in late 2019. No data from SH:24 is presented here.
- HPV vaccination for boys was introduced in September 2019.

Chart 1: Trends in diagnoses and sexual health screens made in Northern Ireland GUM Clinics, 2006-2019

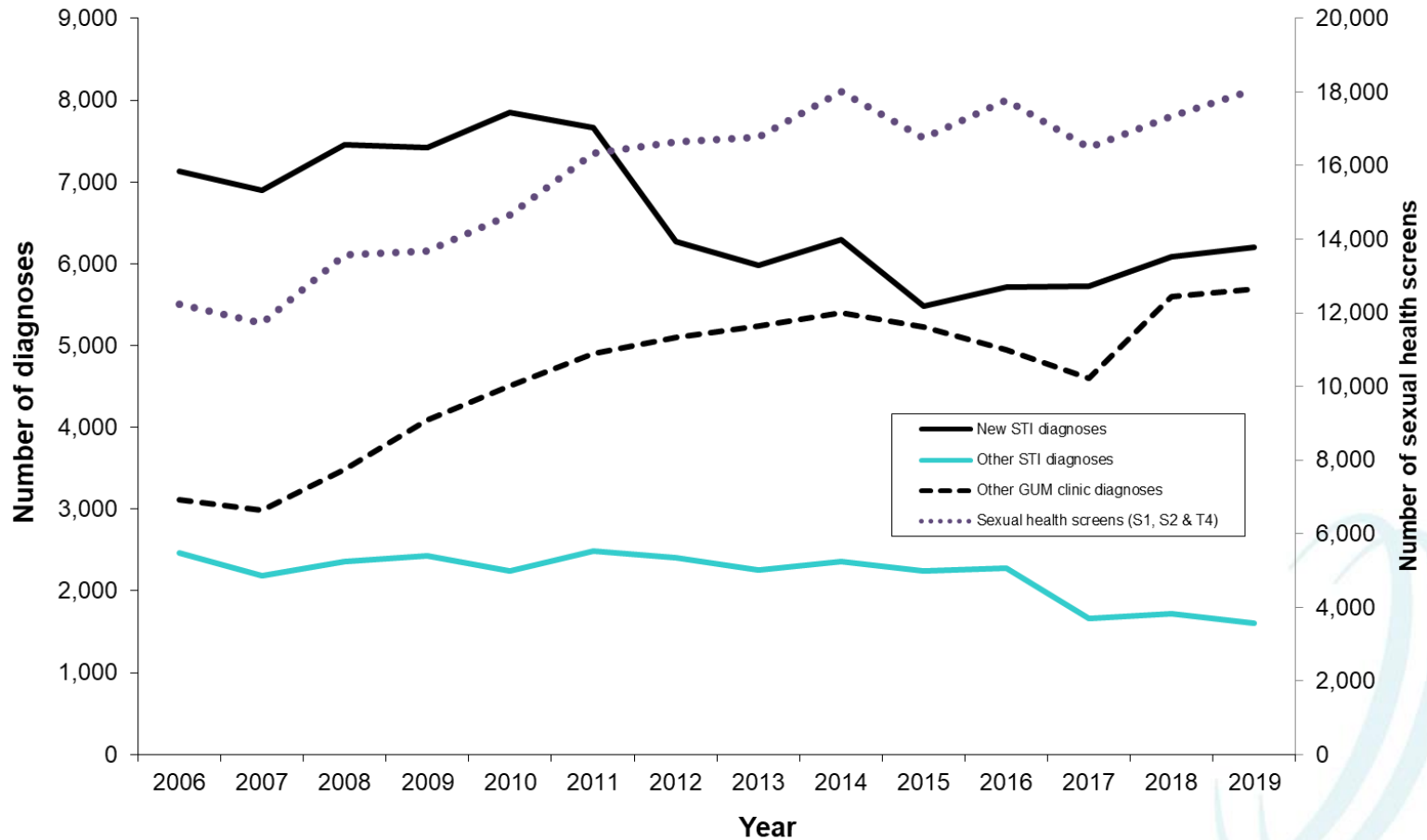


Chart 2: Trends in new diagnoses of STIs in Northern Ireland GUM clinics, 2006-2019

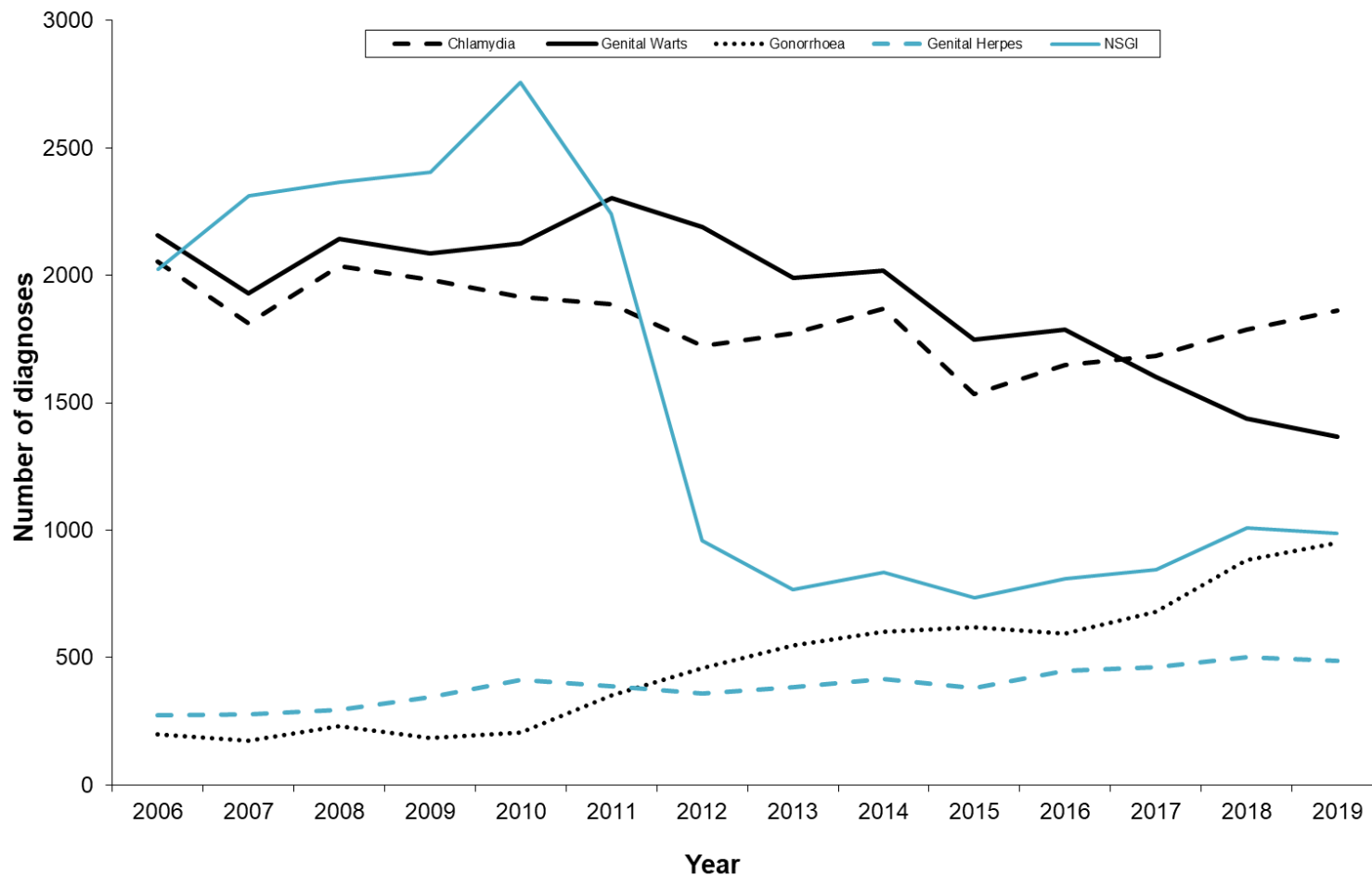


Chart 3a: Trends in sexual health screen activity in Northern Ireland GUM clinics, by male sexual orientation, 2008, 2014-2019

