



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive



HPSC

## TRENDS IN SEXUALLY TRANSMITTED INFECTIONS IN IRELAND, 1995 TO 2012

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## Acknowledgements

The Health Protection Surveillance Centre (HPSC) would like to thank all those who provided data for this report, particularly the STI clinics, and the infectious disease surveillance staff within the departments of public health, the laboratories and GP clinics.

Report prepared by Sarah Jackson, Derval Igoe and Kate O'Donnell

## Key Points

- From 1995 to 2012, there has been overall an increasing trend in STI notifications. In 2012 there was a small reduction in numbers. The increasing trend over time may be due to a number of factors: improvements in testing methods, improved access to testing and screening, more comprehensive surveillance, as well as ongoing unsafe sexual behaviours.
- Young people, particularly those in the 20 to 29 year age group are most affected by STIs
  - In 2012, over 70% of all STIs notified were in those aged less than 30 years of age: 59% in the 20-29 year age group, and 11.3% in those aged 19 and under.
- Of particular concern is the increase in gonorrhoea cases since 2010. The notification rate for gonorrhoea in 2012 was 24 per 100,000 population.
  - Those aged 20-29 years were affected most with an age specific notification rate of 94 per 100,000 population.
  - More males were affected than females, with a ratio of 4 to 1.
  - Most cases occurred in the HSE East region (Dublin, Kildare and Wicklow), with the notification rate more than twice the national rate (50 per 100,000 population).
- *Chlamydia trachomatis* is the most frequently notified STI, accounting for 48.4% of notifications in 2012. The numbers of cases and notification rate rose sharply in 2007 and have remained high since then (134 per 100,000 population in 2012).
  - As is the case with gonorrhoea, HSE East (Dublin, Kildare and Wicklow) was affected the most, with a higher notification rate than the national rate (212 v 134 per 100,000 population).
  - In 2012, Chlamydia was more frequently reported among women (53.6%) than men (44.0%), continuing the trend seen in previous years.
- The notification rate for herpes simplex (genital) continues to rise (+5% in 2012); The increase in notifications observed in recent years may be due to improved detection as a result of the introduction of molecular testing which is more sensitive than viral culture.
- This is the last annual report of STIs based on aggregate reporting. In January 2013, case based information was introduced for all notifiable STIs apart from anogenital warts and non specific urethritis. More timely information is now available in weekly reports and six monthly trends published on the HPSC website. The move to case based surveillance will improve the capacity to analyse STI data on a national basis.

## Introduction

Sexually transmitted infections (STIs) are an important public health issue. They can occur silently without symptoms, in many cases. Early detection and treatment of STIs is important in order to prevent complications such as pelvic inflammatory disease, and infertility.

The Health Protection Surveillance Centre (HPSC) is responsible for the ongoing, systematic collection, collation and analysis of national data relating to trends in the notification of STIs in Ireland. This report is a summary of the key findings from the 2012 STI data returns, and a review of trends in aggregate STI data from 1995 to 2012.

## Methods

The surveillance of STIs in Ireland from 1995 to 2012 was based on the aggregation of notifications received from three sources: STI clinics; laboratories (since 2004); and primary care and other clinicians. Notifications were collated by Departments of Public Health and then reported to HPSC on a quarterly basis in aggregate form i.e. numbers of cases by disease, sex and age group, and not as case-based reports. In 2012, data on syphilis was sourced from the Computerised Infectious Disease Reporting system, CIDR.

Data for this report were extracted from the STI database on 5<sup>th</sup> July 2013. At the time of preparing this report, some data were outstanding for 2012, see Appendix A, table 1. From 1995 to 2011, annual figures were updated as late returns were received. Over time the timeliness and completeness of the data reported nationally has varied. However a systematic assessment of completeness of reporting by location over time is not available.

Data on HIV and Hepatitis B are not reported here but further information on these diseases is available on the HPSC website ([www.hpsc.ie](http://www.hpsc.ie)).

