### Sexually Transmitted Infection surveillance in Northern Ireland 2012

An analysis of data for the calendar year 2011





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This report aims to provide an overview of STI epidemiology in Northern Ireland by collating and analysing information from a number of sources. Although it reflects epidemiological trends over time, its main focus will be on data collected in 2011.

Following recent ONS guidance on data disclosure, where the number of any category of episodes in any one year is between one and four, this is reported either within a cumulative figure, or as an asterix. In addition, where the anonymised figure can be deduced from the totals, the next smallest figure will also be anonymised.

# **Summary points**

### In Northern Ireland Genito-Urinary Medicine (GUM) clinics in 2011

- New STI diagnoses decreased by 2%; 7,661 in 2011 compared with 7,850 in 2010.
- New diagnoses of uncomplicated chlamydia remained similar; 1,830 diagnoses in 2011 compared with 1,832 in 2010.
- New diagnoses of uncomplicated gonorrhoea increased by 65%; 336 in 2011 compared with 204 in 2010.
- New diagnoses of genital herpes simplex (first episode) decreased by 6%; 386 in 2011 compared with 411 in 2010.
- New diagnoses of genital warts (first episode) increased by 8%; 2,305 in 2011 compared with 2,126 in 2010.
- New diagnoses of non-specific genital infection decreased by 19%; 2,242 in 2011 compared with 2,756 in 2010.
- New diagnoses of infectious syphilis decreased by 10%; 52 in 2011 compared with 58 in 2010.

# Surveillance arrangements and sources of data

#### **KC60** returns

The most comprehensive source of surveillance data for sexually transmitted infections (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. Individual patients may contribute more than one diagnosis. For selected conditions, additional age, gender and sexual orientation information are provided. Regularly updated summary statistics are presented at: www.publichealthagency.org

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. Thus, direct comparison of different regions, or indeed different time periods within the same region if service access should change, must be interpreted with caution.

Secondly, no residence-based data is collected. Given that the majority of new diagnoses originate from the GUM clinic at the Royal Victoria Hospital (the clinic that provides greatest access), the clinic location is not a useful proxy for patient residence.

#### Laboratory reporting

Laboratory data represent an important complementary source to clinician-initiated surveillance arrangements. Laboratory reporting of *Chlamydia trachomatis* in Northern Ireland is provided for 2006–2011. Antibiotic susceptibility information for *Neisseria gonorrhoeae* isolates is provided for 2010–2011.

#### Enhanced syphilis surveillance

Enhanced surveillance arrangements for infectious syphilis in Northern Ireland have been in place since the outbreak was first recognised in September 2001. Based on anonymised, confidential reporting by GUM clinicians to the Public Health Agency (PHA), a range of demographic, clinical and risk factor data are collected on cases of primary, secondary and early latent stage syphilis.

#### Enhanced lymphogranuloma venereum (LGV) surveillance

Enhanced surveillance arrangements for cases of LGV in Northern Ireland have been in place since 2004. Based on anonymised, confidential reporting by GUM clinicians to the PHA, a range of demographic, clinical and risk factor data are collected.

### 1: Diagnoses provided in Northern Ireland GUM clinics in 2011

During 2011:

- 7,661 new STI diagnoses were made, compared with 7,850 in 2010, a decrease of 2%;
- males accounted for 66% (5,054/7,661) of new STI diagnoses;
- three types of infection accounted for 84% of **new STI diagnoses** genital warts (first infections) (30%), non-specific genital infection (29%), and chlamydia (25%);
- 2,485 other STI diagnoses were made;
- there were 4,900 other diagnoses made at GUM clinics.

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

#### Trends: 2000-2011

Between 2000 and 2011, the number of **new STI diagnoses** increased by 28%, the number of **other STI diagnoses** increased by 2% and **other GUM clinic diagnoses** increased by 16% (Figure 1.1).





During 2000–2011, chlamydia infection, non-specific genital infection (NSGI) and genital warts (first infections) accounted for the highest proportion of new STI diagnoses (87%) made in Northern Ireland GUM clinics (Figure 1.2). Specific disease trends will be examined in chapters 2 to 8.





# 2: Chlamydia

Genital chlamydia is a bacterial infection caused by *Chlamydia trachomatis*. The infection is asymptomatic in at least 50% of men and 70% of women. In women, untreated infection can cause chronic pelvic pain and lead to pelvic inflammatory disease (PID), ectopic pregnancy and infertility. An infected pregnant woman may also pass the infection to her baby during delivery. Complications in men include urethritis, epididymitis and Reiter's Syndrome.

Consistent with elsewhere in the UK, chlamydia is the most common bacterial STI diagnosed in Northern Ireland GUM clinics.

Although there is currently no organised regional chlamydia testing programme in Northern Ireland, symptomatic testing is undertaken within primary care and sexual health services.

#### **Diagnoses made in GUM clinics during 2011**

Chlamydial infection accounted for 25% (1,888/7,661) of all new STI diagnoses made in Northern Ireland GUM clinics during 2011.

#### **Uncomplicated chlamydial infection**

- There were 1,830 new episodes of uncomplicated chlamydial infection diagnosed in Northern Ireland GUM clinics in 2011, compared with 1,832 in 2010.
- 1,036 (57%) of these were diagnosed in males.
- The highest rates of infection in both males and females were in the 20–24 years age group, accounting for 41% of male and 47% of female diagnoses.
- The rate of diagnoses in the 16–19 years age group is nearly twice as high in females as in males.
- 15% (152/1,036) of the total male diagnoses occurred in men who have sex with men (MSM).

#### **Complicated chlamydial infection**

- There were 58 new episodes of complicated chlamydial infection diagnosed in Northern Ireland GUM clinics in 2011.
- 45 (78%) of these were diagnosed in females.

#### Trends: 2000-2011

Between 2000 and 2011, diagnoses of uncomplicated chlamydial infection increased by 90%, from 963 diagnoses in 2000 to 1,830 in 2011. Diagnoses in males increased by 116%, while in females, there was a 64% increase. Diagnoses of complicated chlamydial infection increased from 40 in 2000 to 58 in 2011, but remained at a relatively low level (Figure 2.1).





#### Age and gender trends: uncomplicated chlamydia

From 2000–2011, diagnostic rates in females were consistently highest in the 16–24 years age group, peaking between 20 and 24 years (Figure 2.2). In males, the highest rates were in the 20–34 years age group, again peaking between 20 and 24 years.

Diagnostic rates in those under 25 years of age were consistently higher in females, with rates in those aged 25 years and over consistently higher in males. Diagnostic rates in females aged over 24 years decrease due to changes in sexual behaviour, as well as decreased susceptibility.

Diagnoses in those under 16 years of age accounted for 1% (122/18,708) of all diagnoses made during the period 2000–2011.

Diagnoses in the 45+ years age group accounted for 2% (347/18,708) of all diagnoses made during the period 2000–2011.

The proportion of male chlamydia diagnoses attributed to MSM has ranged from 2% in 2000 and 2002 to 15% in 2011.

![](_page_8_Figure_0.jpeg)

![](_page_8_Figure_1.jpeg)

### Genital Chlamydia trachomatis laboratory reporting, 2006–2011

During 2011, 3,200 laboratory confirmed cases of genital *Chlamydia trachomatis* were reported, a decrease of 5% compared to the number reported in 2010. GP specimens accounted for 34% (1,096/3,200) of cases reported during 2011 (Table 2.1). Between 2006 and 2011, confirmations from GP specimens increased by 52%.

Referral Source	2006	2007	2008	2009	2010	2011	TOTAL
GP Number (% of total specimens)	720 (26.1)	894 (29.7)	979 (29.0)	1025 (30.3)	1124 (33.5)	1096 (34.3)	5838 (30.6)
Other	2,036	2,121	2,396	2,353	2,231	2,104	13,241
Total	2,756	3,015	3,375	3,378	3,355	3,200	19,079

#### Table 2.1: Referral source of genital Chlamydia trachomatis specimens, 2006-2011

Higher numbers of diagnoses are consistently reported in females, accounting for 59% (1,877/3,200) of all cases reported by laboratories during 2011. The majority (68%; 7,677/11,303) of female cases reported in the period 2006–2011 were aged between 16 and 24 years. Males accounted for between 38% and 41% of cases reported annually since 2006. The majority of male cases reported since 2006

were in the 20–34 years age group (Figure 2.3). Information on gender was missing for 1% of cases reported during the period 2006–2011.