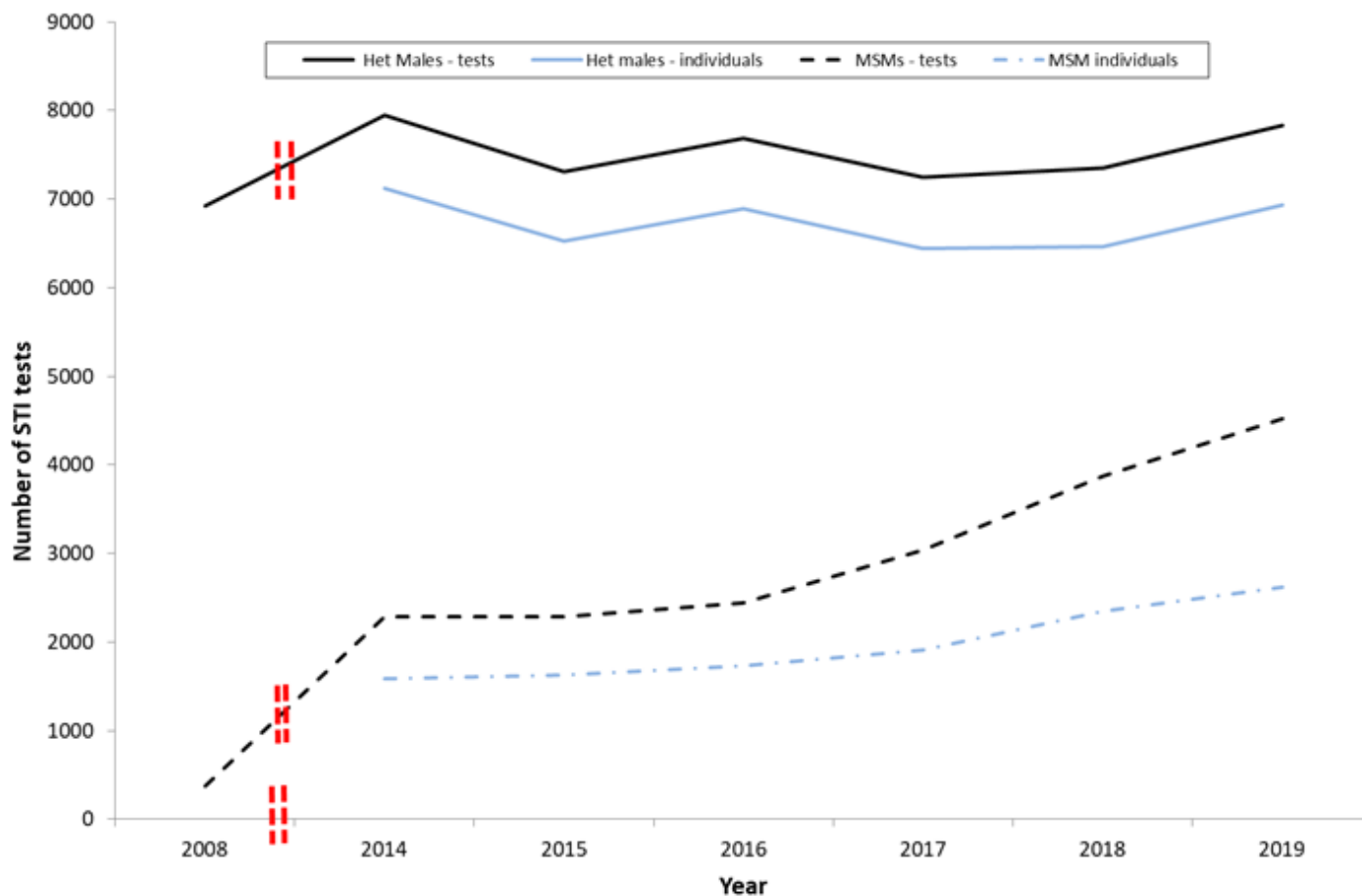


Chart 3b: Trends in sexual health screen activity in Northern Ireland GUM clinics, for females, 2008, 2014-2019

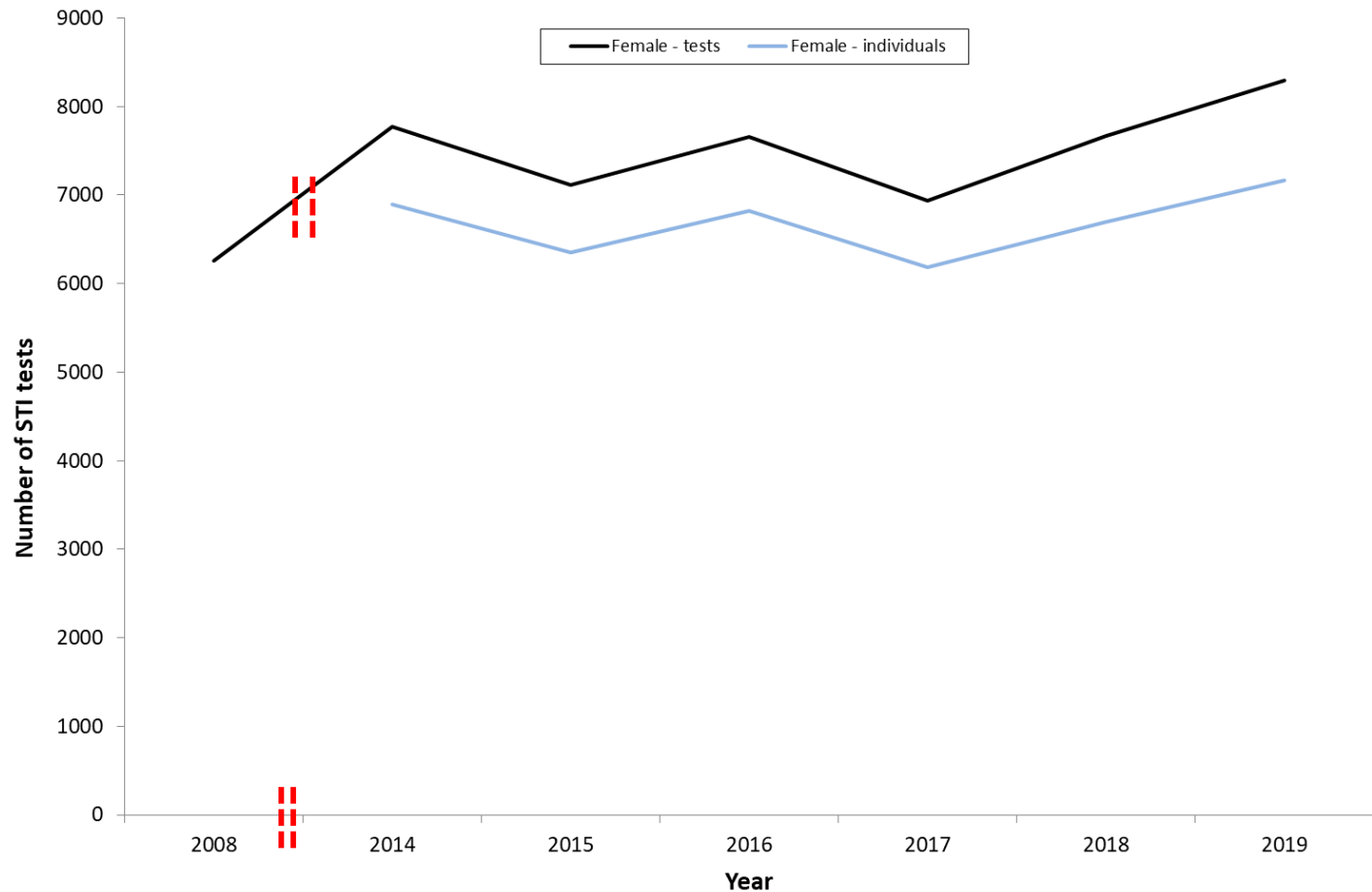


Table 1: Trends in diagnoses made in GUM clinics in Northern Ireland, 2006-2019

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
New STI diagnoses	7129	6897	7452	7417	7850	7661	6267	5977	6292	5477	5719	5726	6086	6208
Other STI diagnoses	2464	2187	2355	2426	2245	2485	2410	2260	2363	2242	2279	1663	1725	1610
Other GUM clinic diagnoses	3110	2991	3480	4094	4507	4900	5095	5233	5400	5224	4953	4600	5600	5693

Diagnoses provided in Northern Ireland GUM clinics in 2019

During 2019:

- 6,208 new STI diagnoses were made, an increase of 2% compared with 2018 (6,086);
- 66% (4,073/6,208) of new STI diagnoses were in males;
- three types of infection accounted for 68% of **new STI diagnoses** – chlamydia (30%), genital warts (first infections) (22%) and non-specific genital infection (16%);
- 1,610 other STI diagnoses were made;
- 5,693 other diagnoses made at GUM clinics.

Trends : 2006-2019

- Between 2006 and 2011 the number of **new STI diagnoses** remained relatively stable. Between 2011 and 2017, the numbers have decreased reflecting a steep decline in new diagnoses of complicated and uncomplicated non-specific genital infection (NSGI) (chart 2). This decrease is likely to be due to the change in test technology within GUM clinics, whereby the more sensitive dual platform PCR test for gonorrhoea and chlamydia has largely replaced the invasive urethral culture in asymptomatic patients. This has resulted in more detections of organisms with proven pathogenicity, particularly gonorrhoea and thus NSGI diagnoses have fallen (chart 1). However, diagnoses of new STIs have been increasing again since 2015, with a further 2% increase in 2019 when compared to 2018 (chart 1), (table 1).
- The number of **other STI diagnoses** has remained largely stable since 2006.
- During 2006–2019, chlamydia infection, non-specific genital infection (NSGI) and genital warts (first infections) accounted for the highest proportion of new STI diagnoses (68%) made in Northern Ireland GUM clinics (chart 2).