Syphilis figures in this report refer to total number of syphilis cases notified to HPSC in 2012, including all stages of infection, but excluding cases with a history of previously treated syphilis with no evidence of recent infection. A separate report on the epidemiology of syphilis in Ireland can be found [here](#).

Throughout this report notification rates have been calculated using data from Census 1996 (notification years 1995-1999), Census 2002 (notification years 2000-2003), Census 2006 (notification years 2004-2008) and Census 2011 (notification years 2009-2012).

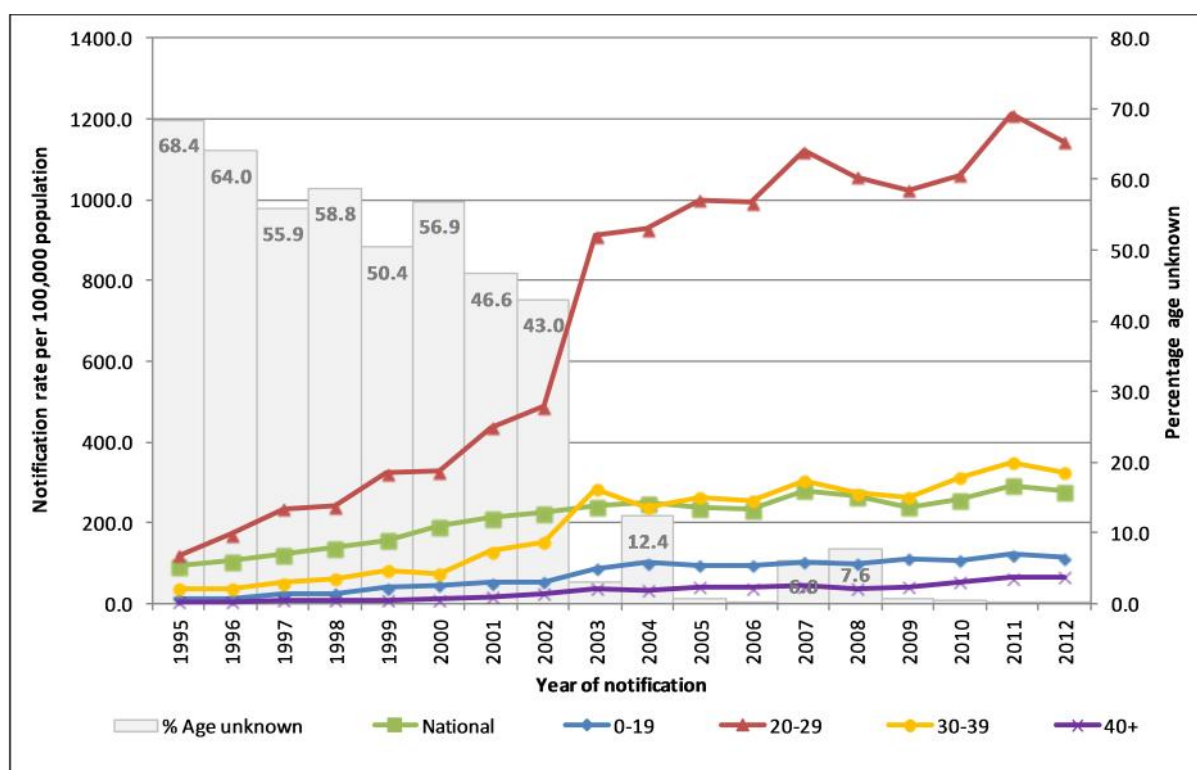
## General Trends

There were 12,719 notifications of STIs in 2012, a decrease of 5.4% compared with 2011 (table 1). There was a 32.9% increase in the number of cases of gonorrhoea between 2011 and 2012. There were reductions in the number of ano-genital warts cases and syphilis cases notified (24% and 20.7% respectively)