![](_page_9_Figure_1.jpeg)

![](_page_9_Figure_2.jpeg)

# 3: Gonorrhoea

Gonorrhoea is a bacterial STI caused by *Neisseria gonorrhoeae*. Untreated, gonorrhoea can enter the bloodstream or spread to the joints, and in women it can cause pelvic inflammatory disease, ectopic pregnancy and infertility. An infected pregnant woman may pass the infection to her baby during delivery.

#### **Diagnoses made in GUM clinics during 2011**

Gonorrhoea accounted for 5% (350/7,661) of all new STI diagnoses made in Northern Ireland GUM clinics during 2011.

#### **Uncomplicated gonococcal infection**

- There were 336 new episodes of uncomplicated gonorrhoea diagnosed in Northern Ireland GUM clinics in 2011, compared with 204 in 2010, an increase of 65%.
- 259 (77%) of these were diagnosed in males.
- The highest diagnostic rates in both men and women were in the 20-24 years age group.
- 69% of female diagnoses were in the 16–24 years age group and 25% were in the 25–34 years age group.
- 40% of male diagnoses were in the 16–24 years age group and 36% were in the 25–34 years age group.
- 56% (145/259) of male diagnoses were attributed to MSM.

#### Trends: 2000–2011

Although numbers have been variable, diagnoses of uncomplicated gonorrhoea have shown a general increased trend since 2000 (Figure 3.1). The number of diagnoses in 2011 (336) have been the highest ever recorded in Northern Ireland. This is likely to be due at least in part to the introduction of more sensitive nucleic acid amplification tests (NAATs) which are being used across laboratories in Northern Ireland<sup>1</sup>. The proportion of male diagnoses attributed to MSM ranged from 9% in 2000 to 56% in 2011.

The number of diagnoses of complicated gonorrhea have ranged from 1 in 2007 to 14 in 2011.

![](_page_11_Figure_0.jpeg)

Figure 3.1: Diagnoses of gonorrhoea in Northern Ireland, 2000–2011

Age and gender trends: uncomplicated gonorrhoea

![](_page_11_Figure_3.jpeg)

![](_page_11_Figure_4.jpeg)

In males, the highest diagnostic rates were in the 20–34 years age groups (Figure 3.2).

From 2000–2011, fewer than five diagnoses were made annually in males aged under 16 years. Males aged 45 years and over accounted for 7% (128/1,837) of all male diagnoses during the period 2000–2011. There was no clear trend in females due to the small numbers involved.

### Neisseria gonorrhoeae laboratory reporting, 2010–2011

Effective treatment of gonorrhoea has been compromised by the ability of *Neisseria gonorrhoeae* to develop resistance to antimicrobial agents.<sup>2</sup> Ongoing monitoring of antimicrobial resistance in Northern Ireland is important to ensure that first line treatments for gonorrhoea remain effective, as patterns of resistance can change rapidly. During 2011, laboratories reported antibiotic susceptibility data for 169 isolates.

Current guidelines recommend the use of third generation cephalosporins to treat gonorrhoea. During 2011, only 1 isolate was reported as resistant to third generation cephalosporins (Ceftriaxone) (Table 3.2).

Table 3.2: Neisseria gonorrhoeae antibiotic susceptibility reported activity for antibiotics, 201	0-
2011	

Antibiotics	Susce	eptible	Resista	ant (%)	Indete	rminate	Total specimens Reported					
	2010	2011	2010	2011	2010	2011	2010	2011				
Azithromycin	0	4	0 (0%)	0 (0%)	0	0	0	4				
Cefixime	21	23	0 (0%)	0 (0%)	0	0	21	23				
Cefotaxime	105	27	0 (0%)	0 (0%)	0	0	105	27				
Ceftriaxone	8	109	0 (0%)	1 (1%)	0	0	8	110				
Ceftizoxime	0	0	0 (0%)	0 (0%)	0	0	0	0				
Cefuroxime	21	12	3 (13%)	2 (14%)	0	0	24	14				
Cephalexin	0	1	0 (0%)	0 (0%)	0	0	0	1				
Ciprofloxacin	99	122	49 (33%)	43 (26%)	0	2	148	167				
Doxycycline	0	88	0 (0%)	10 (10%)	0	0	0	98				
Nalidixic Acid	17	23	8 (32%)	7 (23%)	0	0	25	30				
Penicillin	89	127	57 (39%)	37 (23%)	0	0	146	164				
Spectinomycin	8	11	1 (11%)	0 (0%)	0	0	9	11				
Tetracycline	93	44	25 (21%)	4 (8%)	0	0	118	48				

# 4: Genital herpes

Genital herpes is caused by the herpes simplex virus (HSV), of which there are two distinct subtypes. HSV2 is almost exclusively associated with genital infection. Historically, HSV1 has mainly been associated with oral infection, but the proportion of genital herpes attributed to HSV1 in the UK is increasing. Genital herpes infection may facilitate HIV transmission, can cause severe systemic disease in those with impaired immunity, and can be potentially fatal to neonates.

#### **Diagnoses made in GUM clinics during 2011**

Genital herpes (first episodes) accounted for 5% (386/7,661) of all new STI diagnoses made in Northern Ireland GUM clinics during 2011.

- There were 503 episodes (first infections and recurrent infections) of genital herpes diagnosed in Northern Ireland GUM clinics in 2011.
- 335 (67%) of these were diagnosed in females.
- 386 (77%) of the total attendances for herpes in 2011 were for treatment of first infection and 117 (23%) were for treatment of recurrent infection.
- 23% of male diagnoses (39/168) and 23% (78/335) of female diagnoses were recurrent infections.
- The highest diagnostic rates of first infection in men were in the 20-34 years age group and in women were in the 16-19 years age group.
- Diagnostic rates of first infection in most age groups were higher in females. The diagnostic rate in 16–19 year old females was nearly 15 times higher than in males of the same age.
- 11% (14/129) of male first diagnoses occurred in MSM.

#### Trends: 2000-2011

Annual numbers of first diagnoses of genital herpes increased each year from 2004-2010 with 2011 showing a slight decrease. (Figure 4.1).

![](_page_14_Figure_0.jpeg)

Figure 4.1: Diagnoses of genital herpes in Northern Ireland, 2000–2011

Age and gender trends: genital herpes (first episode)

Figure 4.2: Rates of diagnosis of genital herpes (first episode) in Northern Ireland, by age and gender, 2000–2011

![](_page_14_Figure_4.jpeg)

Diagnostic rates in females were consistently highest in the 16–24 years age group. In males, the highest diagnostic rates were in the 20–34 years age group (Figure 4.2).

Males under 20 years of age accounted for 7% (75/1,150) of all male diagnoses of genital herpes (first episode) made during the period 2000–2011, with diagnoses in the 45+ years age group accounting for 9% (109/1,150).

Females under 16 years of age accounted for 1% (30/2,323) of all female diagnoses made during the period 2000–2011, with diagnoses in the 45+ years age group accounting for 5% (124/2,323).

# **5: Genital warts**

Genital warts are caused by human papillomavirus (HPV). More than 90 HPV types have been identified, of which approximately one third are sexually acquired. Although around 20 different types of HPV have been linked to cervical cancer, these particular types are less frequently linked to genital warts.

HPV vaccine was introduced as a school-based programme in Northern Ireland in 2008/09. Until September 2012 the vaccine used protected against the oncogenic types 16 and 18, but not those types causing genital warts.<sup>3</sup> From September 2012 onwards, the vaccine used will protect against types 6 and 11, accounting for 90% of genital warts<sup>4</sup>.

### **Diagnoses made in GUM clinics during 2011**

Genital warts (first episodes) accounted for 30% (2,305/7,661) of all new STI diagnoses made in Northern Ireland GUM clinics during 2011.