Chart 4: Diagnoses of chlamydial infection in Northern Ireland, 2006-2019

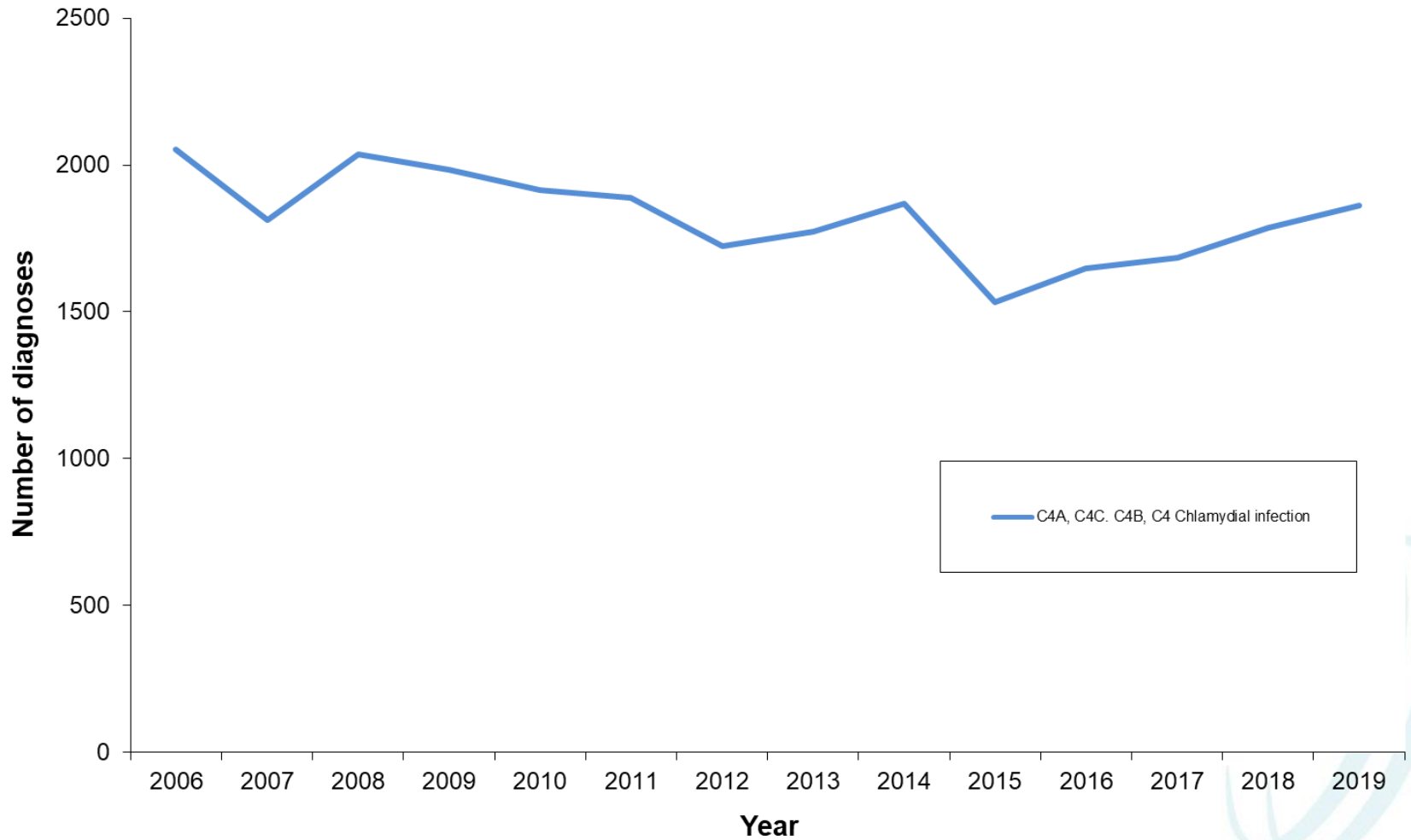
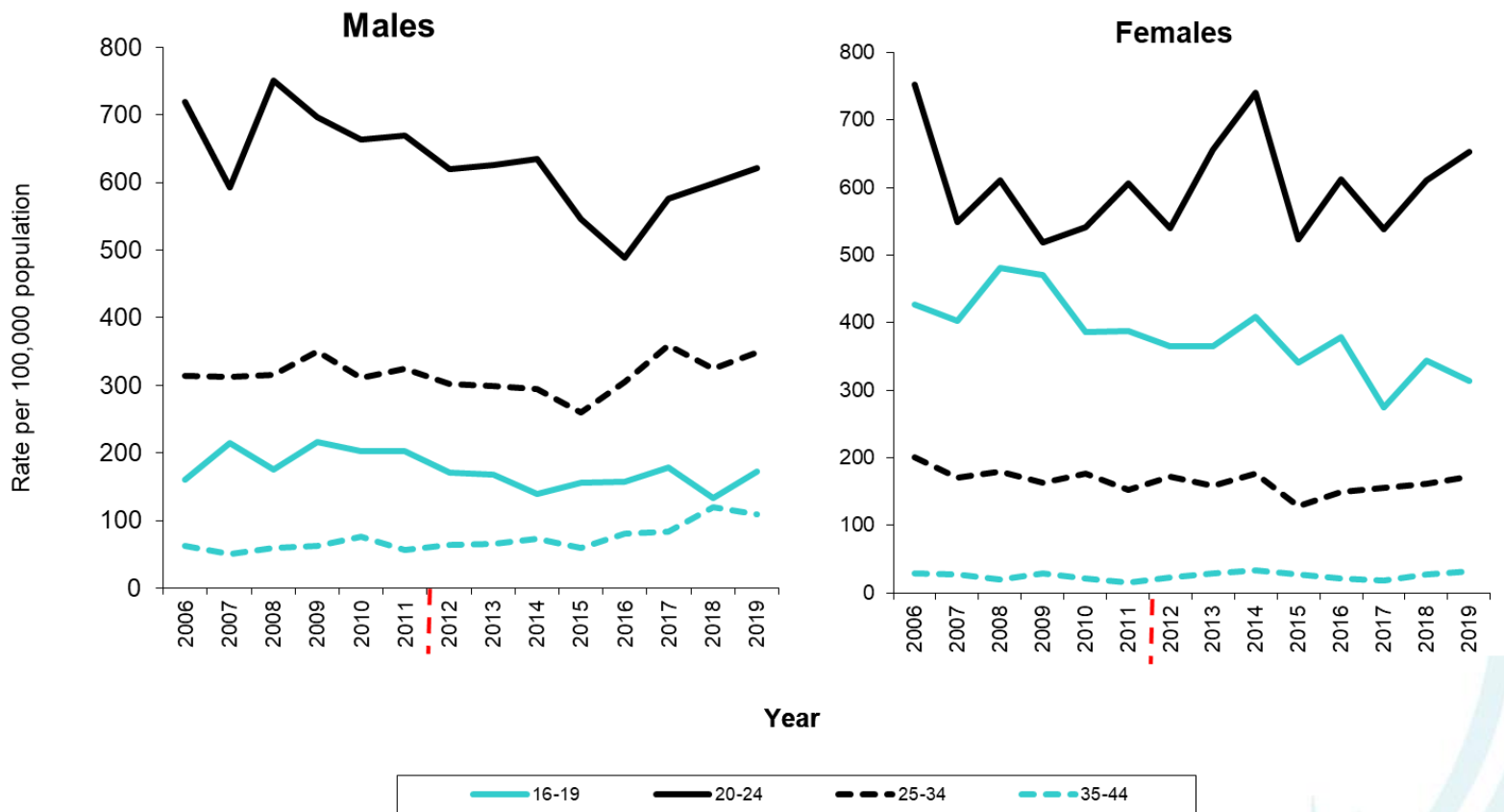


Chart 5: Rates of diagnosis of chlamydial infection in Northern Ireland by gender and age group, 2006-2019



Rates have been recalculated from 2012 as a result of new coding within GUMC clinic

Table 2: Referral source of genital *Chlamydia trachomatis* specimens, 2006–2019

Referral Source	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
GP Number (%)	720 (26.1)	894 (29.7)	979 (29.0)	1025 (30.3)	1124 (33.5)	1096 (34.3)	1207 (37.1)	1102 (35.2)	1093 (33.9)	1028 (35.8)	977 (32.8)	968 (33.5)	911 (29.7)	881 (28.8)	14,005
Other	2,036	2,121	2,396	2,353	2,231	2,104	2,044	2,023	2,130	1,836	1,998	1,921	2,152	2,173	29,518
Total	2,756	3,015	3,375	3,378	3,355	3,200	3,251	3,125	3,223	2,864	2,975	2,889	3,063	3,054	43,523

Chart 6: Laboratory reports of genital *Chlamydia trachomatis*, by age and gender, 2006–2019