**Table 1: Number of notifications and percentage change, 2011-2012**

| Sexually transmitted infection | 2011         | 2012         | % change    |
|--------------------------------|--------------|--------------|-------------|
| Ano-genital warts              | 2605         | 1981         | -24.0       |
| Chancroid                      | 0            | 0            | 0.0         |
| <i>Chlamydia trachomatis</i>   | 6407         | 6162         | -3.8        |
| Gonorrhoea                     | 834          | 1108         | +32.9       |
| Granuloma inguinale            | 0            | 0            | 0.0         |
| Herpes simplex (genital)       | 1263         | 1326         | +5.0        |
| Lymphogranuloma venereum       | 2            | 4            | +100.0      |
| Non-specific urethritis        | 1603         | 1539         | -4.0        |
| Syphilis                       | 653          | 518          | -20.7       |
| Trichomoniasis                 | 75           | 81           | +8.0        |
| <b>Total</b>                   | <b>13442</b> | <b>12719</b> | <b>-5.4</b> |

During 2012, the notification rate for all STIs was 277.2 per 100,000 population (Figure 1). This dropped from a peak rate of 293.0 per 100,000 in 2011 (Table C2 Appendix ).



**Figure 1: Notification rates, age specific notification rates, and percentage of cases where age group data was missing, for all STIs by year, 1995-2012**

Since 2003, when data on the age group of cases became more readily available, those aged 20-29 have been affected the most, followed by those in the 30 to 39 year age group.

Notification rates in each HSE public health area are provided in Table 2; rates in the HSE East (458.2/100,000) and HSE Mid West (318.5/100,000) were higher than the national rate. However, this may be partly a reflection of the areas in which STIs services are located as well as differences in reporting practices by clinics, clinicians and laboratories from one area to another.

**Table 2: STI notification rates (per 100,000 population) by HSE public health area, 2012**

| Sexually transmitted infection | HSE-E        | HSE-M        | HSE-MW       | HSE-NE      | HSE-NW       | HSE-S        | HSE-SE       | HSE-W        | Ireland      |
|--------------------------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Ano-genital warts              | 38.8         | 11.3         | 112.6        | 0.5         | 54.2         | 53.7         | 79.0         | 0.2          | <b>43.2</b>  |
| Chancroid                      | 0.0          | 0.0          | 0.0          | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | <b>0.0</b>   |
| Chlamydia trachomatis          | 212.0        | 72.6         | 142.4        | 63.1        | 96.8         | 28.4         | 142.3        | 125.1        | <b>134.3</b> |
| Herpes simplex (genital)       | 64.4         | 3.5          | 13.2         | 3.6         | 7.7          | 8.4          | 14.9         | 12.8         | <b>28.9</b>  |
| Gonorrhoea                     | 50.4         | 4.2          | 16.6         | 8.4         | 8.9          | 4.4          | 14.1         | 12.8         | <b>24.1</b>  |
| Granuloma inguinale            | 0.0          | 0.0          | 0.0          | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | <b>0.0</b>   |
| Lymphogranuloma venereum       | 0.1          | 0.0          | 0.5          | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | <b>0.1</b>   |
| Non-specific urethritis        | 65.7         | 0.4          | 21.1         | 0.0         | 2.7          | 53.4         | 6.4          | 0.0          | <b>33.5</b>  |
| Syphilis                       | 24.2         | 6.0          | 10.0         | 4.5         | 3.5          | 3.8          | 0.6          | 3.1          | <b>11.3</b>  |
| Trichomoniasis                 | 2.5          | 2.8          | 2.1          | 0.9         | 0.8          | 1.2          | 1.8          | 0.2          | <b>1.8</b>   |
| <b>Total</b>                   | <b>458.2</b> | <b>100.9</b> | <b>318.5</b> | <b>81.0</b> | <b>174.6</b> | <b>153.3</b> | <b>259.1</b> | <b>154.3</b> | <b>277.2</b> |

### **Chlamydia trachomatis infection**

In line with previous years, *Chlamydia trachomatis* was the most frequently notified STI, accounting for 48.4% of notifications in 2012. There were 6,162 *Chlamydia* notifications in 2012, corresponding to a notification rate of 134.3 per 100,000 population which was a slight decrease compared to the rate of 139.6 reported in 2011. Both rates are below the peak rate of 148.4 per 100,000 population recorded in 2008 (figure 2). Where sex was reported, *Chlamydia* was more frequently reported among women (53.6%) than men (44.0%), continuing the trend seen in previous years. *Chlamydia* was most frequently reported in those aged 20-29 years (59.1%); there has been a slight increase in notifications in those aged 30 years and older since 2008.