- There were 3,316 episodes (first infections and recurrent infections) of genital warts diagnosed in Northern Ireland GUM clinics in 2011.
- 1,886 (57%) of these were diagnosed in males.
- 2,305 (70%) of the total attendances for genital warts in 2011 were for treatment of first infection and 1,011 (30%) were for treatment of recurrent infection.
- 34% of male diagnoses (649/1,886) were recurrent infections, compared with 25% (362/1,430) of female diagnoses.
- The highest diagnostic rates of first infection in both men and women were in the 20–24 years age group.
- 38% of male diagnoses and 37% of female diagnoses of first infection were in the 20–24 years age group.
- The diagnostic rate in females aged 16–19 years (505/100,000) was more than twice that of males the same age. However, diagnostic rates in those aged over 19 years were higher in males.
- 8% (93/1,237) of male first diagnoses occurred in MSM.

### Trends: 2000–2011

Diagnoses of first infections of genital warts have shown little variation since 2000 (Figure 5.1). Diagnostic rates tend to be higher overall in males (Figure 5.2).

![](_page_16_Figure_0.jpeg)

Figure 5.1: Diagnoses of genital warts in Northern Ireland, 2000-2011

Age and gender trends: genital warts (first episode)

Figure 5.2: Rates of diagnosis of genital warts (first episode) in Northern Ireland, by age and gender, 2000–2011

![](_page_16_Figure_4.jpeg)

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 (Figure 5.2).

Those under 16 years of age accounted for 0.5% (116/25,751) of all diagnoses (first episode) made during the period 2000–2011, while the 45+ years age group accounted for 5% (1,187/25,751).

During 2000–2010, the proportion of male diagnoses attributed to MSM ranged from 2% in 2000 and 2002 to a peak of 8% in 2010 and 2011.

# 6: Syphilis

Syphilis is a bacterial infection caused by the spirochete *Treponema pallidum*. Its importance lies in its ability to promote both the acquisition and transmission of HIV, and in the potential for serious or even fatal consequences if left untreated. Late syphilis can cause complications of the cardiovascular, central nervous and mucocutaneous systems. Infectious syphilis in pregnant women can cause miscarriage, stillbirth or congenital infection.

Northern Ireland has, in common with elsewhere in the UK and Europe, experienced a marked increase in infectious syphilis since 2000. In the decade prior to 2000, on average only one case of infectious syphilis per year was reported.

#### Reports from enhanced syphilis surveillance arrangements

During 2011:

- 52 new episodes of infectious syphilis, representing 51 individuals, were diagnosed;
- 23 presented as primary syphilis, 15 as secondary syphilis and 10 as early latent syphilis, for four episodes the stage of illness was not known;
- 77% (40/52) of episodes were diagnosed in MSM;
- 34 episodes occurred in Northern Ireland residents and, in 27 episodes, syphilis was likely to have been acquired through exposure within Northern Ireland;
- diagnosed co-infections included HIV, chlamydia, gonorrhoea, genital warts and non-specific genital infection (NSGI);
- 29% (15/52) reported one sexual partner in the three months preceding diagnosis;
- the highest number of reported sexual partners of any one individual in the preceding three months was 30;

#### **Trend information**

While there has been no overall annual trend since the outbreak began in 2000, it is clear that infectious syphilis is now endemic within Northern Ireland. One individual presented with infectious syphilis to the GUM clinic in 2000 (this episode has been excluded from the analysis below). Overall, there have been 487 new episodes of infectious syphilis since 2001: 22 in 2001, 30 in 2002, 37 in 2003, 62 in 2004, 38 in 2005, 43 in 2006, 26 in 2007, 63 in 2008, 56 in 2009, 58 in 2010 and 52 in 2011. The outbreak continues to involve predominantly MSM, who accounted for 74% (358/487) of diagnoses to the end of 2011. Episodes in heterosexual males and females accounted for between 13% and 40% of annual totals. Fifty six percent of heterosexually acquired episodes were in males (Figure 6.1).

### Figure 6.1: Number of syphilis diagnoses in Northern Ireland, by gender and sexual orientation, 2001-2011

![](_page_18_Figure_1.jpeg)

#### Age and sexual orientation

Analysis of cumulative data by age and sexual orientation shows the highest number of episodes in heterosexual females was in the 25–34 years age group (54%; 29/54). In MSM, the highest number of episodes was in the 25–44 years age group (62%; 221/358). In heterosexual males, diagnoses were more evenly spread across the age bands, with those aged 25+ years accounting for 75% (52/69) of diagnoses. Information on age was missing for eight episodes (Figure 6.2).

Figure 6.2: Age distribution of syphilis diagnoses in Northern Ireland, by gender and sexual orientation, 2001–2011

![](_page_18_Figure_5.jpeg)

#### LCG area of residence

Of the 487 new episodes reported since 2001, 292 (60%) were resident in the Belfast and South Eastern Local Commissioning Group (LCG) areas, 49 (10%) in the Northern LCG area, 62 (13%) in the Southern LCG area, 37 (7%) in the Western LCG area, and for 10% (47), the area of residence was unknown (Figure 6.3).

![](_page_19_Figure_2.jpeg)

#### Figure 6.3: Syphilis diagnoses by LCG area of residence, 2001–2011

#### Stage of disease

From 2001 to 2005, there was little variation in the stage of disease at which diagnosis was made, with primary and secondary stages accounting for 82% (131/159) of episodes for which this information was available. During 2006 and 2007, this fell to 46% (23/50), with the proportion of early latent episodes increasing to 54% (27/50), representing diagnosis of syphilis at a later stage. However, 2008 and 2009 saw an increase in primary and secondary stage diagnoses to 62% (36/58) and 52% (26/50) respectively. A further increase was noted in 2010 and 2011, with 85% and 79% of episodes in the primary and secondary stage, representing early diagnosis of syphilis. The number of episodes at an unknown stage has decreased to 8%, compared with 31% in 2007 (Figure 6.4).

![](_page_19_Figure_6.jpeg)

#### Figure 6.4: Stage of disease, by year of diagnosis

#### Location of exposure

Although initial episodes were linked to an outbreak among MSM in Dublin, the majority of episodes in both MSM and heterosexuals were acquired in Northern Ireland (Table 6.1).

Table 6.1: Location of acquisition of syphilis infection diagnosed in Northern Irelan	ıd,
2001–2011	

Year	Dublin	Northern Ireland	Elsewhere in the UK	Outside UK/ROI	ROI (excluding Dublin)	Unknown
2001	9	*	*	*	0	*
2002	*	18	*	*	*	*
2003	*	23	*	*	*	5
2004	*	43	7	*	0	5
2005	*	24	*	5	*	*
2006	*	21	5	11	0	*
2007	0	14	0	5	0	7
2008	*	38	*	9	*	9
2009	*	41	*	*	0	8
2010	*	46	*	*	0	*
2011	*	27	*	*	*	16

#### Partner change

Cumulative data from 2001–2011 show that the majority of cases reported between zero and two partners (67%: 327/487) in the three months prior to diagnosis. Three percent (14/487) reported 20 or more partners during this period.

#### **Co-infections**

Of the 487 new episodes of syphilis reported since 2001, 52 (11%) were HIV positive. In addition to HIV and syphilis, nine of these cases had another STI co-infection. A further 115 episodes had one of the following STI co-infections: chlamydia, gonorrhoea, genital herpes, genital warts, non-specific genital infection (NSGI), balanitis, bacterial vaginosis, scabies, anogenital candidosis, hepatitis A, hepatitis B or trichomoniasis. Six episodes had two STI co-infections.

# 7: Lymphogranuloma venereum (LGV)

Lymphogranuloma venereum (LGV) is a bacterial infection caused by a specific type of *Chlamydia trachomatis* (serovars L1, L2 and L3). LGV is highly prevalent in parts of Africa, Asia, and Central and South America. For many years, LGV was rare in Western Europe, with the majority of cases being imported. However, since 2003 a series of outbreaks have emerged across different countries in Europe. The majority of cases seen in the UK have been HIV positive white MSM. The most common presentation is proctitis.<sup>4</sup>

#### **Reports from enhanced LGV surveillance arrangements**

#### Trends: 2003-2011

![](_page_21_Figure_4.jpeg)

#### Figure 7.1: United Kingdom LGV diagnoses, by year of diagnosis

Compared with the rest of the UK, Northern Ireland has had very few cases of LGV, with only 11 cases reported since 2008. Seven of these were reported in 2009. The majority of Northern Ireland cases were white MSM. The median age of cases was 28 years, range 19–54 years. Six of the 11 cases were HIV positive.

