

SEXUALLY TRANSMITTED INFECTIONS

This factsheet provides information on the incidence and trends of the main sexually transmitted infections (STIs), including HIV, in Northern Ireland. Statistics are provided by the Public Health Agency (PHA).

Key facts

- The number of gonorrhoea diagnoses in Northern Ireland is the highest ever recorded. Between 2010 and 2013, diagnoses of uncomplicated gonorrhoea more than doubled, although this coincides with more sensitive testing.
- The main exposure category for HIV infection is sex between men.
- The syphilis outbreak identified in October 2001 is ongoing. Enhanced surveillance arrangements are still in place to monitor this.

Services and sources of statistics

In 1916, a report from the Royal Commission on Venereal Diseases recommended establishing a free, confidential, open access service for the diagnosis and treatment of venereal diseases (VD). These clinics became part of the National Health Service in 1948. Unlike VD, the term 'sexually transmitted infections' encompasses the whole range of STIs. Clinics are now known as genitourinary medicine (GUM) or sexual health clinics. There are seven GUM clinics in Northern Ireland - in Belfast, Coleraine, Derry, Newry, Portadown, Omagh and Downpatrick - providing free, confidential sexual health services, including the diagnosis and treatment of STIs. Referral by a general practitioner is not required.

Responsibility for monitoring changes in the incidence, prevalence and patterns of communicable disease (including HIV and AIDS) in Northern Ireland was transferred from the Department of Health, Social Services and Public Safety (DHSSPS) to the Communicable Disease Surveillance Centre (Northern Ireland), CDSC (NI), in 1999. From 1999 to 2009 responsibility for the surveillance and control of communicable disease at the local level rested with Consultants in Communicable Disease Control based in Health and Social Services Boards, with the Communicable Disease Surveillance Centre (NI) providing a regional focus. In April 2009, the four health boards merged, with the formation of a Regional Health Protection Service – the Public Health Agency, of which the regional unit CDSC (NI) became a part.

STIs are diagnosed and treated in GUM clinics, general practice, hospital departments, such as gynaecology, and at sexual health/contraception clinics. STIs are not regarded as notifiable diseases. However, GUM clinics are required to provide data to the PHA.

The most comprehensive source of surveillance data for STIs in Northern Ireland is the statutory KC60 return each quarter from GUM clinics. This return records the numbers of new diagnoses for a range of STIs. For selected STIs, age, gender and sexual orientation information is provided.

There are two important limitations to KC60 data. Firstly, as data reflect only those diagnoses made in GUM clinics, it follows that accessibility of those services to the public, as measured by service capacity and geographic location of services, may influence the diagnostic rate of STIs. Therefore, direct comparison of different regions, or indeed different time periods within the same region, if service access changes, must be interpreted with caution.

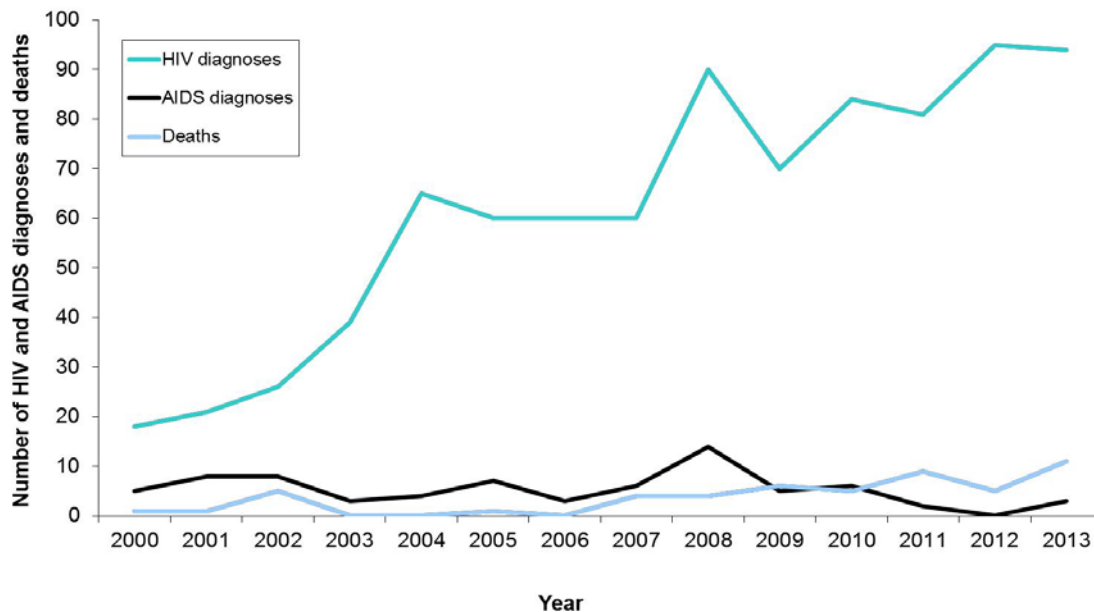
Secondly, unlike HIV surveillance arrangements, no residence-based data are collected. Given that the majority of new diagnoses originate from the GUM clinic at the Royal Victoria Hospital in Belfast, the clinic location is not a useful indication of where patients live.

The official statistics available from the PHA are for 2013.