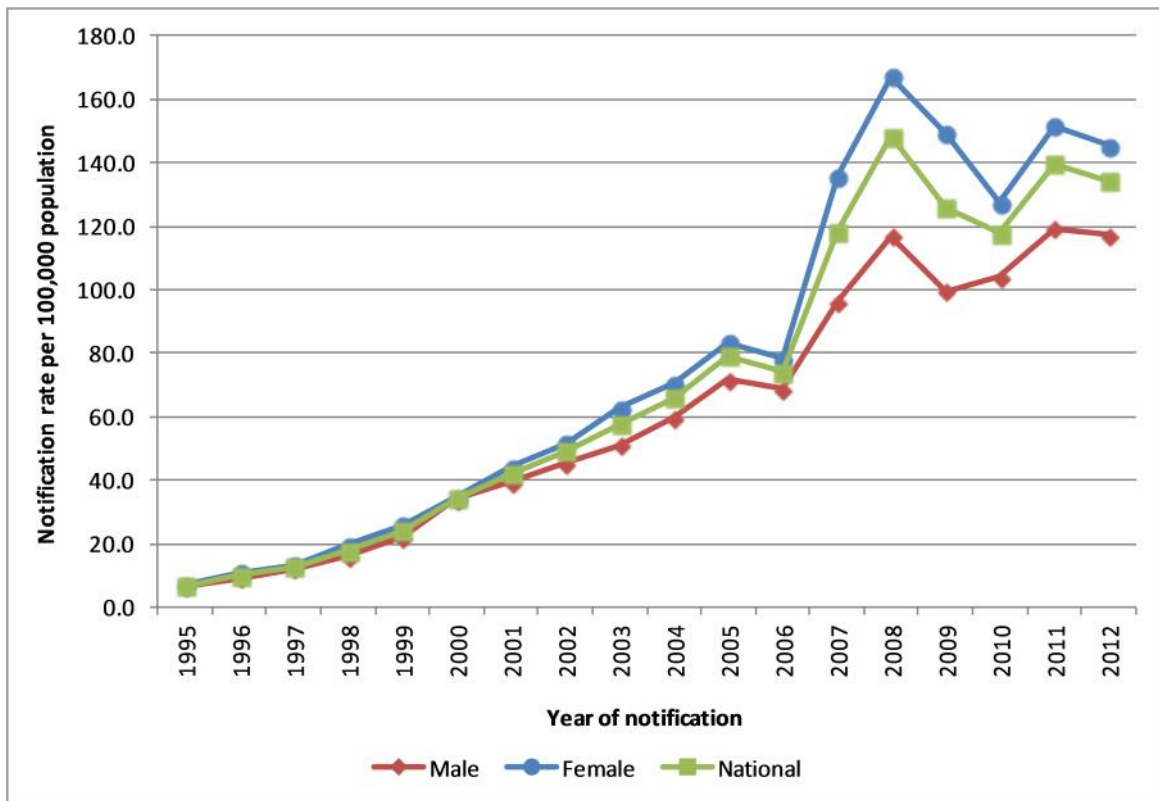


Figure 2: *Chlamydia trachomatis* notification rate by sex, 1995-2012

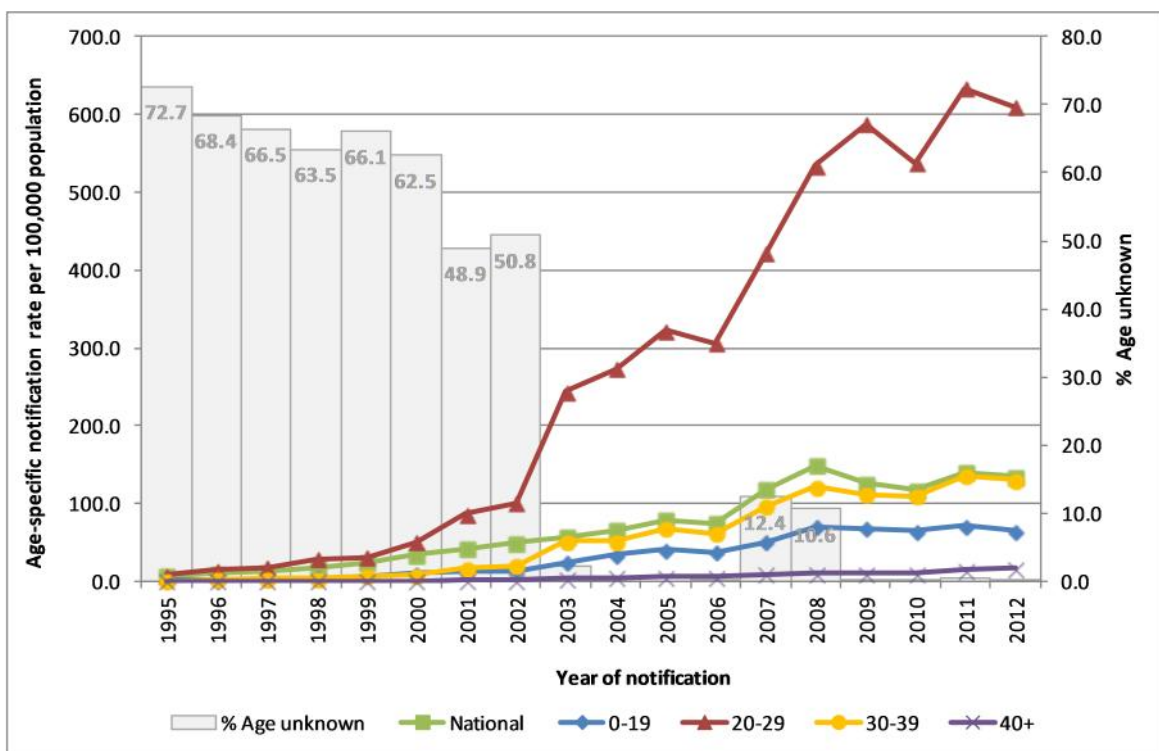


Figure 3: *Chlamydia trachomatis* age specific notification rate and percentage age unknown by year, 1995-2012

## Gonorrhoea

The number of gonorrhoea notifications continued to increase (+32.9%) in 2012. The notification rate is now 24.1 per 100,000 population which is the highest rate ever recorded for gonorrhoea in Ireland (figure 4). This rate is also much higher than the latest data available from Europe; 12.6 per 100,000 population for 28 EU/EEA Member States in 2011<sup>1</sup>. However, there was large variation in the rates across the 28 countries; the rate reported for the United Kingdom was 37.1/100,000, while four countries (Portugal, Poland, Luxembourg and Slovenia) reported rates less than 1.5/100,000. In Ireland, the majority of gonorrhoea notifications continue to be reported in men (n=864; 78.0%). Since 2010, the rate has been increasing more rapidly in men than women. The male-to-female ratio remained stable during 2012 at 3.7:1 compared to 4.1:1 during 2011. In line with previous years, the majority of gonorrhoea notifications in 2012 were reported in those aged 20-29 years (55.6%). During 2012 the age-specific notification rate in the 20-29 year age group increased to 93.6 per 100,000 population, compared to 70.5 during 2011. Rates also increased in the 0-19 and 30-39 year age groups. A recent article on the increasing number of cases of Gonorrhoea in the HSE East and HSE Southeast can be found at <http://www.hpsc.ie/hpsc/EPI-Insight/Volume142013/>.