# 8: Summary and conclusions

2011 saw a slight decrease in annual numbers of new STI diagnoses made in Northern Ireland GUM clinics.

Together, chlamydia, non-specific genital infection and genital warts accounted for 84% of all new STI diagnoses made in Northern Ireland GUM clinics in 2011.

MSM is the group most at risk of acquiring gonorrhoea, infectious syphilis and LGV.

During 2011, 55% of new STI diagnoses for which age group information was available occurred in young people under the age of 25 years.

Safer sex messages should continue to be promoted to the general population, young people and MSM. The risks of unprotected casual sex, both within and outside Northern Ireland, need to be reinforced.

### References

- 1. British Association for Sexual Health and HIV. UK National guideline for the management of gonorrhoea in adults 2011. Available at: www.bashh.org/guidelines
- 2. Health Protection Agency. The Gonococcal Resistance to Antimicrobials Surveillance Programme (GRASP). Available at: www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/Gonorrhoea/AntimicrobialResistance/
- Department of Health, Social Services and Public Safety. Introduction of human papillomavirus vaccine into the childhood immunisation programme: announcement of vaccine to be used. 23 July 2008. Available at: www.dhsspsni.gov.uk/hss-md-24-2008.pdf
- Department of Health, Social Services and Public Safety. HPV Immunisation Programme Change of supply of HPV vaccine to Gardasil® from September 2012. Available at http://www.dhsspsni.gov.uk/hss-md-26-2011.pdf
- Health Protection Agency. Substantial increase in cases of Lymphogranuloma venereum (LGV) in UK. Health Protection Report 2010; 4(8). Available at: www.hpa.org.uk/hpr/archives/2010/news0810.htm#lgv