STI data in Northern Ireland in 2013

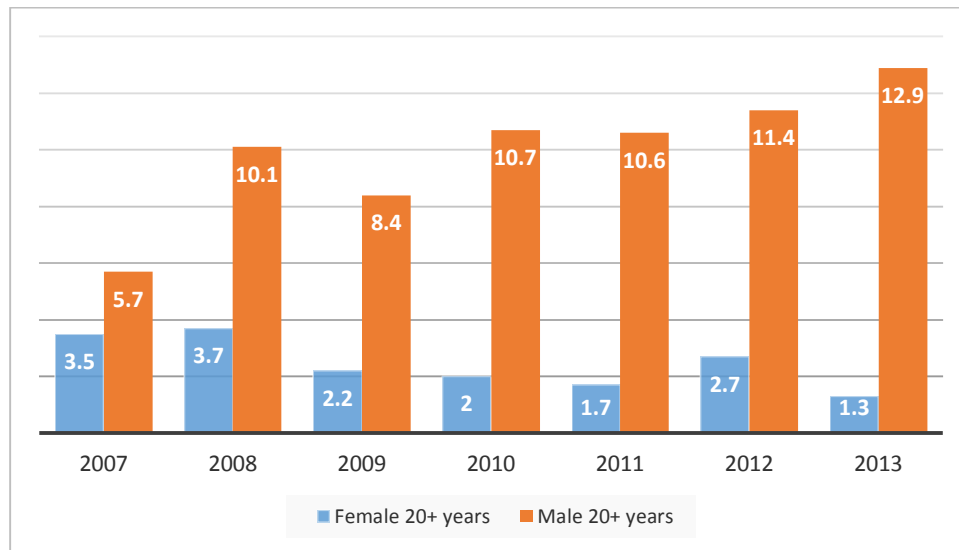
- There were 5,977 new STI diagnoses, a decrease of 5% from 6,267 in 2012.
- Males accounted for 62% (3,678/5,977) of new STI diagnoses.
- Three types of infection accounted for 76% of all new STI diagnoses – genital warts (first infections) (33%), chlamydia (30%) and non-specific genital infection (13%).
- 54 (57%) of new HIV diagnoses were in men who have sex with men (MSM).
- New diagnoses of syphilis increased by 3%, from 70 in 2012 to 72 in 2013.
- The biggest rise in 2013 was in new diagnoses of gonorrhoea, which increased by 19% between 2012 and 2013. 71% of these new diagnosis were in males aged 20-24.
- 94 new cases of HIV were diagnosed in Northern Ireland in 2013, a 1% decrease from 2012, with a rate of 7.8 per 100,000 of the population (Figure 1).
- While HIV diagnoses remained similar between 2012 and 2013, Northern Ireland still accounts for the largest proportional increase in new HIV diagnosis (422% increase) between 2000 and 2013.
- The key routes of probable transmission remain sexual contact between MSM and between males and females.
- Heterosexual transmission has assumed increasing importance since 2003 and now accounts for 41% (436/1,062) of new diagnoses made to date.

Figure 1: Number of HIV and AIDS diagnoses and deaths in Northern Ireland by year



- MSM exposure accounted for 57% of new diagnoses in 2013 (54/94) and has accounted for 53% (560/1,062) of new diagnoses made to date.
- Cumulative data from 2000–2013 show that for cases acquired through MSM exposure, the majority were infected within the UK (82% 347/421). In contrast for cases acquired through heterosexual exposure, and where location of exposure was known, the majority (72%) were infected outside the UK (270/374).
- Between 2007 and 2013, diagnostic rates have been consistently higher in males, with peak rates in the 25–34 and 35–44 years age groups. In females, rates were highest in those aged 25–34 years. Between 2012 and 2013, diagnostic rates fell in all gender/age groups with the exception of males aged 35 and over.

Figure 2: Diagnostic rates of HIV in males and females in Northern Ireland per 100,000 population aged 20+ years, by year of diagnosis



While the number of deaths reported in individuals with HIV has remained relatively low, there were 11 deaths reported in 2013, which is the highest annual number since 1998.

AIDS

There were no HIV diagnoses diagnosed as acquired immunodeficiency syndrome (AIDS) during 2013. The number of deaths reported in individuals with HIV has remained relatively low, due largely to the influence of highly active antiretroviral therapy. Eleven deaths were reported in 2013, compared to five in 2012.

Syphilis

Syphilis is caused by a bacteria known as *Treponema pallidum*; left untreated it can cause very serious health problems for males and females.