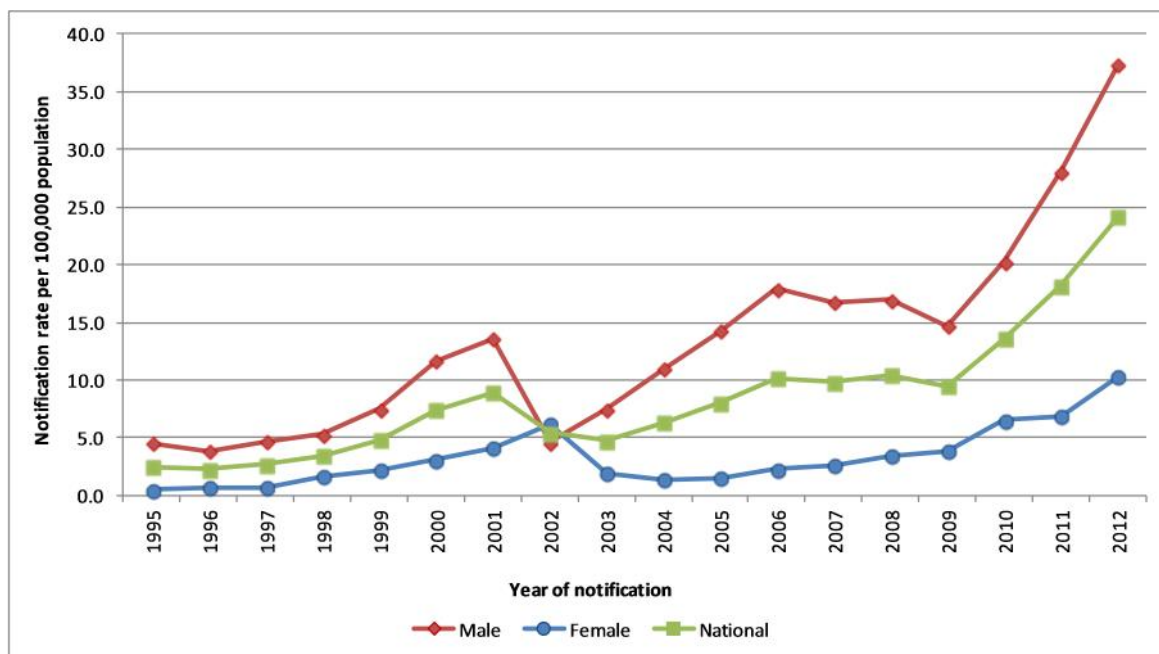


Figure 4: Gonorrhoea notification rates by sex, 1995-2012

The notification rates in each HSE area from 2009 to 2012 are shown in figure 6. The notification rate is highest in the HSE East area and has risen significantly year on year.