NI         F         Total         MI         F         Total        MI         F         T				2000			2001			2002			2003			2004			2005			2006			2007			2008			2009			2010	-		2011^	
e18         0         6         6         0         6         6         0         7         7         0         1         1         0			м	F	Total	м	F	Total	м	F	Total	м	F	Total	М	F	Total	м	F	Total	м	F	Total	М	F	Total	м	F	Total	м	F	Total	М	F	Total	М	F	Total
g         16:10         50         118         168         47         117         126         126         200         135         206         136         206         136         206         136         206         136         206         136         206         136         206         136         206         136         206         136         206         136         206         136         206        136         206         136		<16	0	6	6	0	6	6	*	*	7	0	7	7	0	13	13	0	9	9	•	*	22	*	*	11	*	*	13	0	8	8	*	*	11	0	9	9
100         154         154         150         354         174         177         371         220         334         524         334         554         556         566         556         566         556         566         556         566         566         566 <td>a B</td> <td>16-19</td> <td>50</td> <td>118</td> <td>168</td> <td>47</td> <td>149</td> <td>196</td> <td>44</td> <td>136</td> <td>180</td> <td>81</td> <td>180</td> <td>261</td> <td>72</td> <td>206</td> <td>278</td> <td>75</td> <td>215</td> <td>290</td> <td>87</td> <td>220</td> <td>307</td> <td>115</td> <td>206</td> <td>321</td> <td>93</td> <td>243</td> <td>336</td> <td>113</td> <td>236</td> <td>349</td> <td>105</td> <td>192</td> <td>297</td> <td>104</td> <td>191</td> <td>295</td>	a B	16-19	50	118	168	47	149	196	44	136	180	81	180	261	72	206	278	75	215	290	87	220	307	115	206	321	93	243	336	113	236	349	105	192	297	104	191	295
Norm         Sold         214         130         344         180         170         370         200         187         200         187         200         187         200         187         200         187         200         187         200         187         200         188         200         187         200         187         200         188         200         187         200         188         200         187         200         188         200         187         200         188         200         187         200         188         200         188         200         186         200         170         277         288         200 </td <td>di.</td> <td>20-24</td> <td>154</td> <td>200</td> <td>354</td> <td>174</td> <td>177</td> <td>351</td> <td>228</td> <td>304</td> <td>532</td> <td>248</td> <td>294</td> <td>542</td> <td>326</td> <td>333</td> <td>659</td> <td>334</td> <td>396</td> <td>730</td> <td>445</td> <td>458</td> <td>903</td> <td>375</td> <td>342</td> <td>717</td> <td>477</td> <td>385</td> <td>862</td> <td>447</td> <td>327</td> <td>774</td> <td>423</td> <td>338</td> <td>761</td> <td>424</td> <td>374</td> <td>798</td>	di.	20-24	154	200	354	174	177	351	228	304	532	248	294	542	326	333	659	334	396	730	445	458	903	375	342	717	477	385	862	447	327	774	423	338	761	424	374	798
No.         Si-44         54         52         70         54         78         54         78         76         78 <th< td=""><td>È</td><td>25-34</td><td>214</td><td>130</td><td>344</td><td>192</td><td>117</td><td>309</td><td>209</td><td>147</td><td>356</td><td>236</td><td>151</td><td>387</td><td>247</td><td>159</td><td>406</td><td>303</td><td>184</td><td>487</td><td>362</td><td>239</td><td>601</td><td>365</td><td>205</td><td>570</td><td>371</td><td>220</td><td>591</td><td>416</td><td>201</td><td>617</td><td>373</td><td>220</td><td>593</td><td>390</td><td>191</td><td>581</td></th<>	È	25-34	214	130	344	192	117	309	209	147	356	236	151	387	247	159	406	303	184	487	362	239	601	365	205	570	371	220	591	416	201	617	373	220	593	390	191	581
Ge- ber         de- ber         de- ber <t< td=""><td>a</td><td>35-44</td><td>54</td><td>22</td><td>76</td><td>47</td><td>17</td><td>64</td><td>58</td><td>24</td><td>82</td><td>60</td><td>26</td><td>86</td><td>46</td><td>32</td><td>78</td><td>54</td><td>38</td><td>92</td><td>80</td><td>39</td><td>119</td><td>65</td><td>36</td><td>101</td><td>76</td><td>27</td><td>103</td><td>81</td><td>39</td><td>120</td><td>96</td><td>28</td><td>124</td><td>71</td><td>20</td><td>91</td></t<>	a	35-44	54	22	76	47	17	64	58	24	82	60	26	86	46	32	78	54	38	92	80	39	119	65	36	101	76	27	103	81	39	120	96	28	124	71	20	91
Total         440         483         963         473         474         973         546         623         1,307         750         1,507         1,507         1,507         1,5	5	45+	8	7	15	13	8	21	*	*	13	20	5	25	12	7	19	17	6	23	*	*	27	*	*	23	*	*	41	33	5	38	*	*	46	47	9	56
Nin MSM         2%         2%         4%         7%         7%         6%         4%         4%         7%         6%         7%         6%         7%         6%         7%         7%         6%         7%         6%         7%         7%         6%         7%         6%         7%         6%         7%         6%         7%         7%         6%         7%         6%         7%         7%         6%         7%         6%         7%         7%         6%         7%         7%         6%         7%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         6%         7%         7%         7%         7%         7%         7%         7%         7%         7%         7%         7%         7%         7%         7%         7%         7%         7% <t< td=""><td>-</td><td>Total</td><td>480</td><td>483</td><td>963</td><td>473</td><td>474</td><td>947</td><td>548</td><td>622</td><td>1,170</td><td>645</td><td>663</td><td>1,308</td><td>703</td><td>750</td><td>1,453</td><td>783</td><td>848</td><td>1,631</td><td>993</td><td>986</td><td>1,979</td><td>938</td><td>805</td><td>1,743</td><td>1,050</td><td>896</td><td>1,946</td><td>1,090</td><td>816</td><td>1,906</td><td>1,036</td><td>796</td><td>1,832</td><td>1,036</td><td>794</td><td>1,830</td></t<>	-	Total	480	483	963	473	474	947	548	622	1,170	645	663	1,308	703	750	1,453	783	848	1,631	993	986	1,979	938	805	1,743	1,050	896	1,946	1,090	816	1,906	1,036	796	1,832	1,036	794	1,830
c+f6         ·		% in MSM	2%			3%			2%			4%			4%			7%			6%			4%			4%			11%			14%			15%		
a         16         10         22         7         20         7         0         7         8         8         16         17         5         17         5         20         19         8         27         12         9         21         9         21         10         15		<16	*	*	*	0	0	0	0	*	*	0	0	0	0	*	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	•	•	*	*
0         20-24         3         5         36         *         *         39         48         10         56         37         47         13         60         58         17         65         16         13         67         88         125          35-14         *         22         *         10         52         48         5         57         62         7         63         56         10         66         57         63         58         17         61         13         67         93         18         127         44         7         51         56         10         66         77         61         56         10         67         93         84         10         65         10         67         93         18         127         44         7         51         56         10         68         17         71         44         77         51         56         10         60         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10	ea	16-19	18	10	28	22	7	29	7	0	7	8	8	16	17	8	25	*	*	17	*	*	15	27	7	34	15	5	20	19	8	27	12	9	21	17	15	32
25:34         · <td>ğ</td> <td>20-24</td> <td>31</td> <td>5</td> <td>36</td> <td>*</td> <td>•</td> <td>37</td> <td>*</td> <td>*</td> <td>39</td> <td>45</td> <td>10</td> <td>55</td> <td>32</td> <td>5</td> <td>37</td> <td>47</td> <td>13</td> <td>60</td> <td>58</td> <td>17</td> <td>75</td> <td>44</td> <td>7</td> <td>51</td> <td>56</td> <td>10</td> <td>66</td> <td>36</td> <td>15</td> <td>51</td> <td>61</td> <td>13</td> <td>74</td> <td>87</td> <td>38</td> <td>125</td>	ğ	20-24	31	5	36	*	•	37	*	*	39	45	10	55	32	5	37	47	13	60	58	17	75	44	7	51	56	10	66	36	15	51	61	13	74	87	38	125
0 0 0         35-44 (5)         +         -         2         1         -         2         1         -         45         -         -         45         -         -         45         -         -         45         -         -         45         -         -         45         -         -         45         -         -         45         -         -         45         -         -         45         -         -         226         10         0	Ē	25-34	*		49	42	10	52	45	6	51	42	6	48	•	*	49	*	*	58	55	7	62	*	•	49	58	13	71	69	8	77	51	6	57	93	19	112
A         A         A         B         A         B         A         C	2	35-44	*	*	22	*	•	24	14	0	14	*	*	28	•	*	10	*	*	38	•	*	32	*	•	21	*	*	45	•	•	16	30	*	•	•	*	40