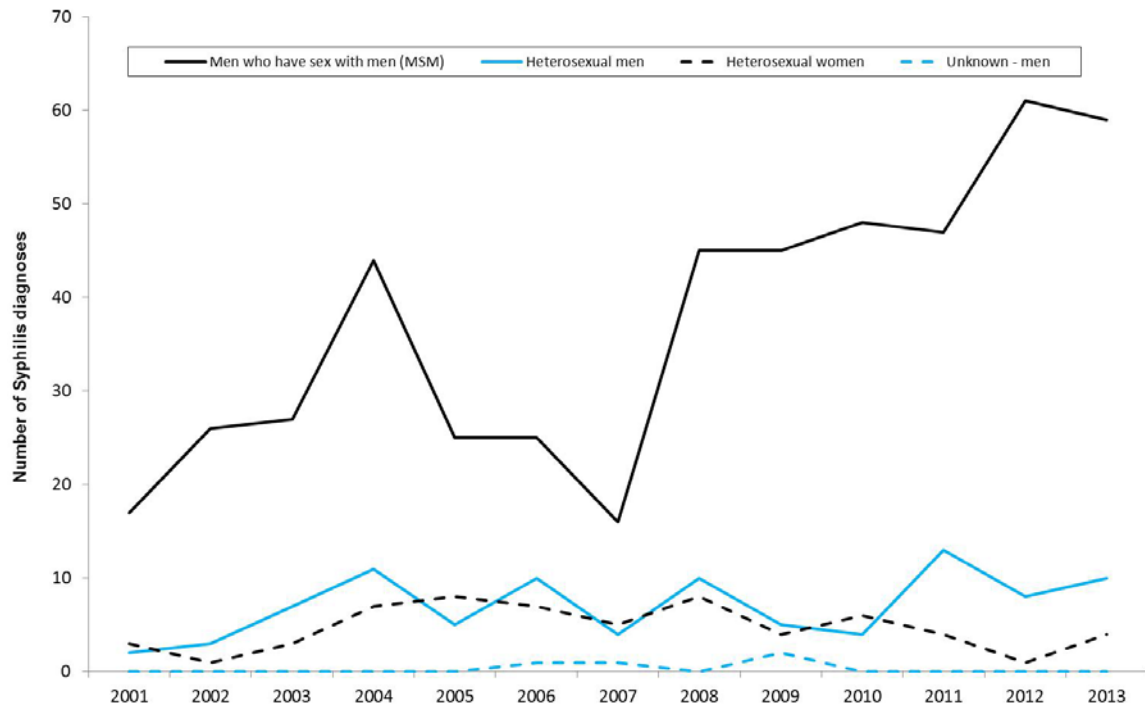
In Northern Ireland prior to 2000, on average, only one case of infectious syphilis was reported each year. Since then, there has been a marked increase. This trend is reflected across the rest of the UK and Europe.

In 2013:

- 52 new episodes of primary and secondary syphilis were reported with 83% (40/48) diagnosed in MSM (Figure 3).
- 20 additional episodes of early latent syphilis were reported.
- Information from the enhanced surveillance available for 71 cases showed that 67 episodes occurred in Northern Ireland residents and, in 58 episodes, syphilis was likely to have been acquired through exposure within Northern Ireland.

- 15% (11/71) of syphilis diagnoses were also reported as HIV positive.
- 30% (21/71) reported one sexual partner in the three months preceding diagnosis and the highest number of reported sexual partners of any one individual in the preceding three months was 60.

Figure 3: Number of syphilis diagnosis per year in Northern Ireland according to sexual orientation



Chlamydia

As elsewhere in the UK, chlamydia (genital chlamydial trachomatis) is the most common bacterial STI diagnosed in GUM in Northern Ireland. Rates are increasing but diagnostic rates have been consistently lower than the UK overall. However, obtaining accurate estimates of the true prevalence of chlamydia is difficult as the infection often shows no symptoms and can remain undiagnosed.

In 2013, chlamydial infection accounted for 30% (1,772/5,977) of all new STI diagnoses made in GUM clinics. Unlike England there is no regional chlamydia testing programme in Northern Ireland but symptomatic testing is undertaken within primary care and sexual health services.

In 2013:

- There were 1,699 new episodes of uncomplicated chlamydial infection diagnosed in Northern Ireland GUM clinics, compared to 1,676 in 2012.

- 930 (55%) of these were diagnosed in males (Figure 4), with 12% (109/930) of the total male diagnoses occurring in MSM.
- The trend between 2000 and 2013 shows an increase of 76% in non-complicated chlamydia infections, peaking in 2006. Complicated chlamydia has remained fairly unchanged during this period with 73 cases diagnosed in 2013 (Figure 5).
- The highest rates of infection in both males and females were in the 20–24 years age group, accounting for 41% of male and 44% of female diagnoses. However the rate of diagnoses in the 16–19 years age group is twice as high in females as in males (Figure 6).

Figure 4: Number of cases of chlamydia by gender in 2013

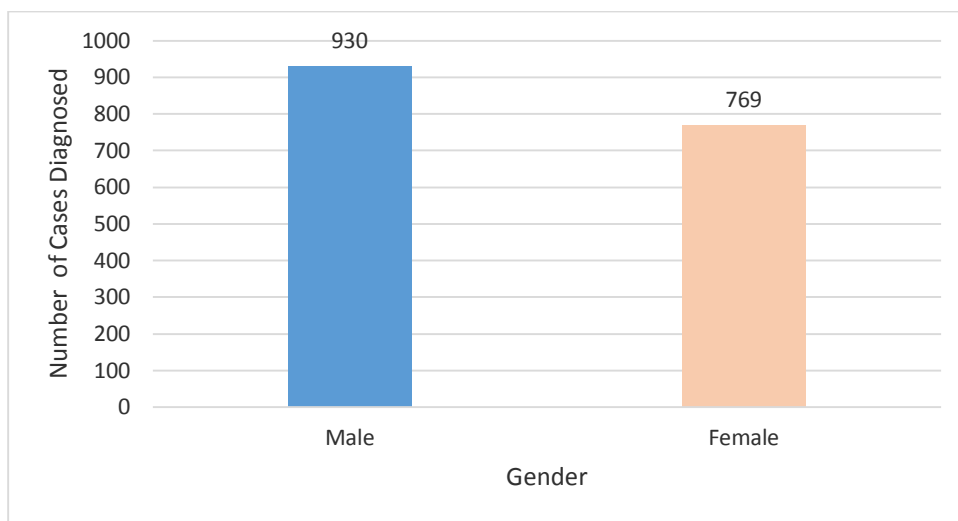


Figure 5: Number of non-complicated and complicated cases of chlamydia in Northern Ireland between 2000 and 2013