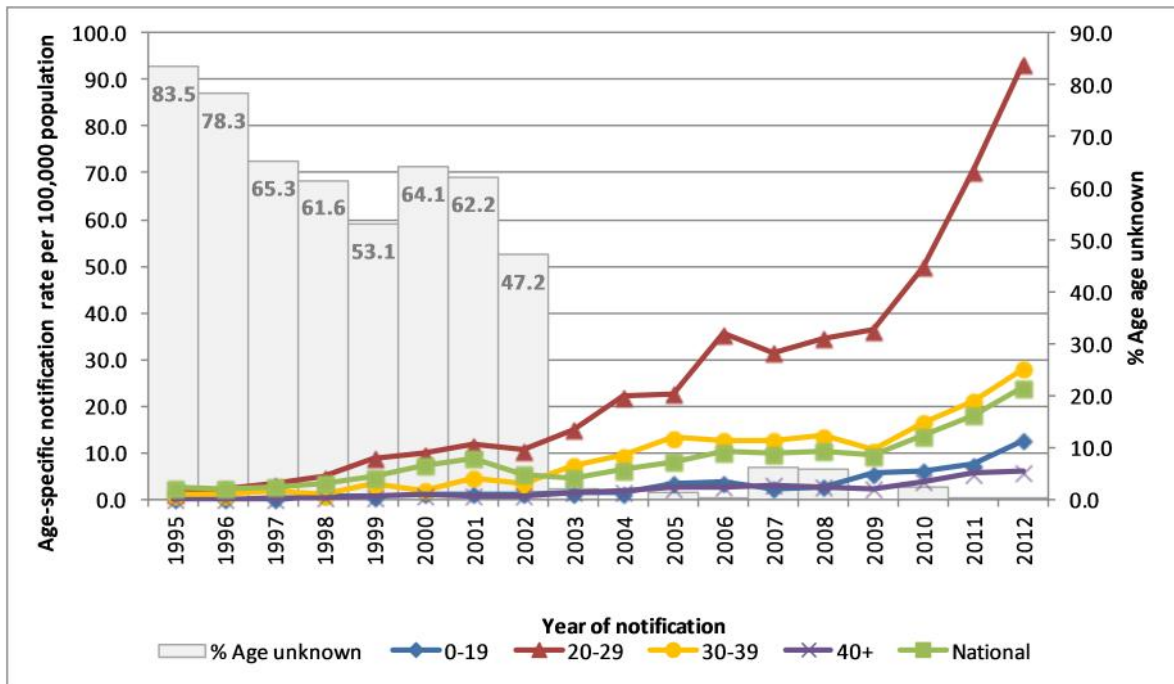


Figure 5: Gonorrhoea age specific notification rate and percentage age group unknown by year, 1995-2012