O         Total         19         24         143         127         21         148         100         112         12         22         148         52         158         17         172         194         52         226         148         52         168         52         158         17         172         194         52         226         180         17         172         194         52         226         226         226         226         226         226         226         226         226         226         226         226         20         0 <td>ā</td> <td>45+</td> <td>*</td> <td>*</td> <td>*</td> <td>6</td> <td>0</td> <td>6</td> <td>*</td> <td>0</td> <td>*</td> <td>*</td> <td>*</td> <td>7</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td> <td>9</td> <td>*</td> <td>*</td> <td>11</td> <td>17</td> <td>0</td> <td>17</td> <td>*</td> <td>*</td> <td>24</td> <td>*</td> <td>*</td> <td>9</td> <td>18</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td>	ā	45+	*	*	*	6	0	6	*	0	*	*	*	7	*	*	*	*	*	9	*	*	11	17	0	17	*	*	24	*	*	9	18	*	*	*	*	*
***         ****         ***         ***         *** <td>0</td> <td>Total</td> <td>119</td> <td>24</td> <td>143</td> <td>127</td> <td>21</td> <td>148</td> <td>106</td> <td>11</td> <td>117</td> <td>127</td> <td>27</td> <td>154</td> <td>105</td> <td>19</td> <td>124</td> <td>162</td> <td>20</td> <td>182</td> <td>163</td> <td>32</td> <td>195</td> <td>155</td> <td>17</td> <td>172</td> <td>194</td> <td>32</td> <td>226</td> <td>148</td> <td>32</td> <td>180</td> <td>172</td> <td>32</td> <td>204</td> <td>259</td> <td>77</td> <td>336</td>	0	Total	119	24	143	127	21	148	106	11	117	127	27	154	105	19	124	162	20	182	163	32	195	155	17	172	194	32	226	148	32	180	172	32	204	259	77	336
eff         0		% in MSM	9%			18%			11%			31%			23%			40%			24%			29%			29%			29%			34%			56%		
Single for the second		<16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
gring         21/24         0         0         0         0         0         0         0         0         0         0         0         1         1         0         1         1         0         1         1         0         1         1         0         1         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0		16-19	0	0	0	0	0	0		0		0	0	0	0	0	0		0		0	*	*		0			0	*	0	0	0	0	0	0		*	
viscol         vis         vis         viscol	ili s	20-24	0	0	0	0				0			0	-	5	5	10	5	0	5		-	13	5	0	5			10						12	5	0	5
S         35-44         0 <td>- He</td> <td>25-34</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>•</td> <td>6</td> <td>-</td> <td>0</td> <td></td> <td>5</td> <td>0</td> <td>5</td> <td></td> <td></td> <td>11</td> <td></td> <td>•</td> <td>9</td> <td>10</td> <td>0</td> <td>10</td> <td></td> <td>•</td> <td>9</td> <td></td> <td>•</td> <td>10</td> <td></td> <td>•</td> <td>11</td> <td>18</td> <td>0</td> <td>18</td> <td>11</td> <td>0</td> <td>11</td>	- He	25-34	0	0	0		•	6	-	0		5	0	5			11		•	9	10	0	10		•	9		•	10		•	11	18	0	18	11	0	11
d5+         0	2	35-44	0	0	0		0		5	0	5		0		-	0	15	12	0	12		0			0		-	0		9	0	9	6	0	6	10	-	10
Indial         0         0         0         0         0         10         10         0         10         20         10         20         10         20         10         20         10         20         10         20         10         20         10         20         10         66%         10         52%         52%         52%         52%         73%         75%	0	45+	0	0	0	•		- 44	9	0	9	40	0	40	5	0	5	5	-	24	•	0			0		8	0	8	6	0	6		•	10	10	0	10
VIRTNON         UNX         VIX         UXX         VIX         UXX		I otal	0	U	U	000/		11	19	U	19	10	U	10	31	10	41	29	5	34	500/		30	500/		22	450/		33	700/		29	750/		40	700/		30
y         (10-9)         0         40         47         6         40         46         *         31         6         *         34         6         39         45         7         33         40         5         44         49         11         58         69         7         43         50         10         57         67         5         71         76          20-24         29         52         81         15         48         63         20         54         71         76         5         71         76         5         71         76         5         71         76         5         71         76         5         71         76         5         71         76         5         71         76         5         71         76         5         71         76         5         71         76         5         71         76         7         73         71         76         71         76         71         76         71         76         71         76         71         76         71         76         71         76         71         76         71         76         71         76		76 III IVISIVI	0%	*	*	09%		*	41 70	E	E	\$	*	*	00%	*	*	*	*	*	0276	*	*	0270	*		40%	*	*	10%		*	75%	*	*	18%	6	6
No         10         1         40         47         6         40         31         36         67         23         43         7         33         44         49         11         36         69         7         43         30         10         37         17         30         43         31         36         43         34         44         49         11         36         69         7         43         30         10         37         17         33         43         31         36         47         41         35         43         41         45         41         80         12         52         49         74         33         44         47         43         30         10         37         44         49         11         36         81         31         56         51         11         22         33         8         19         27         13         39         26         13         39         26         13         39         26         13         39         26         10         39         26         10         39         26         10         39         26         10         39		16 10	7	40	47	6	40	46	*	*	40	5	21	26	*	*	24	6	20	45	7	22	40	5	44	40	11	EO	60	7	42	50	10	57	67	5	71	76
Sec       20       20       10       10       40       03       03       20       04       20       05       20       20 <t< td=""><td></td><td>20-24</td><td>20</td><td>40</td><td>47 81</td><td>15</td><td>40</td><td>40</td><td>20</td><td>54</td><td>40</td><td>1/</td><td>53</td><td>67</td><td>28</td><td>56</td><td>34 84</td><td>20</td><td>59</td><td>40</td><td>21</td><td>60</td><td>40</td><td>32</td><td>44 53</td><td>49</td><td>11</td><td>78</td><td>80</td><td>28</td><td>43</td><td>04</td><td>42</td><td>37 87</td><td>120</td><td>30</td><td>68</td><td>08</td></t<>		20-24	20	40	47 81	15	40	40	20	54	40	1/	53	67	28	56	34 84	20	59	40	21	60	40	32	44 53	49	11	78	80	28	43	04	42	37 87	120	30	68	08
Lip         35-44         14         25         40         16         10 <th< td=""><td>ee ee</td><td>25-34</td><td>47</td><td>45</td><td>92</td><td>30</td><td>47</td><td>86</td><td>35</td><td>48</td><td>83</td><td>23</td><td>49</td><td>72</td><td>25</td><td>30</td><td>64</td><td>28</td><td>46</td><td>74</td><td>30</td><td>52</td><td>91</td><td>27</td><td>55</td><td>82</td><td>38</td><td>47</td><td>85</td><td>41</td><td>80</td><td>121</td><td>52</td><td>79</td><td>131</td><td>56</td><td>65</td><td>121</td></th<>	ee ee	25-34	47	45	92	30	47	86	35	48	83	23	49	72	25	30	64	28	46	74	30	52	91	27	55	82	38	47	85	41	80	121	52	79	131	56	65	121
Y         Ast-         H         C         B         L         C         C         L         C         C         L         C         C         L         C         L         C         C         L         C         L         C         C         L         C         C         L         C         C         L         C         L         C         L         C         C         L         C         C         C         C         L         C <thc< th="">         C         <thc< th=""> <thc< th=""></thc<></thc<></thc<>	2	35-44	14	25	30	24	22	46	16	22	38	14	21	35	11	22	33	8	10	27	18	21	30	26	13	30	8	10	27	17	32	49	36	21	57	24	26	50
Viscour         Viscour <t< td=""><td>Ť</td><td>45+</td><td>11</td><td>*</td><td>*</td><td>*</td><td>*</td><td>*</td><td>*</td><td>*</td><td>19</td><td>*</td><td>*</td><td>*</td><td>*</td><td>*</td><td>*</td><td>*</td><td>*</td><td>*</td><td>6</td><td>*</td><td>*</td><td>13</td><td>*</td><td>*</td><td>10</td><td>*</td><td>*</td><td>18</td><td>*</td><td>*</td><td>13</td><td>*</td><td>*</td><td>14</td><td>21</td><td>35</td></t<>	Ť	45+	11	*	*	*	*	*	*	*	19	*	*	*	*	*	*	*	*	*	6	*	*	13	*	*	10	*	*	18	*	*	13	*	*	14	21	35
% in MSM         3%         3%         1%         1%         5%         7%         8%         2%         2%         4%         6%         7%         7%         11%         11%         12%         11%         11%           % in MSM         3%         3%         12         1%         5%         7%         7%         8%         8%         2%         11         *         6%         7%         12%         11%         12%         11% <td></td> <td>Total</td> <td>108</td> <td>173</td> <td>281</td> <td>93</td> <td>165</td> <td>258</td> <td>79</td> <td>180</td> <td>259</td> <td>60</td> <td>166</td> <td>226</td> <td>69</td> <td>153</td> <td>222</td> <td>66</td> <td>172</td> <td>238</td> <td>91</td> <td>183</td> <td>274</td> <td>103</td> <td>173</td> <td>276</td> <td>78</td> <td>218</td> <td>296</td> <td>121</td> <td>225</td> <td>346</td> <td>153</td> <td>258</td> <td>411</td> <td>129</td> <td>257</td> <td>386</td>		Total	108	173	281	93	165	258	79	180	259	60	166	226	69	153	222	66	172	238	91	183	274	103	173	276	78	218	296	121	225	346	153	258	411	129	257	386