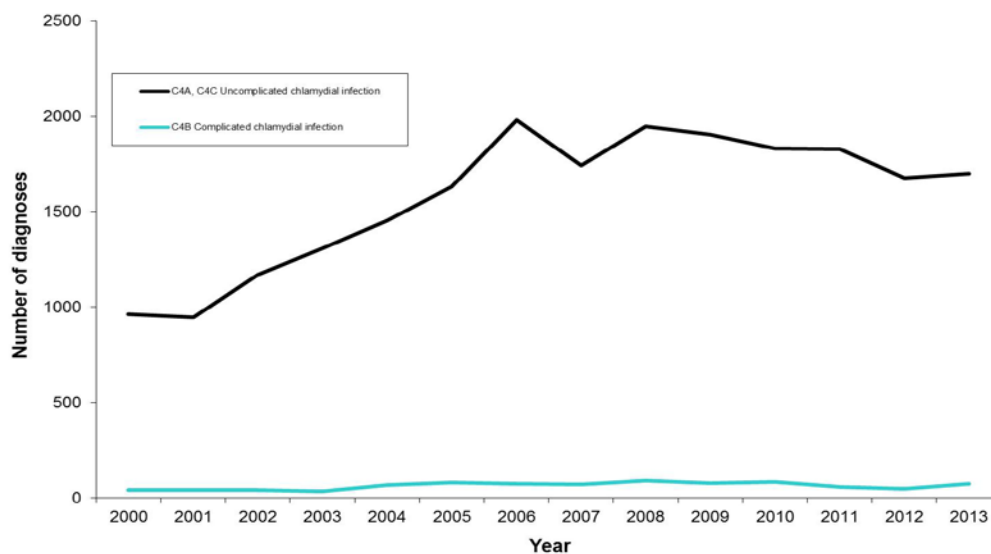
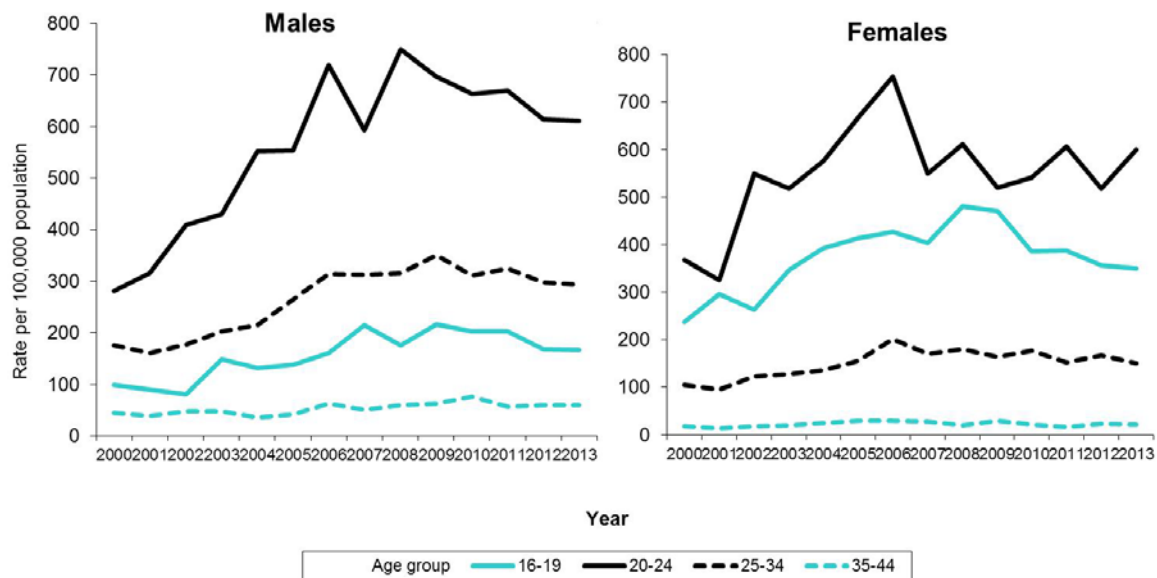


Figure 6: Number of new episodes of chlamydia in Northern Ireland by age group between 2000 and 2013



Gonorrhoea

Gonorrhoea is a bacterial STI caused by *Neisseria gonorrhoeae*, which can cause serious health problems, including infertility in both males and females.

In 2013:

- Gonorrhoea accounted for 9% (549/5,977) of all new STI diagnoses made in GUM clinics.
- There were 537 new episodes of uncomplicated gonorrhoea diagnosed in Northern Ireland GUM clinics, compared with 451 in 2012, an increase of 19%. This is the highest ever recorded number in Northern Ireland.
- 380 (71%) of diagnoses were in males (Figure 7).
- The highest diagnostic rates in both males and females were in the 20–24 years age group.
- 65% of female diagnoses were in the 16–24 years age group and 27% were in the 25–34 years age group.
- 41% of male diagnoses were in the 16–24 years age group and 36% were in the 25–34 years age group.
- 46% (175/380) of male diagnoses were attributed to MSM.