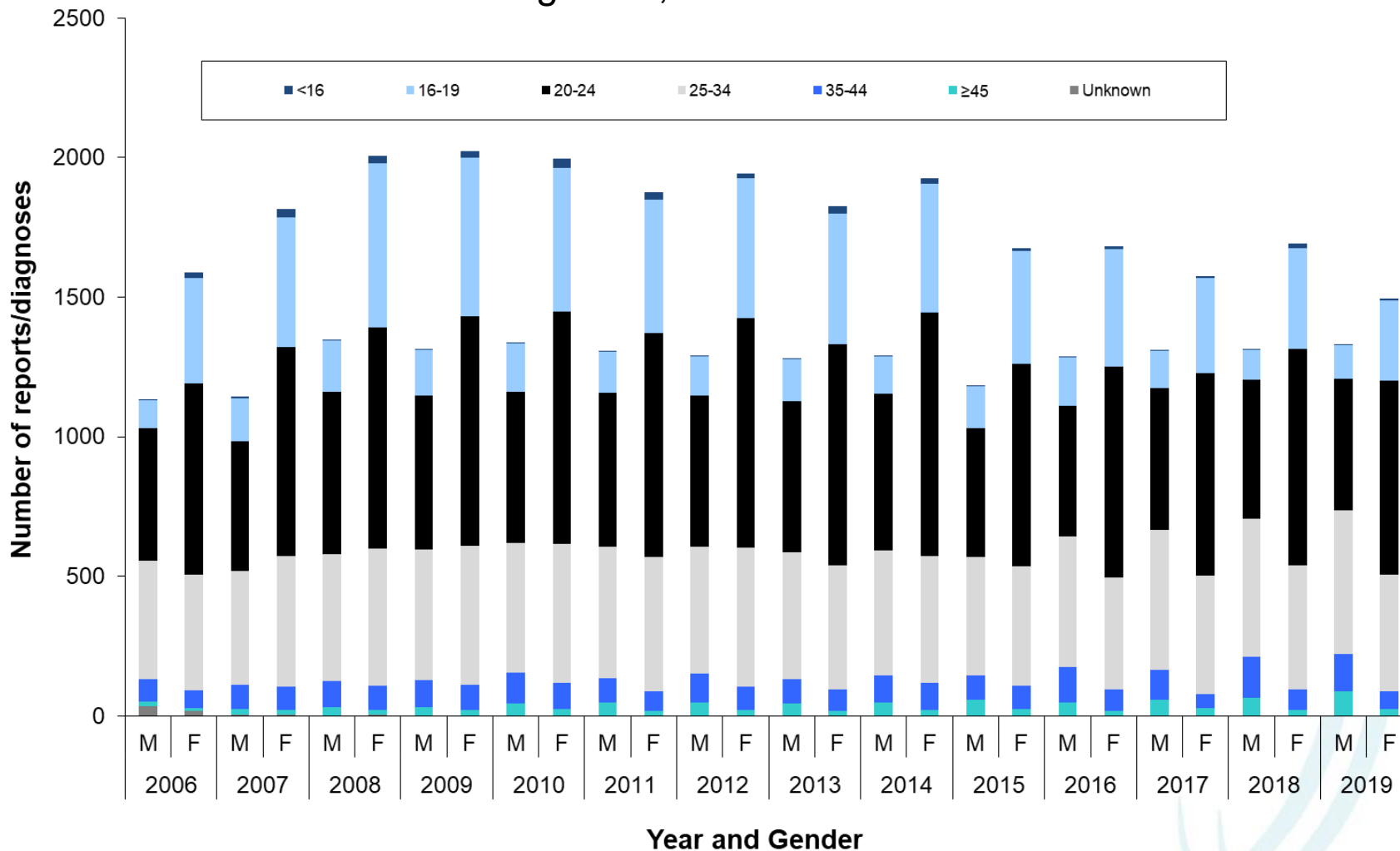


Chart 7: Diagnoses of gonorrhoea in Northern Ireland, 2006–2019

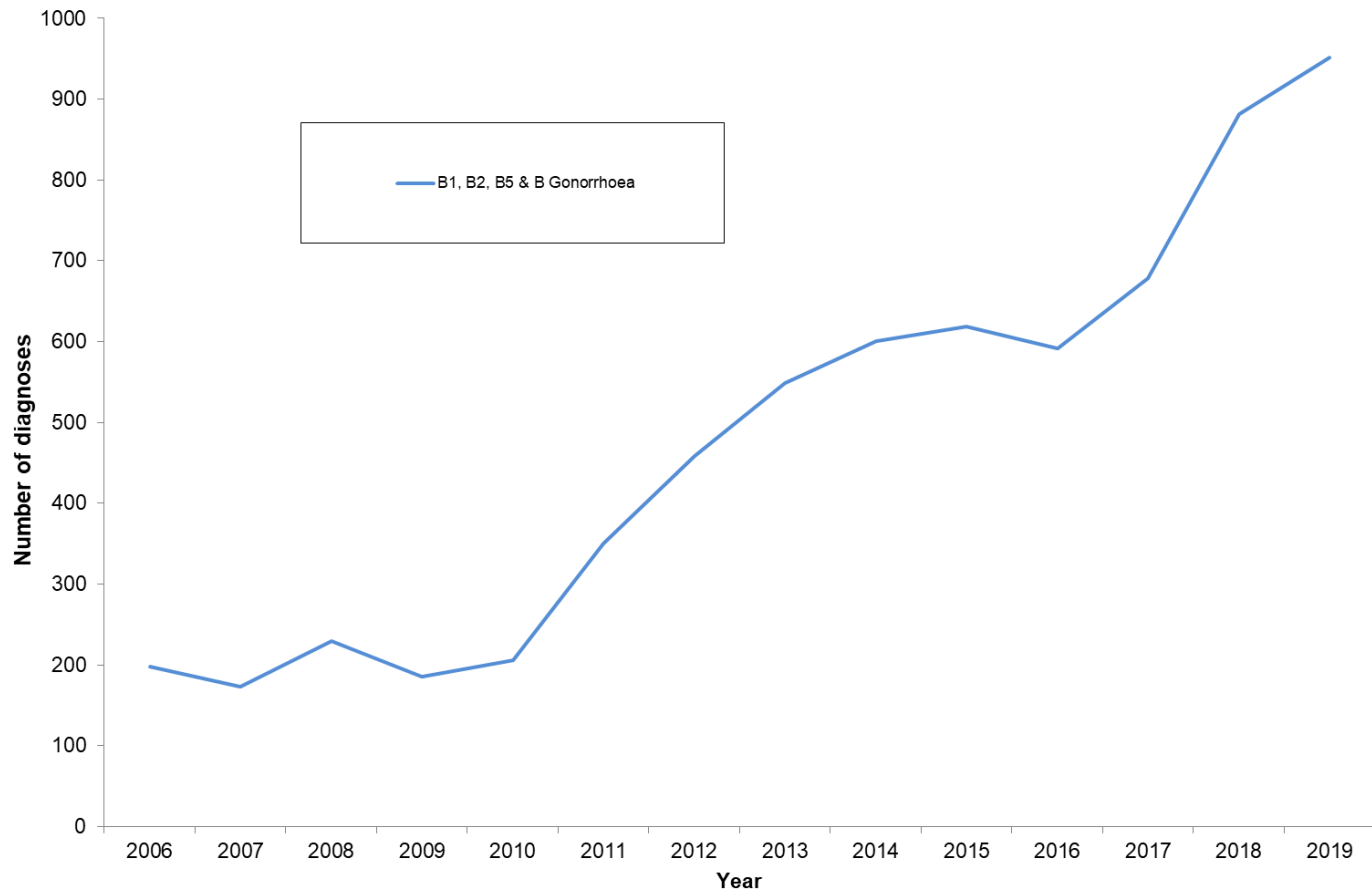
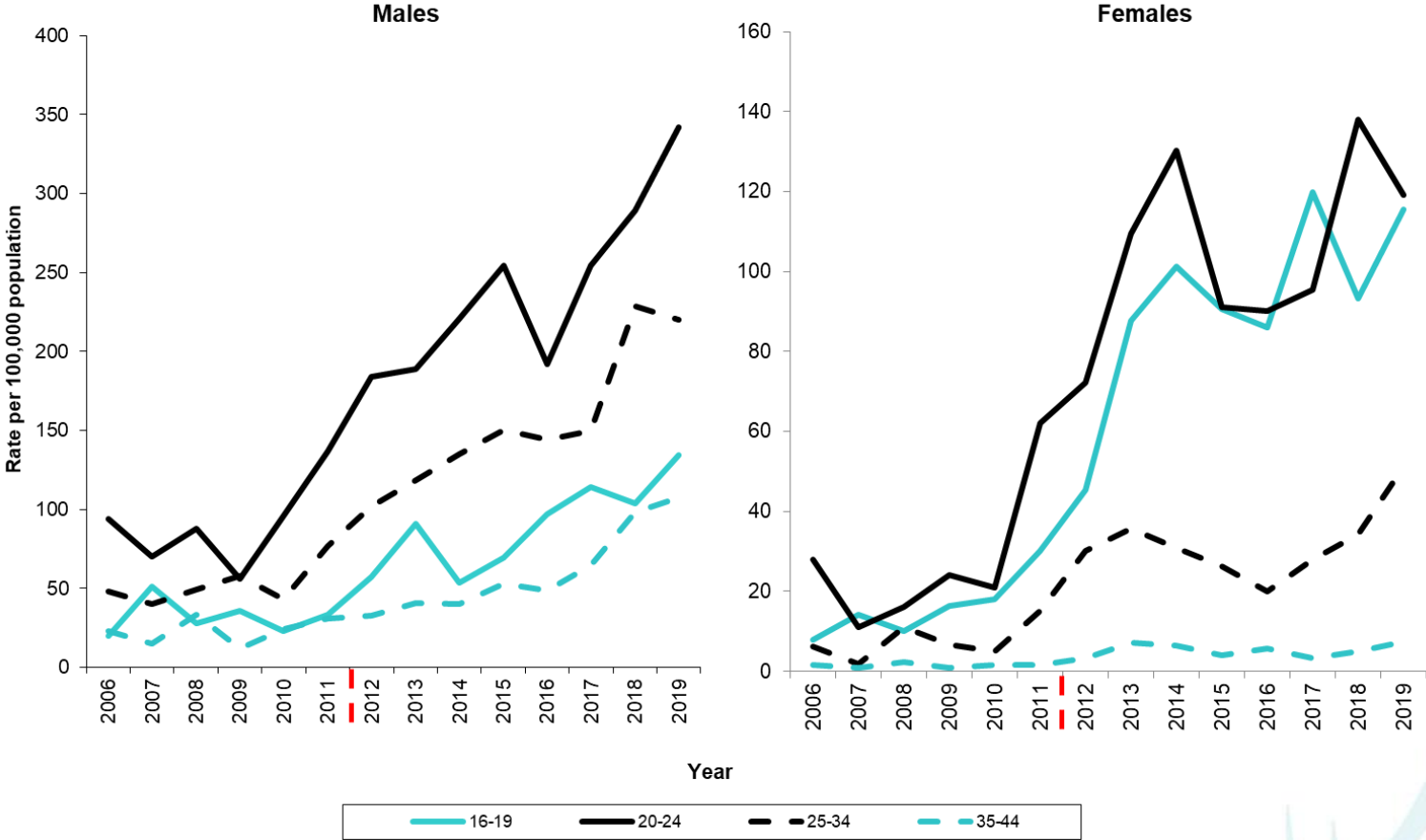