viscol         cite         5         7         12         *         9         *         6         *         9         0         9         9         0         6         6         *         11         *         5         *         10         *         18         *         11         *         *         16         9         9         9         9         0         6         6         *         11         *         *         5         *         10         *         *         18         *         11         *         *         5         *         10         *         *         18         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *         *         11         *		% in MSM	3%			3%			1%			5%			7%			8%			2%			4%			6%			7%			12%			11%		
16-19         93         236         329         95         229         324         84         243         327         115         235         350         86         259         345         103         267         370         122         270         392         88         216         304         100         253         353         95         217         312         107         230         337         104         245         349           20-24         417         366         783         393         358         751         409         357         766         401         411         812         397         358         755         460         403         863         440         356         766         384         326         710         419         369         788         444         334         778         432         342         774         467         394         861           25-34         429         287         716         422         297         758         88         216         387         217         311         20         216         441         216         387         217         312         97         481		<16	5	7	12	*	•	9	*	*	6	*	*	9	0	9	9	0	6	6	*	*	11	*		5	*	*	10	*		18	*	*	11	*	*	*
Y         20-24         417         366         783         393         358         751         409         357         766         401         411         812         397         358         755         460         403         863         440         356         796         384         326         710         419         369         788         444         334         778         432         342         774         467         394         861           25-34         429         287         716         422         297         719         458         298         763         387         278         665         433         296         739         401         249         280         736         417         309         788         444         334         778         432         342         774         467         394         861           25-34         118         78         196         132         95         227         713         457         650         387         278         665         433         296         387         278         131         10         243         131         10         243         239         239		16-19	93	236	329	95	229	324	84	243	327	115	235	350	86	259	345	103	267	370	122	270	392	88	216	304	100	253	353	95	217	312	107	230	337	104	245	349
St         25-34         429         287         716         422         297         719         458         298         756         386         287         673         387         278         665         443         296         739         401         249         650         387         227         614         439         262         701         400         221         621         442         255         697         448         254         702           35-44         118         78         196         132         95         221         13         91         240         133         110         243         150         89         239         123         95         218         131         70         201         119         88         207         138         86         241         138         129         423         150         89         239         123         95         218         131         70         201         119         88         207         138         94         239         789         *<		20-24	417	366	783	393	358	751	409	357	766	401	411	812	397	358	755	460	403	863	440	356	796	384	326	710	419	369	788	444	334	778	432	342	774	467	394	861
No         35-44         118         78         196         132         95         227         138         95         233         149         91         240         133         110         243         150         89         239         123         95         218         131         70         201         119         88         207         138         86         224         135         74         209         138         91         229           45+         56         25         81         *         100         *         88         *         92         56         28         84         52         37         89         *         95         *         84         *         133         *         98         *         154           Total         1,118         999         2,117         1,107         1,023         2,130         1,111         1,065         1,676         1,059         1,424         1,014         1,055         879         1,929         1,132         1,011         2,143         1,169         947         2,126         1,337         1,068         2,305           Of         999         2,117         1,107         1,023<	rts I	25-34	429	287	716	422	297	719	458	298	756	386	287	673	387	278	665	443	296	739	401	249	650	387	227	614	439	262	701	400	221	621	442	255	697	448	254	702
45+         56         25         81         *         100         *         88         92         56         28         84         52         37         89         *         89         *         95         *         84         *         133         *         98         *         154           Total         1,118         999         2,117         1,107         1,023         2,130         1,114         1,065         1,059         1,042         2,101         1,208         1,098         2,306         1,142         1,014         2,156         1,050         879         1,929         1,132         1,011         2,143         1,017         947         2,126         1,237         1,068         2,305         200 <td>Va</td> <td>35-44</td> <td>118</td> <td>78</td> <td>196</td> <td>132</td> <td>95</td> <td>227</td> <td>138</td> <td>95</td> <td>233</td> <td>149</td> <td>91</td> <td>240</td> <td>133</td> <td>110</td> <td>243</td> <td>150</td> <td>89</td> <td>239</td> <td>123</td> <td>95</td> <td>218</td> <td>131</td> <td>70</td> <td>201</td> <td>119</td> <td>88</td> <td>207</td> <td>138</td> <td>86</td> <td>224</td> <td>135</td> <td>74</td> <td>209</td> <td>138</td> <td>91</td> <td>229</td>	Va	35-44	118	78	196	132	95	227	138	95	233	149	91	240	133	110	243	150	89	239	123	95	218	131	70	201	119	88	207	138	86	224	135	74	209	138	91	229
Total 1,118 999 2,117 1,107 1,023 2,130 1,147 1,029 2,176 1,111 1,065 2,176 1,059 1,042 2,101 1,208 1,098 2,306 1,142 1,014 2,156 1,050 879 1,929 1,132 1,011 2,143 1,160 926 2,086 1,179 947 2,126 1,237 1,068 2,305 0,000 0,	>	45+	56	25	81	*	*	100	*	*	88	*	*	92	56	28	84	52	37	89	*	*	89	*	*	95	*	*	84	*		133	*	*	98		*	154
		Total	1,118	999	2,117	1,107	1,023	2,130	1,147	1,029	2,176	1,111	1,065	2,176	1,059	1,042	2,101	1,208	1,098	2,306	1,142	1,014	2,156	1,050	879	1,929	1,132	1,011	2,143	1,160	926	2,086	1,179	947	2,126	1,237	1,068	2,305
% III INSIN         2%         2%         3%         3%         2%         3%         6%         6%		% in MSM	2%			3%			2%			2%			3%			3%			2%			3%			2%			6%			8%			8%		
Total diagnoses 6,141 5,031 11,172 6,048 5,252 11,300 6,185 5,682 11,867 5,823 5,727 11,550 5,723 5,784 11,507 6,316 6,531 12,847 6,292 5,718 12,010 6,211 5,110 11,321 6,546 5,787 12,333 6,966 5,356 12,322 7,304 5,222 12,528 7,046 5,729 12,778	Total dia	gnoses	6,141	5,031	11,172	6,048	5,252	11,300	6,185	5,682	11,867	5,823	5,727	11,550	5,723	5,784	11,507	6,316	6,531	12,847	6,292	5,718	12,010	6,211	5,110	11,321	6,546	5,787	12,333	6,966	5,356	12,322	7,304	5,222	12,526	7,046	5,729	12,775
Total workload 3 659 3 673 6 590 4 492 4 64 7 086 5 499 3 646 9 744 7 499 6 091 42 900 7 997 7 666 44 399 0 907 7 540 46 944 9 47 404 46 074 7 404 46 080 0 907 9 91 49 449 44 094 14 000 0 609 91 601 42 949 14 004 19 724	Total wo	- rkload	3,658	2,872	6,530	4,435	3,451	7,886	5,128	3,616	8,744	7,188	6,021	13,209	7,327	7,056	14,383	9,302	7,542	16,844	8,871	7,104	15,975	8,480	6,488	14,968	9,897	8,321	18,218	11,903	9,698	21,601	13,242	10,542	23,784	14,035	11,704	25,739