Figure 7: New episodes of gonorrhoea in Northern Ireland by gender, 2013

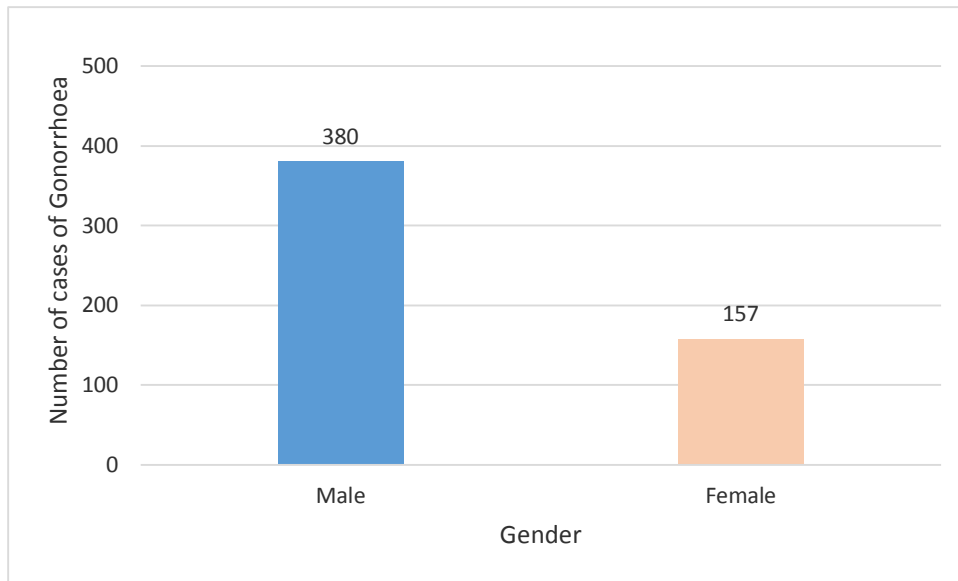
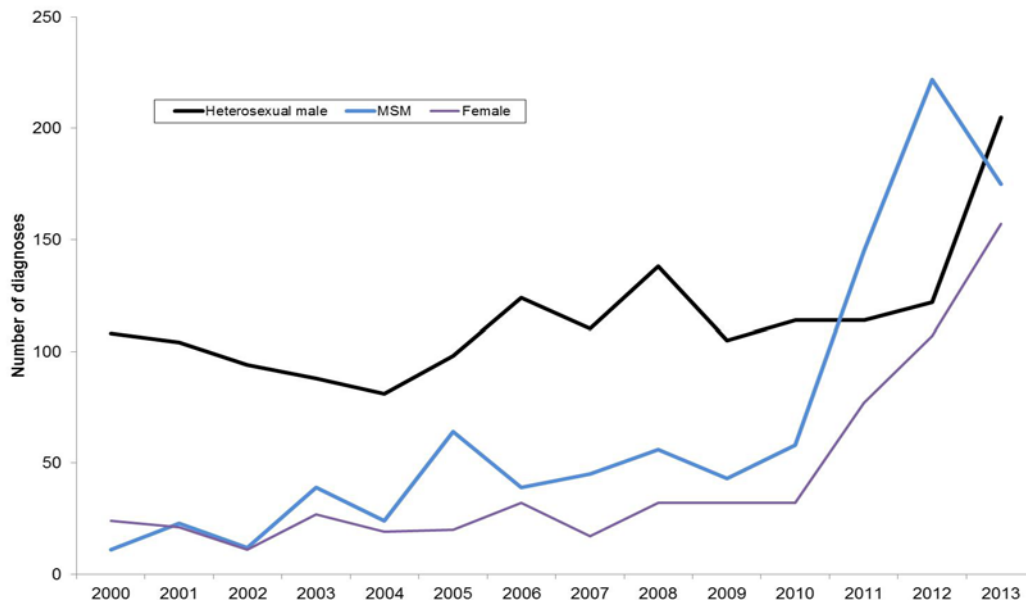


Figure 8 shows that the increase in diagnosis has largely affected MSM and females. Diagnoses in heterosexual males, while remaining stable between 2005 -2012, increased to 205 cases in 2013, the highest ever recorded.

Figure 8: Number of diagnoses of uncomplicated gonorrhoea by sexual orientation in Northern Ireland, 2000-2013



Interpretation of the increase in diagnoses is made more difficult by the introduction across Northern Ireland of combined chlamydia and gonorrhoea PCR testing in both GUM and community settings. The increase in numbers of people tested, and the increased sensitivity of the test, may at least partly explain the increase seen in both the heterosexual and MSM populations.