Chart 8: Rates of diagnosis of gonorrhoea in Northern Ireland, by gender and age group, 2006–2019



Rates have been recalculated from 2012 t as a result of new coding within GUMC clinic

Chart 9: Number of diagnoses of gonorrhoea by sexual orientation in Northern Ireland, 2006-2019

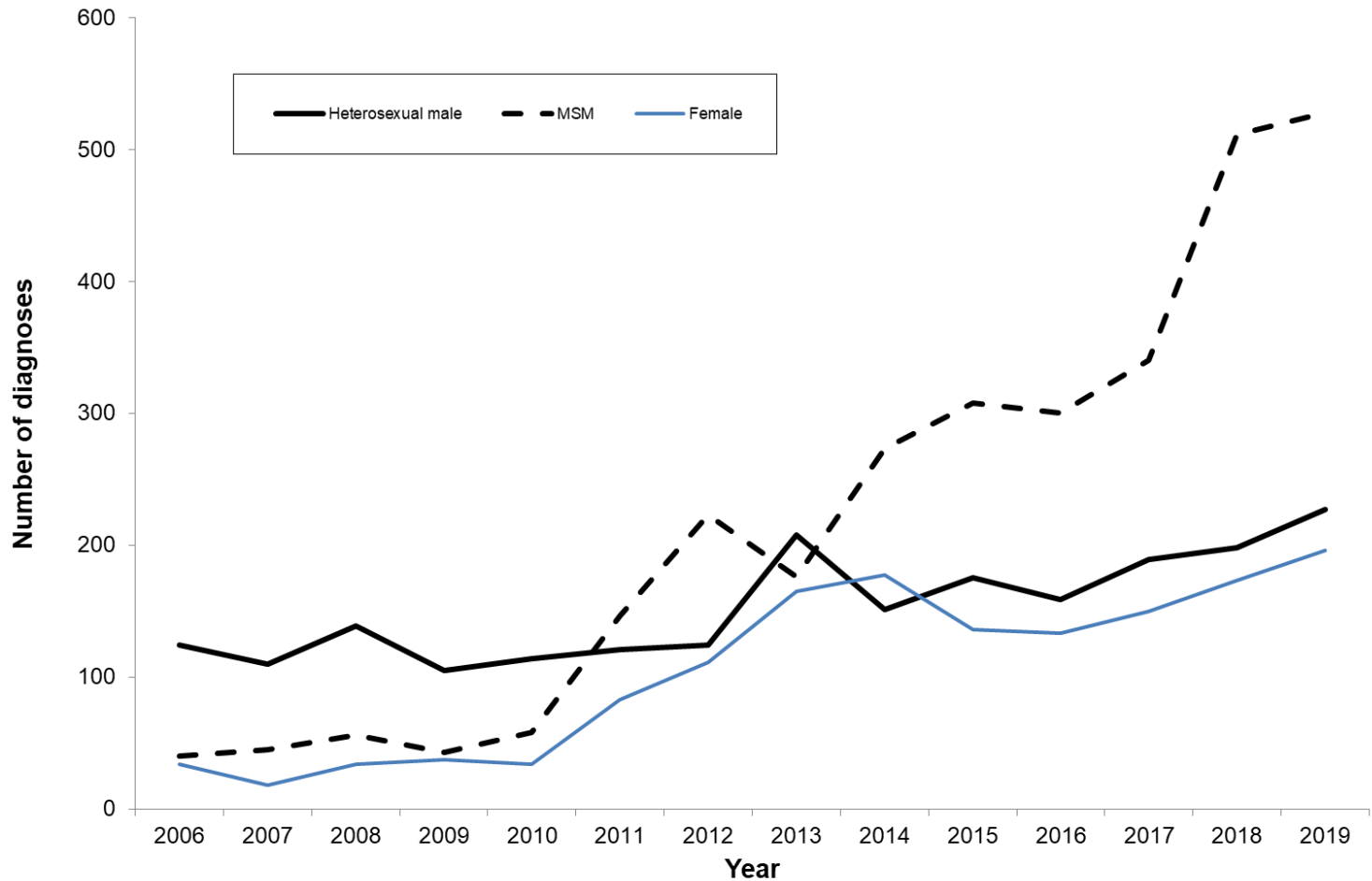


Table 3: *Neisseria gonorrhoeae* antibiotic susceptibility reported activity for antibiotics, 2019

Antibiotics	Susceptible		Resistant		Intermediate		Total specimens Reported	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Azithromycin	336	79.2	46	10.8	42	9.9	424	100
Cefotaxime	1	100	0	0	0	0	1	100
Ceftriaxone	432	98.6	6	1.37	0	0	438	100
Ciprofloxacin	253	59.7	171	40.3	0	0.0	424	100
Doxycycline	216	62.1	125	35.9	7	2.0	348	100
Penicillin	35	9.0	94	24.2	259	66.8	388	100

Source: Northern Ireland Lab Information System (NILIS)



Chart 10: Diagnoses of genital herpes in Northern Ireland, 2006–2019

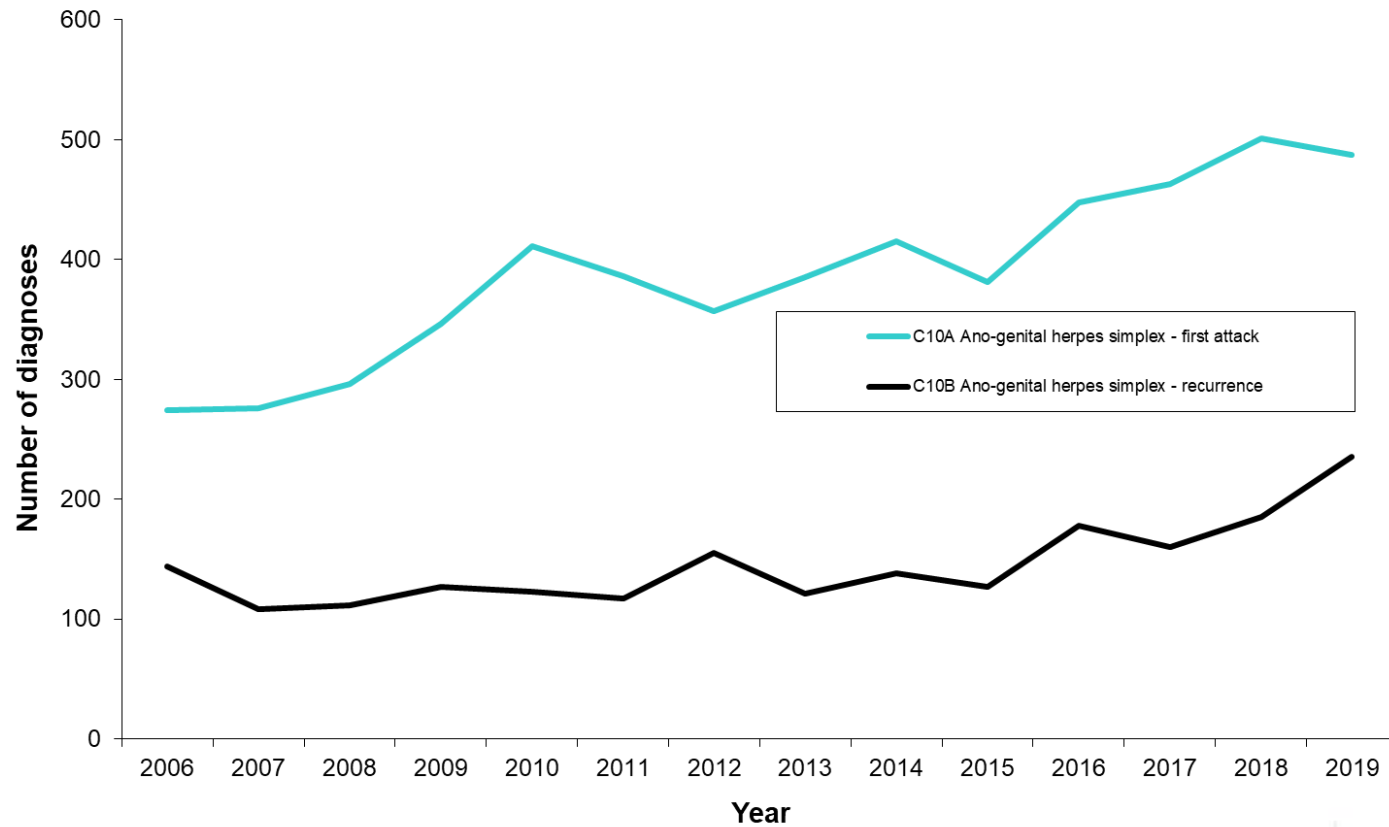


Chart 11: Rates of diagnosis of genital herpes (first episode) in Northern Ireland, by age and gender, 2006–2019