#### Appendix 1: Number of new episodes of selected diagnoses by gender and age group, Northern Ireland, 2000-2011

#### Notes on using these tables:

% in MSM represents the propotion of the total male diagnoses attributed to men who have sex with men (MSM)

^ It is likely that the use of more sensitive Nucleic Acid Amplification Tests (NAATs) has contributed to the increase in gonorrhoea.

#### \* Data is confidential

Following recent ONS guidance on data disclosure, the rules on publication of STI data with small cell sizes have changed. Cells with a value between 1 and 4 will now be anonymised with an astrix. In addition, where the anonymised cell can be deduced from the totals, the next smallest cells will also be anonymised.

#### Definitions of selected conditions:

Chlamydia	uncomplicated genital chlamydial infection, KC60 code C4a, C4c
Gonorrhoea	uncomplicated gonorrhoea, KC60 code B1, B2
Syphilis	primary and secondary infectious syphilis, KC60 code A1, A2
Herpes	anogenital herpes simplex (first attack), KO60 code C10a
Warts	anogenital warts (first attack), KC60 code C11a
Total diagnoses	all diagnoses made, includes all A, B, C and E KC60 codes
Total w orkload	all workload not requiring a diagnoses, includes all D, P and S KO60 codes

[			2000			2001			2002			2003			2004			2005			2006			2007	-		2008			2009			2010			2011^	
		м	F	Total	м	F	Total	м	F	Total	м	F	Total	м	F	Total	м	F	Total	М	F	Total	м	F	Total	м	F	Total									
	<16	0.0	15.1	7.4	0.0	15.2	7.4	*	*	8.7	0.0	18.1	8.8	0.0	33.9	16.5	0.0	23.6	11.5	*	*	28.5	*	*	14.5	*	*	17.4	0.0	22.2	10.8	*	*	14.9	0.0	25.0	12.2
	16-19	98.2	236.6	166.6	90.2	294.3	190.7	81.8	264.7	171.1	148.3	347.8	245.4	131.3	398.1	260.8	137.4	417.4	273.3	162.2	434.0	294.3	219.4	413.7	314.1	179.2	491.3	331.5	220.0	482.0	347.8	208.5	395.7	300.4	206.6	393.6	298.4
di	20-24	281.0	366.5	323.7	313.2	322.8	318.0	407.5	554.7	480.3	430.7	532.4	480.5	548.6	582.5	565.2	541.1	669.1	603.8	683.9	738.6	710.6	551.7	531.4	541.8	703.1	592.0	648.7	659.4	506.2	584.7	641.7	530.5	587.1	643.3	587.0	615.6
È	25-34	175.0	104.1	139.1	160.1	95.2	127.3	178.1	122.1	149.8	205.4	128.2	166.3	219.2	137.0	177.5	268.4	159.6	213.4	319.1	207.4	262.9	318.9	175.4	246.4	316.1	186.5	251.1	347.9	167.7	257.7	303.6	179.7	241.8	317.4	156.0	236.9
ar	35-44	45.2	17.8	31.2	38.7	13.4	25.8	47.0	18.7	32.6	48.2	20.1	33.9	36.7	24.5	30.5	42.8	29.0	35.7	63.1	29.6	46.0	51.2	27.3	39.0	60.1	20.6	40.0	64.6	30.2	47.1	77.4	22.1	49.4	57.2	15.8	36.3
ج د	45+	3.0	2.2	2.6	4.8	2.5	3.6	*	*	2.2	7.1	1.5	4.1	4.2	2.1	3.1	5.8	1.8	3.6	*	*	4.2	*	*	3.5	*	*	6.2	10.4	1.4	5.6	*	*	6.6	14.5	2.4	8.1
0	Total	58.5	56.0	57.2	57.4	54.8	56.1	66.1	71.7	69.0	77.4	76.2	76.8	84.0	85.8	85.0	92.7	96.3	94.6	116.4	111.0	113.6	108.8	89.7	99.1	120.6	99.1	109.6	124.1	89.6	106.5	117.1	87.0	101.8	117.1	86.8	101.7
	<16	*	*	*	0.0	0.0	0.0	0.0	*	*	0.0	0.0	0.0	0.0	*	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*
ea	16-19	35.3	20.0	27.8	42.2	13.8	28.2	13.0	0.0	6.7	14.6	15.5	15.0	31.0	15.5	23.5	*	*	16.0	*	*	14.4	51.5	14.1	33.3	28.9	10.1	19.7	37.0	16.3	26.9	23.8	18.5	21.2	33.8	30.9	32.4
ğ	20-24	56.6	9.2	32.9	*	*	33.5	*	*	35.2	78.2	18.1	48.8	53.8	8.7	31.7	76.1	22.0	49.6	89.1	27.4	59.0	64.7	10.9	38.5	82.6	15.4	49.7	53.1	23.2	38.5	92.5	20.4	57.1	132.0	59.6	96.4
È	25-34	*	*	19.8	35.0	8.1	21.4	38.3	5.0	21.5	36.6	5.1	20.6	*	*	21.4	*	*	25.4	48.5	6.1	27.1	*	*	21.2	49.4	11.0	30.2	57.7	6.7	32.2	41.5	4.9	23.2	75.7	15.5	45.7
2	35-44	*	*	9.0	*	*	9.7	11.4	0.0	5.6	*	*	11.0	*	*	3.9	*	*	14.8	*	*	12.4	*	*	8.1	*	*	17.5	*	*	6.3	24.2	*	*	*	*	15.9
<u>R</u>	45+	*	*	*	2.2	0.0	1.0	*	0.0	*	*	*	1.1	*	*	*	*	*	1.4	*	*	1.7	5.6	0.0	2.6	*	*	3.6	*	*	1.3	5.5	*	*	*	*	*
0	Total	14.5	2.8	8.5	15.4	2.4	8.8	12.8	1.3	6.9	15.2	3.1	9.0	12.6	2.2	7.3	19.2	2.3	10.6	19.1	3.6	11.2	18.0	1.9	9.8	22.3	3.5	12.7	16.8	3.5	10.1	19.4	3.5	11.3	29.3	8.4	18.7
	40	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	<10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>.s</u>	16-19	0.0	0.0	0.0	0.0	0.0	0.0	*	0.0	*	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	4.4	0.0		10.0	7.4	0.0	2.0	*	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	2.0
ΪĻ	20-24	0.0	0.0	0.0	*	*	25	*	0.0	*	4.4	0.0	2.1	*	*	0.0	*	*	4.1	0.0	0.0	10.2	*	*	3.0	*	*	1.3	*	*	4.6	146	0.0	9.3	0.0	0.0	3.9
d X	25-34	0.0	0.0	0.0	*	0.0	2.0	4.1	0.0	2.0	4.4	0.0	Z.I *	*	*	4.0	0.5	0.0	3.9	0.0 *	0.0	*	*	0.0	3.9	*	0.0	4.3	7.2	0.0	4.0	14.0	0.0	7.3	9.0 *	*	4.0
Ś	45+	0.0	0.0	0.0	*	0.0	*	3.3	0.0	1.5	*	0.0	*	17	0.0	0.8	1.7	*	*	*	0.0	*	*	0.0	*	2.6	0.0	12	1.2	0.0	0.0	*	*	1.4	3.1	0.0	1.4
	Total	0.0	0.0	0.0	•	*	0.7	23	0.0	1.0	12	0.0	0.6	3.7	11	24	3.4	0.6	2.0	*	*	17	*	*	13	2.0	*	1.2	*	*	1.6	*	*	2.6	*	*	2.1
	Total	0.0	0.0	0.0			0.7	2.0	0.0		1.2	0.0	0.0	0.1		2.4	0.4	0.0	2.0						1.5			1.5			1.0			2.0			
	<16	0.0	*	*	0.0	*	*	0.0	12.8	6.2	*	*	*	0.0	*	*	*	*	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	16.7	8.1
	16-19	13.7	80.2	46.6	11.5	79.0	44.8	*	*	38.0	9.2	59.9	33.8	*	*	31.9	11.0	75.7	42.4	13.1	65.1	38.3	9.5	88.4	47.9	21.2	117.3	68.1	13.6	87.8	49.8	19.9	117.5	67.8	9.9	146.3	76.9
es	20-24	52.9	95.3	74.1	27.0	87.5	57.1	35.7	98.5	66.8	24.3	96.0	59.4	47.1	98.0	72.0	32.4	108.1	69.5	32.3	96.8	63.7	47.1	82.4	64.2	16.2	119.9	67.0	56.1	86.7	71.0	63.7	136.5	99.5	45.5	106.7	75.6
đ	25-34	38.4	36.0	37.2	32.5	38.2	35.4	29.8	39.9	34.9	20.0	41.6	30.9	22.2	33.6	28.0	24.8	39.9	32.4	34.4	45.1	39.8	23.6	47.1	35.4	32.4	39.8	36.1	34.3	66.7	50.5	42.3	64.5	53.4	45.6	53.1	49.3
μ	35-44	11.7	20.2	16.0	19.7	17.4	18.5	13.0	17.2	15.1	11.3	16.3	13.8	8.8	16.9	12.9	6.3	14.5	10.5	14.2	15.9	15.1	20.5	9.9	15.1	6.3	14.5	10.5	13.6	24.8	19.2	29.0	16.5	22.7	19.3	20.5	19.9
	45+	4.1	*	*	*	*	*	*	*	3.2	*	*	*	*	*	*	*	*	*	2.0	*	*	4.3	*	*	3.2	*	*	5.7	*	*	4.0	*	*	4.3	5.7	5.1
	Total	13.2	20.1	16.7	11.3	19.1	15.3	9.5	20.7	15.3	7.2	19.1	13.3	8.2	17.5	13.0	7.8	19.5	13.8	10.7	20.6	15.7	11.9	19.3	15.7	9.0	24.1	16.7	13.8	24.7	19.3	17.3	28.2	22.8	14.6	28.1	21.5
	<16	12.0	17.7	14.8	*	*	11.1	*	*	7.5	*	*	11.3	0.0	23.4	11.4	0.0	15.7	7.7	*	*	14.2	*	*	6.6	*	*	13.4	*	*	24.3	*	*	14.9	*	*	*
	16-19	182.6	473.1	326.3	182.2	452.3	315.3	156.1	472.9	310.9	210.6	454.1	329.1	156.8	500.5	323.7	188.7	518.4	348.7	227.5	532.6	375.7	167.9	433.8	297.4	192.7	511.5	348.3	184.9	443.2	311.0	212.5	474.0	340.8	206.6	504.9	353.0
ŝ	20-24	761.0	670.6	715.9	707.4	652.9	680.3	730.9	651.4	691.6	696.5	744.2	/19.8	668.0	626.2	647.5	745.2	681.0	/13.8	676.2	5/4.1	626.4	564.9	506.5	536.5	617.6	567.4	593.0	655.0	517.1	587.7	655.4	536.8	597.1	708.5	618.4	664.2
ar	25-34	350.8	229.7	289.6	351.9	241.7	296.1	390.3	247.6	318.0	335.9	243.6	289.2	343.4	239.5	290.7	392.5	256.7	323.9	353.5	216.1	284.3	338.2	194.2	265.4	374.1	222.1	297.9	334.5	184.4	259.4	359.7	208.3	284.2	364.6	207.5	286.2
≥	35-44	98.9	63.0	80.6	108.6	/5.1	91.5	111.9	/4.1	92.7	119.8	70.4	94.2	106.2	84.4	95.0	118.8	67.8	92.8	97.0	/2.0	84.3	103.3	53.1	11.1	94.0	67.3	80.4	110.0	66.5	87.9	108.8	58.3	83.3	111.2	/1./	91.2
	40+ Tetel	21.0	8.0	14.0	424.2	440.0	17.0	420.4	440.0	14.7	400.4	400.4	15.1	19.5	8.4	13.0	17.7	11.0	14.1	422.0	444.0	13.8	404.0	08.0	14.5	420.0	444.0	12.0	422.0	404 7	19.6	400.0	402.5	14.2	420.0	446.7	420.4
	Iotal	136.3	115.8	125.8	134.3	118.3	126.1	138.4	118.6	128.3	133.4	122.4	127.8	126.6	119.2	122.8	143.1	124.8	133.7	133.8	114.2	123.8	121.8	98.0	109.7	130.0	111.8	120.7	132.0	101.7	116.6	133.3	103.5	118.2	139.9	116.7	128.1
		1																																			

#### Appendix 2: Rates of new episodes of selected diagnoses by gender and age group, Northern Ireland, 2000-2011

#### Notes on using these tables:

Diagnoses are calculated on GUM clinics in the region, rates are calculated for the region's resident population.

Diagnostic rates for specific age groups were estimated by dividing the annual number of diagnoses in each age bracket by the estimated mid-year resident population of Northern Ireland for each age group. The denominators used to calculate rates in people under 16 and over 44 years of age were the population aged 13 to 15, and the population aged over 44 years respectively. The total population was used for the calculation of overall rates. Rates are per 100,0000 population

^ 2011 rates are based on 2010 mid year estimates (Source NISRA)

^ It is likely that the use of more sensitive Nucleic Acid Amplification Tests (NAATs) has contributed to the increase in gonorrhoea.

\*Data is confidential

Following recent ONS guidance on data disclosure, the rules on publication of STI data with small cell sizes have changed. Cells with a value between 1 and 4 will now be anonymised with an astrix. In addition, where the anonymised cell can be deduced from the totals, the next smallest cells will also be anonymised.

#### Definitions of selected conditions:

Chlamydia	uncomplicated genital chlamydial infection, KC60 code C4a, C4c
Gonorrhoea	uncomplicated gonorrhoea, KC60 code B1, B2
Syphilis	primary and secondary infectious syphilis, KC60 code A1, A2
Herpes	anogenital herpes simplex (first attack), KC60 code C10a
Warts	anogenital warts (first attack), KC60 code C11a

![](_page_26_Picture_0.jpeg)

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