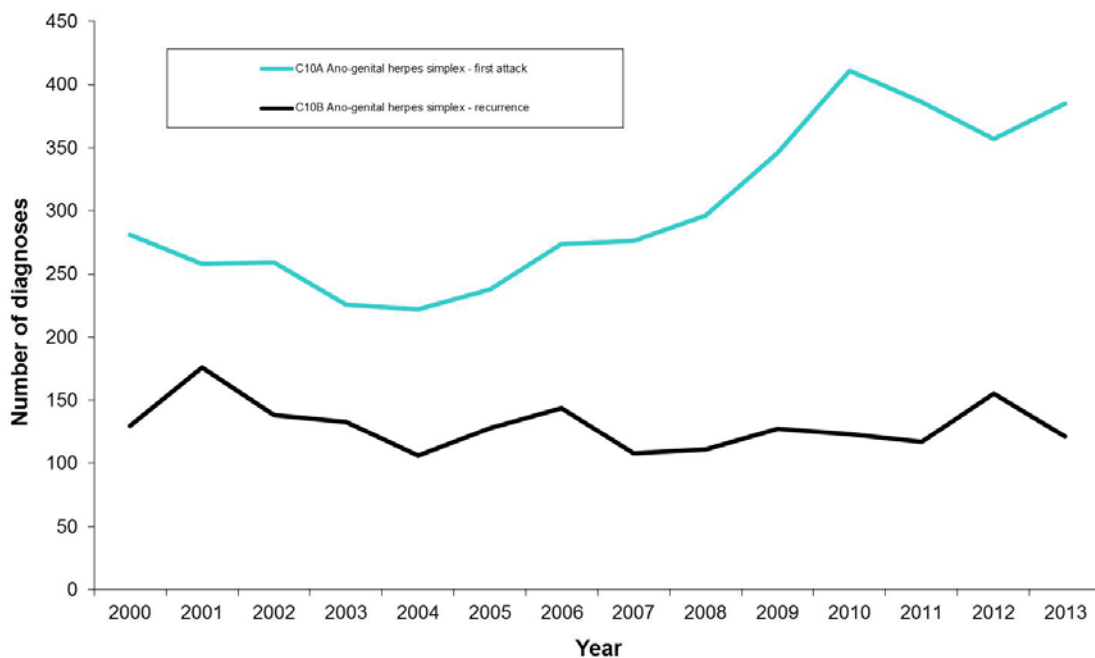
Genital herpes

Genital herpes is caused by a virus called Herpes simplex. Following an infection some people will experience an outbreak of genital herpes. The virus then becomes dormant but remains in the body – in some cases the virus can become active again and cause further outbreaks of genital herpes.

In 2013:

- First episodes of genital herpes accounted for 6% (385/5,977) of all new STI diagnoses made in GUM clinics.
- There were 506 episodes (first infections and recurrent infections) diagnosed at GUM clinics in 2013, compared with 512 in 2012 (Figure 9). 385 episodes were first infections (compared to 357 in 2012) and 121 episodes were recurrent infections.

Figure 9: Diagnoses of genital herpes in Northern Ireland, 2000–2013



- 63% (320) of total diagnoses were in females and 37% (186) in males, with the highest diagnostic rates being in males aged 20-34 and females aged 16-24. The diagnostic rate in 16-19-year-olds was seven times higher than in males the same age (Figure 10).
- 30% of male diagnoses (56/186) and 20% (65/320) of female diagnoses were recurrent infections.

Figure 10: Total number of episodes of genital herpes (first infection and recurrent) by gender, 2013

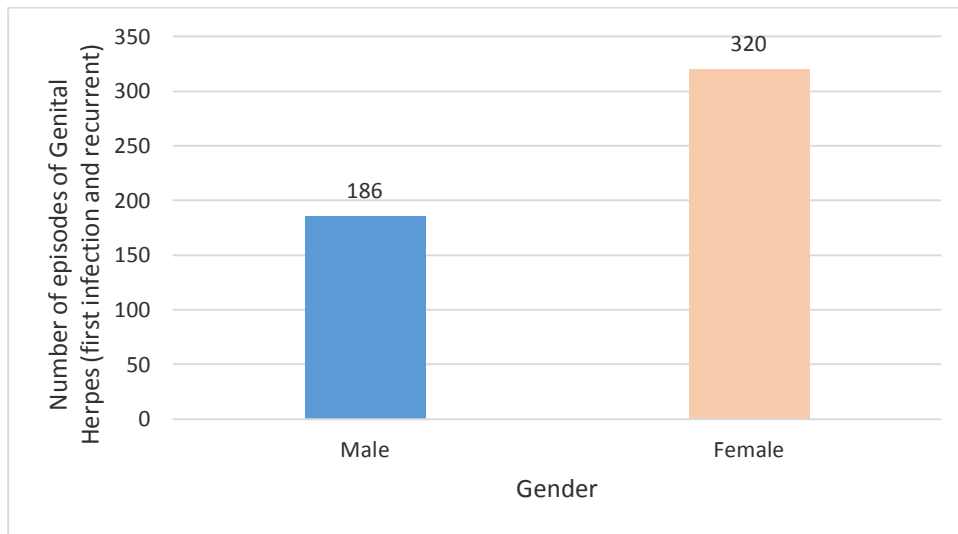
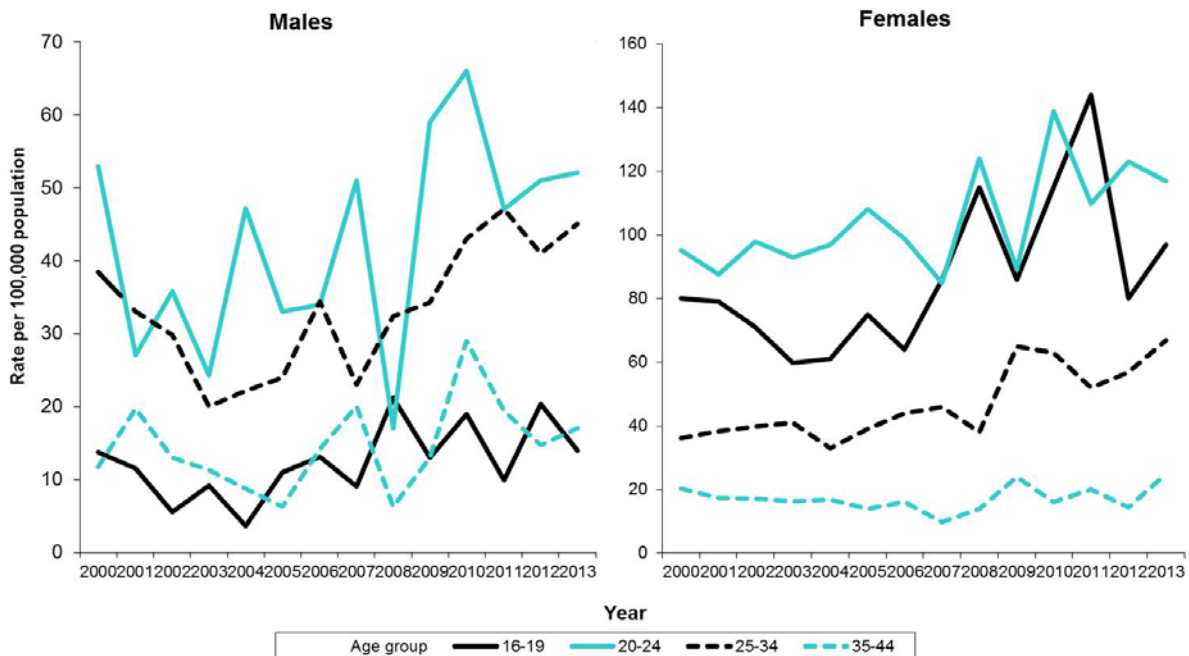