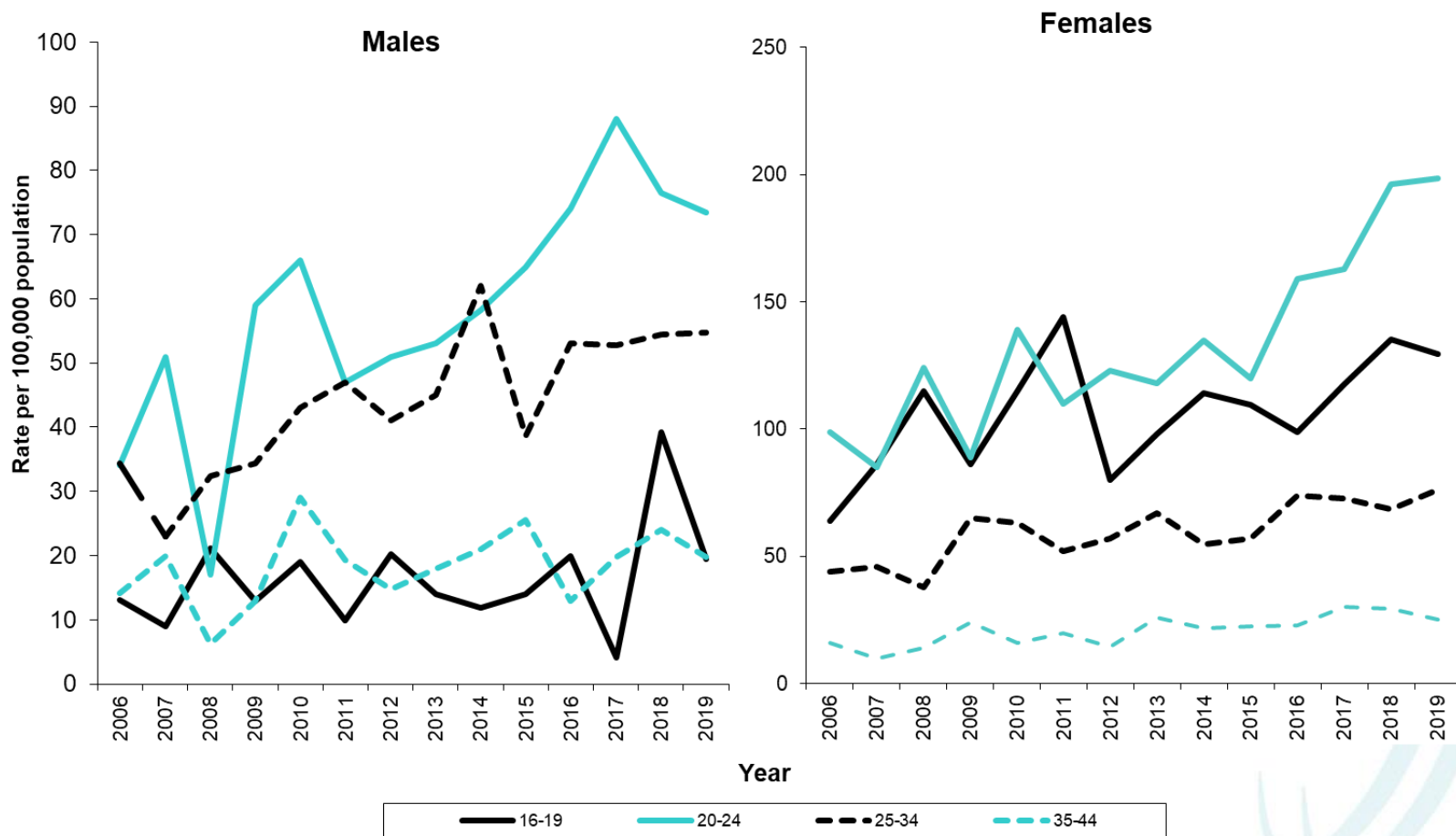


Chart 12: Diagnoses of genital warts in Northern Ireland, 2006–2019

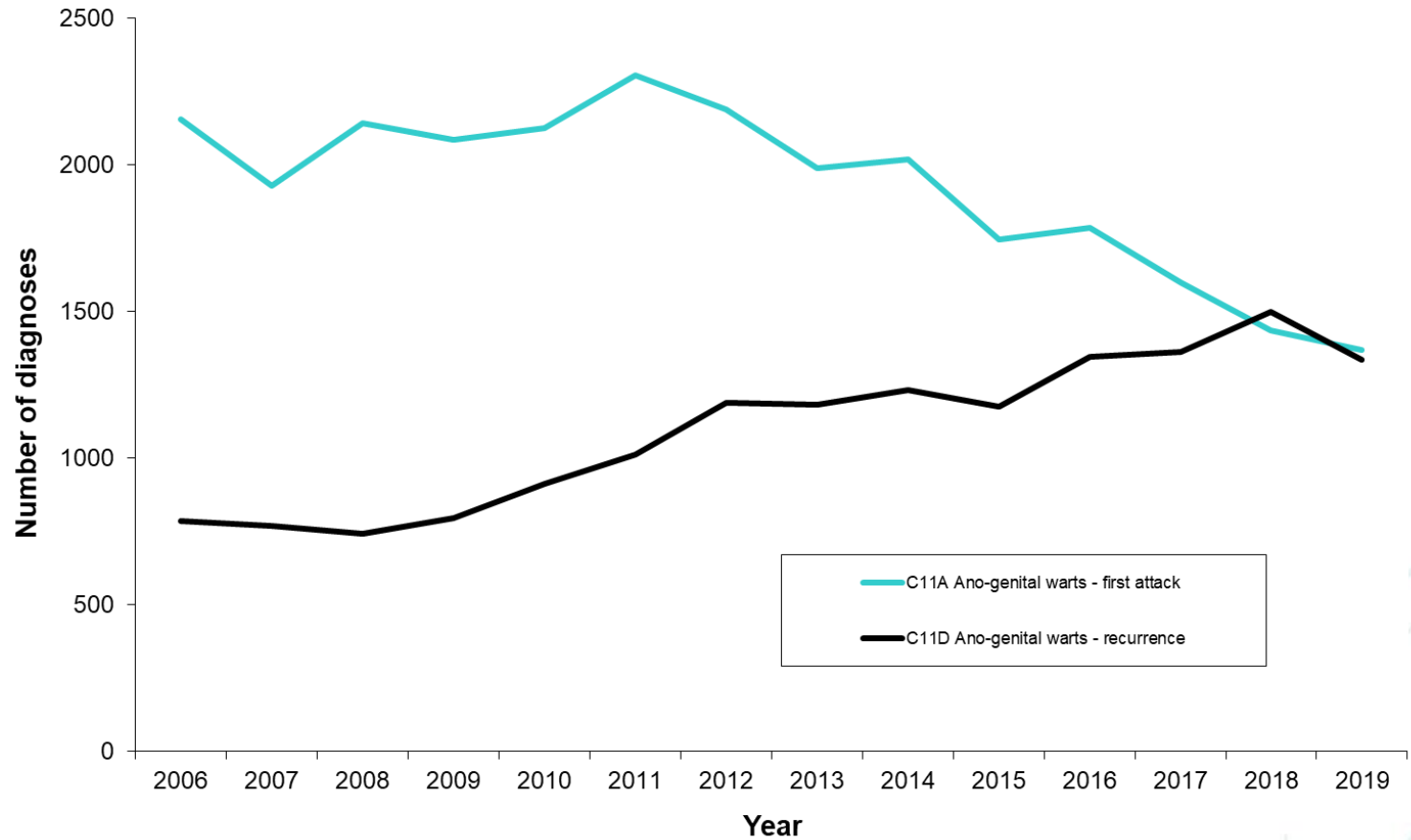


Chart 13: Rates of diagnosis of genital warts (first episode) in Northern Ireland, by age and gender, 2006–2019

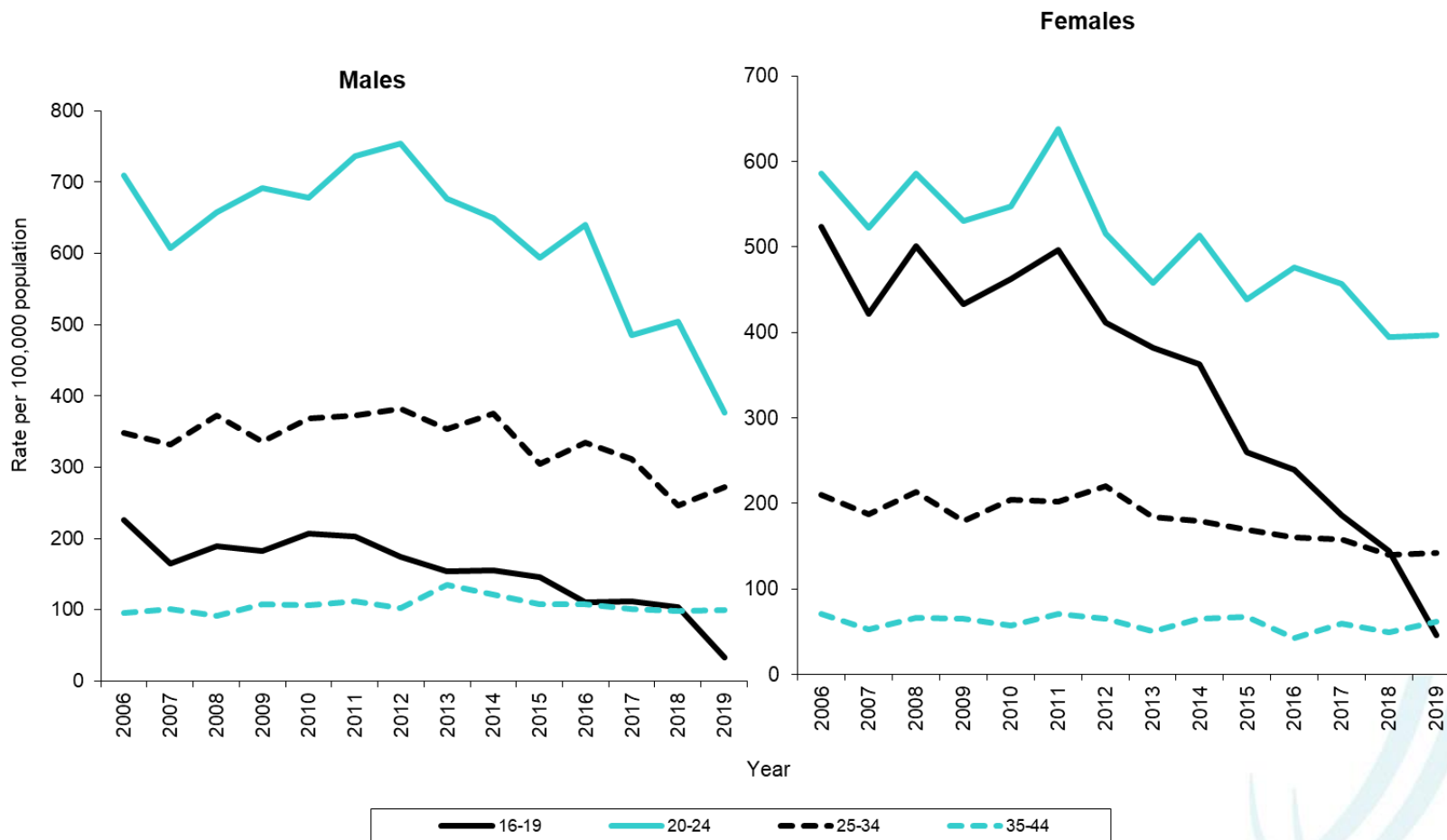
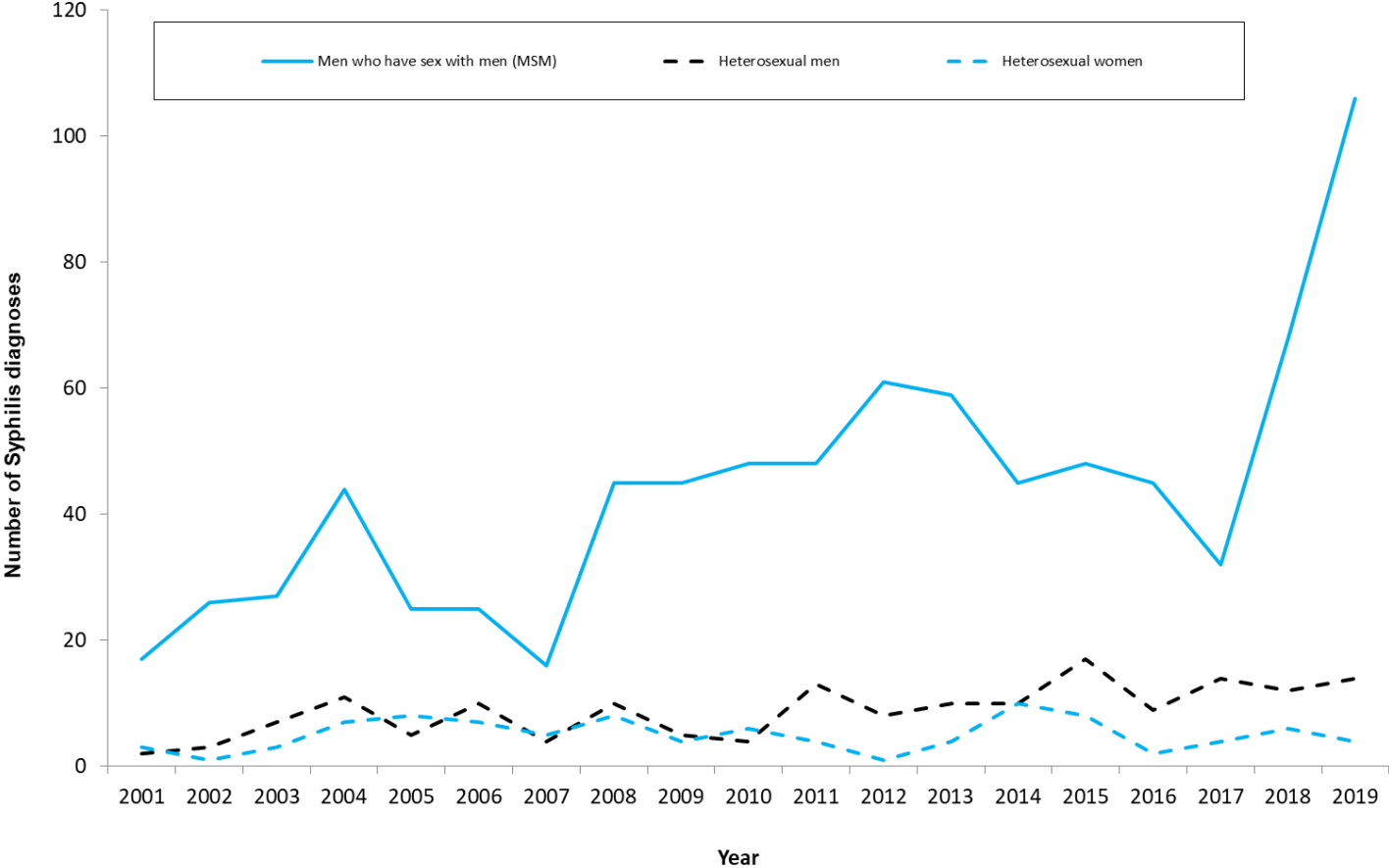
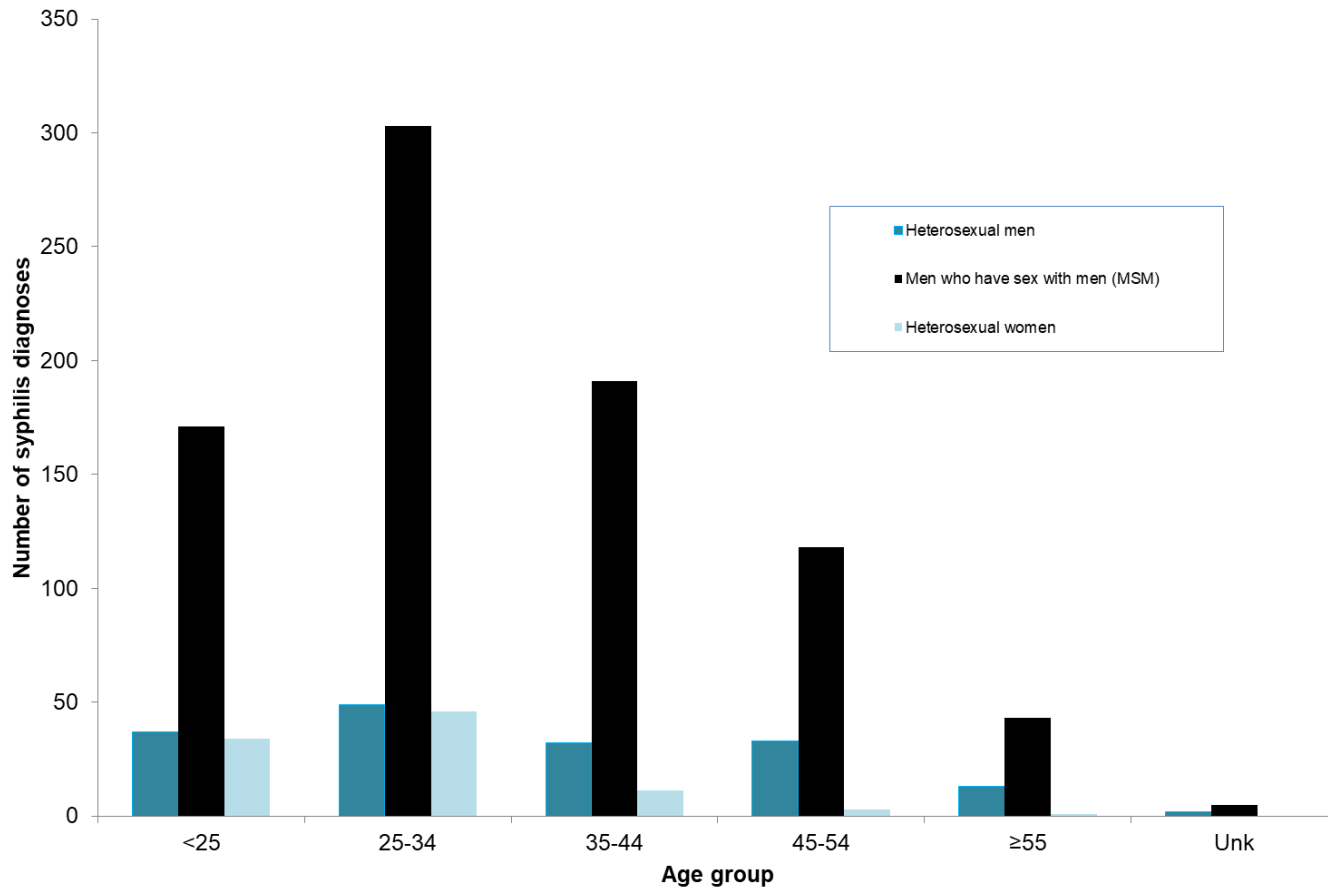