Figure 11 shows that between 2011 and 2013, genital herpes was on the rise in both male and females in the 25-34 age group, and in females aged 16-19 and 35-44. An increase in diagnoses was also observed in the male 20-24 and 35-44 age groups.

Figure 11: Rates of diagnosis of genital herpes (first episode) in Northern Ireland, by age and gender, 2000–2013



Genital warts

Genital warts are the most common viral STI and are caused by the human papilloma virus (HPV). In September 2008, Northern Ireland introduced an HPV

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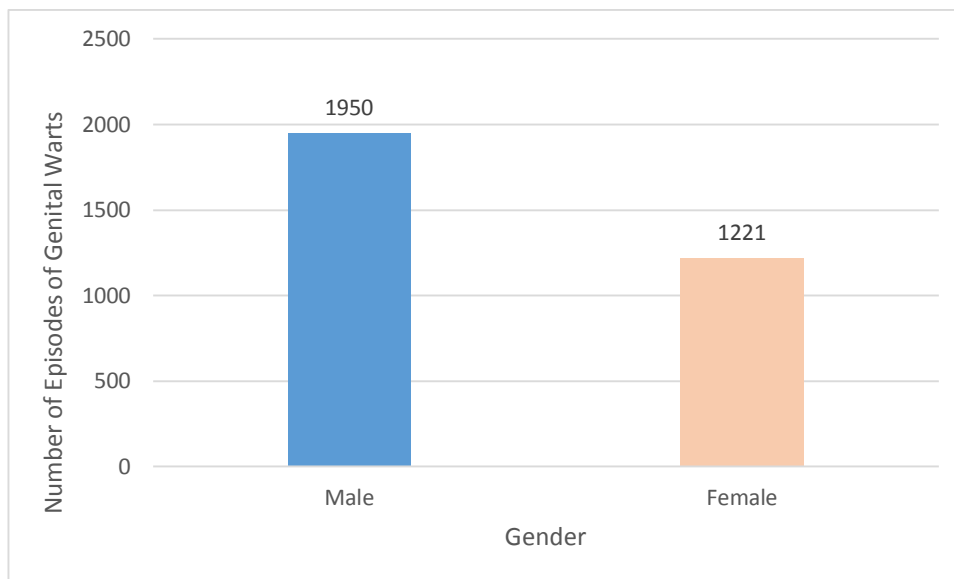
vaccination programme targeting 12 and 13-year-old girls in schools. It primarily vaccinated against HPV 16 and 18, which are associated with over 70% of cervical cancers.

From September 2012, 12-13 year old girls were offered the quadrivalent vaccine which protects against types 16 and 18 and also against types 6 and 11, mainly associated with the majority of genital wart viruses. It is expected that rates of first episodes of genital warts will be positively impacted by the introduction of the HPV vaccination programme.

In 2013:

- Genital warts (first episodes) accounted for 33% (1,989/5,977) of all new STI diagnoses made in GUM clinics.
- There were 3,171 episodes (first infections and recurrent infections) of genital warts compared to 3,377 in 2012.
- 61% (1,950) of total diagnoses were diagnosed in males and 39% (1,221) were diagnosed in females (Figure 12).

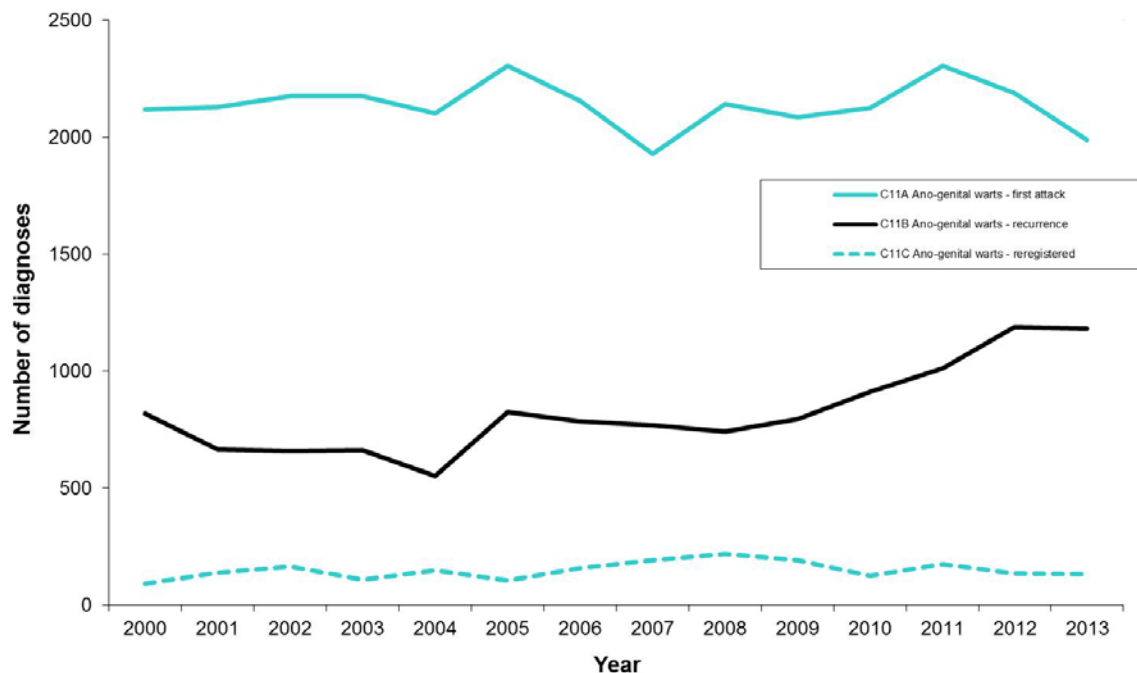
Figure 12: Total diagnoses of genital warts (first episodes & recurrent episodes) by gender, 2013



- 1,989 (63%) of the total attendances for genital warts were for treatment of first infection and 1,182 (37%) were for treatment of recurrent infection.
- 40% of male diagnoses (777/1,950) were recurrent infections, compared with 33% (405/1,221) of female diagnoses.
- The highest diagnostic rates of first infection in both males and females were in the 20–24 years age group.

- 37% of male diagnoses and 36% of female diagnoses of first infection were in the 20–24 years age group.
- The diagnostic rate in females aged 16–19 years (382/100,000) was more than twice that of males the same age. However, diagnostic rates in those aged over 19 years were higher in males.
- 9% (107/1,173) of male first diagnoses occurred in MSM.

Figure 13: Diagnoses of genital warts in Northern Ireland, 2000–2013



- Diagnostic rates in females were highest in the 16–24 years age group, peaking between 20 and 24 years. In males, the highest diagnostic rates were in the 20–34 years age group, also peaking between 20 and 24 years. Rates in those under 20 years of age were consistently higher in females, whereas rates in those over 20 years of age were higher in males.

Knowledge of STIs

The Health Survey Northern Ireland 2001-2013² showed that awareness of STIs (chlamydia, syphilis, gonorrhoea, genital warts, genital herpes and HIV) was higher among females, respondents in urban areas and those living in the least deprived areas.

Government policy

In March 2014, DHSSPS issued an Addendum (to December 2015) to the Regional Sexual Health Promotion Strategy and Action Plan 2008-2013³ with revisions and updated actions.

The aim and objectives of the addendum remained the same as those set in 2008, with the aim being to improve, protect and promote the sexual health and well-being of the population of Northern Ireland.

The key objectives were to:

- enable the population to develop and maintain the knowledge, skills and values necessary for improving sexual health and well-being
- promote opportunities to enable young people to make informed choices before engaging in sexual activity and empowering them to delay first intercourse until an appropriate time of their choosing
- reduce the number of unplanned births to teenage mothers
- ensure that all people have access to sexual health services and reduce the incidence of STIs, including HIV

The addendum set out a renewed approach and updated actions for achieving these objectives.

Two new actions were added:

- The Department will consult on a proposal to revoke legislation to legalise the sale of HIV self-testing kits in Northern Ireland (Action 26).
- The Department will develop proposals, for Ministerial approval, on the next strategy for sexual health to address promotion, prevention and services (Action 27).

References

1. Department of Health. Chlamydia trachomatis: summary and conclusions of CMO Expert Advisory Group. London: DoH, 1998.
2. Health Survey Northern Ireland 2001-2013, Public Health Agency 2014.
3. Progress and Priorities: Addendum to the Sexual Health Promotion Strategy & Action Plan 2008-2013, DHSSPS March 2014.

Other Northern Ireland factsheets

- Abortion
- Legal position regarding contraceptive advice and provision to young people
- Relationships and sexuality education in schools
- Sex and the law
- Sexual behaviour and young people
- Sexual health and people with learning disabilities
- Sexual orientation
- Teenage pregnancy

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