Chart 14: Number of syphilis* diagnoses in Northern Ireland, by gender and sexual orientation, 2001-2019



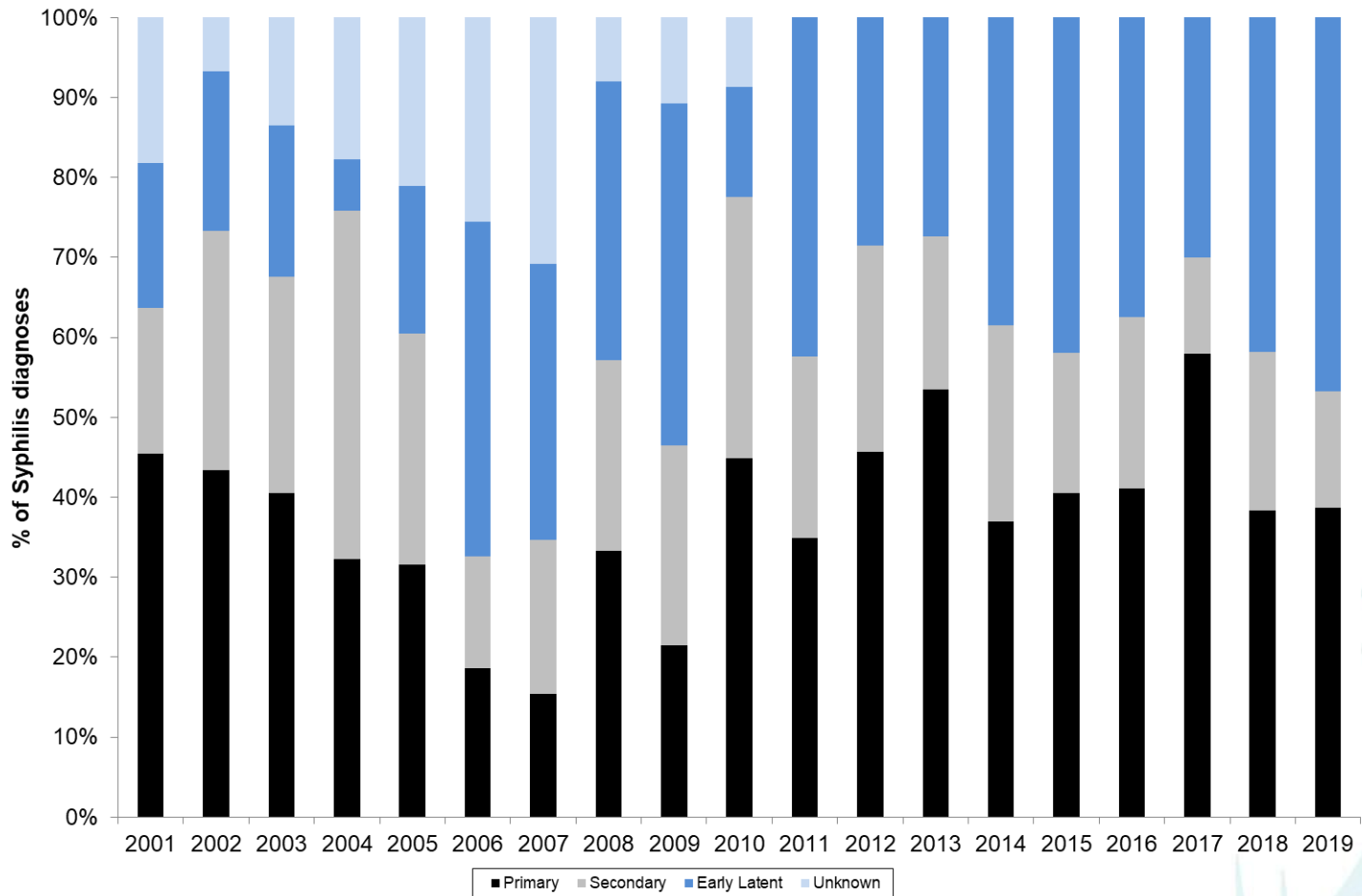
Primary, secondary & early latent syphilis

Chart 15: Age distribution of syphilis* diagnoses in Northern Ireland, by gender and sexual orientation, 2001–2019



*Primary, secondary & early latent syphilis

Chart 16: Stage of disease, by year of diagnosis, 2001-2019



Summary and conclusions (1)

- There was a 2% increase in the number of new STIs reported through Northern Ireland GUM clinics in 2019 when compared with 2018.
- Increases were noted in
 - Chlamydia (4%, increase of 76 cases)
 - Gonorrhoea (8%, increase of 69 cases)
 - Infectious syphilis (32%, increase of 16 cases)
- The highest diagnostic rates of the common STIs occur in 16-24 year old females and 20-34 year old males. People aged 16-34 year old account for approximately 80% of new STIs.

Summary and conclusions (2)

- MSM are at disproportionate risk of contracting some STIs accounting for 86% of male infectious syphilis, 70% of male gonorrhoea, 19% of male herpes and 31% of male chlamydia infections.
- MSM have accounted for the majority of the increase seen in syphilis and gonorrhoea diagnoses during 2019. This may be due at least in part to significantly increased STI testing levels as a result of increased attendance of those seeking HIV PrEP, and the more frequent testing routine in those prescribed PrEP.

Summary and conclusions (3)

- There was a further 5% decline in first episodes of genital warts in 2019 when compared with 2018.
- This sustained decline is seen in young females, due to the human papilloma virus (HPV) vaccine, and a similar but smaller effect seen in similar aged males due to herd immunity.



Recommendations (1)

- Safer sex messages should continue to be promoted to the general population, young people and MSM.
- The risks to health of unprotected casual sex, both within and outside Northern Ireland, need to be reinforced.
- Commissioners should continue to seek to expand access to STI testing opportunities.

Recommendations (2)

Individuals can reduce their risk of acquiring or transmitting an STI by:

- Always using a condom when having sex with casual and new partners;
- Getting tested if at risk, as these infections are frequently asymptomatic;
- MSM having unprotected sex with casual or new partners should have an HIV/STI screen at least annually, and every three months if changing partners regularly;
- Reducing the number of sexual partners and avoiding overlapping sexual relationships.

Appendix 1: STI groupings

New STI diagnoses
Chlamydial infection (uncomplicated and complicated)
Gonorrhoea (uncomplicated and complicated)
Infectious and early latent syphilis
Genital herpes simplex (first episode)
Genital warts (first episode)
New HIV diagnosis
Non-specific genital infection (uncomplicated and complicated)
Chancroid/lymphogranuloma venereum (LGV)/donovanosis
Molluscum contagiosum
Trichomoniasis
Scabies
Pediculus pubis
Other STI diagnoses
Congenital and other acquired syphilis
Recurrent genital herpes simplex
Recurrent and re-registered genital warts
Subsequent HIV presentations (including AIDS)
Ophthalmia neonatorum (chlamydial or gonococcal)
Epidemiological treatment of suspected STIs (syphilis, chlamydia, gonorrhoea, non-specific genital infection)
Other diagnoses made at GUM clinics
Viral hepatitis B and C
Vaginosis and balanitis (including epidemiological treatment)
Anogenital candidiasis (including epidemiological treatment)
Urinary tract infection
Cervical abnormalities
Other conditions requiring treatment at a GUM clinic