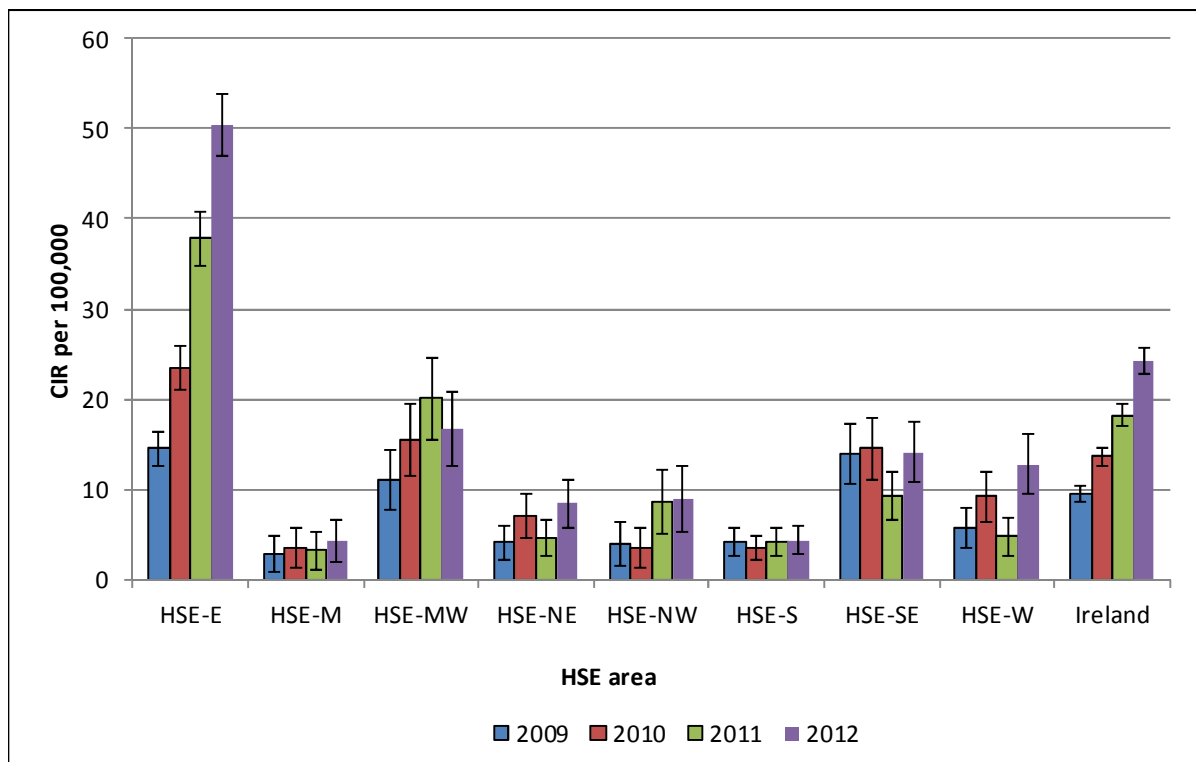


Figure 6: Gonorrhoea crude notification rates by HSE public health area and year with 95% confidence intervals, 2009-2012

### Ano-genital warts

After Chlamydia, ano-genital warts was the second most frequently reported STI in 2012, accounting for 15.6% of all STI notifications. The number of notifications (n=1,981) represents a 24% decrease compared to 2,605 notifications reported in 2011 (table 1). There were more notifications among men (56.6%) and 61.3% of cases were aged 20-29 years.

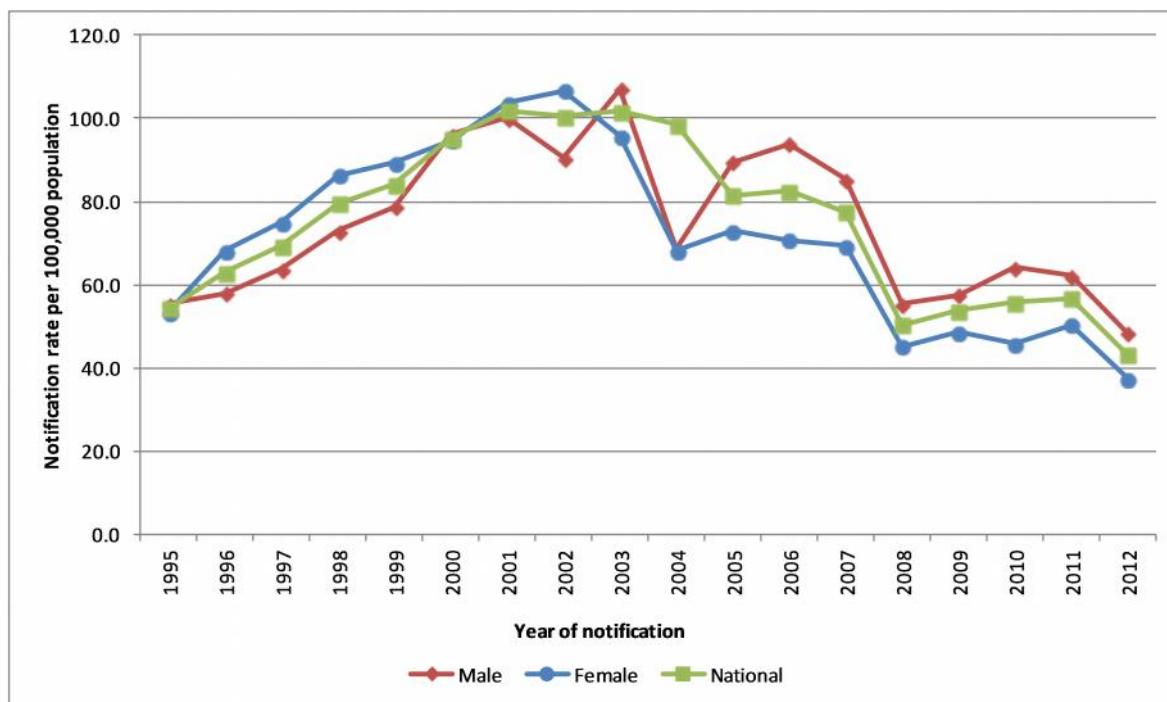


Figure 7: Ano-genital warts notification rates by sex, 1995-2012

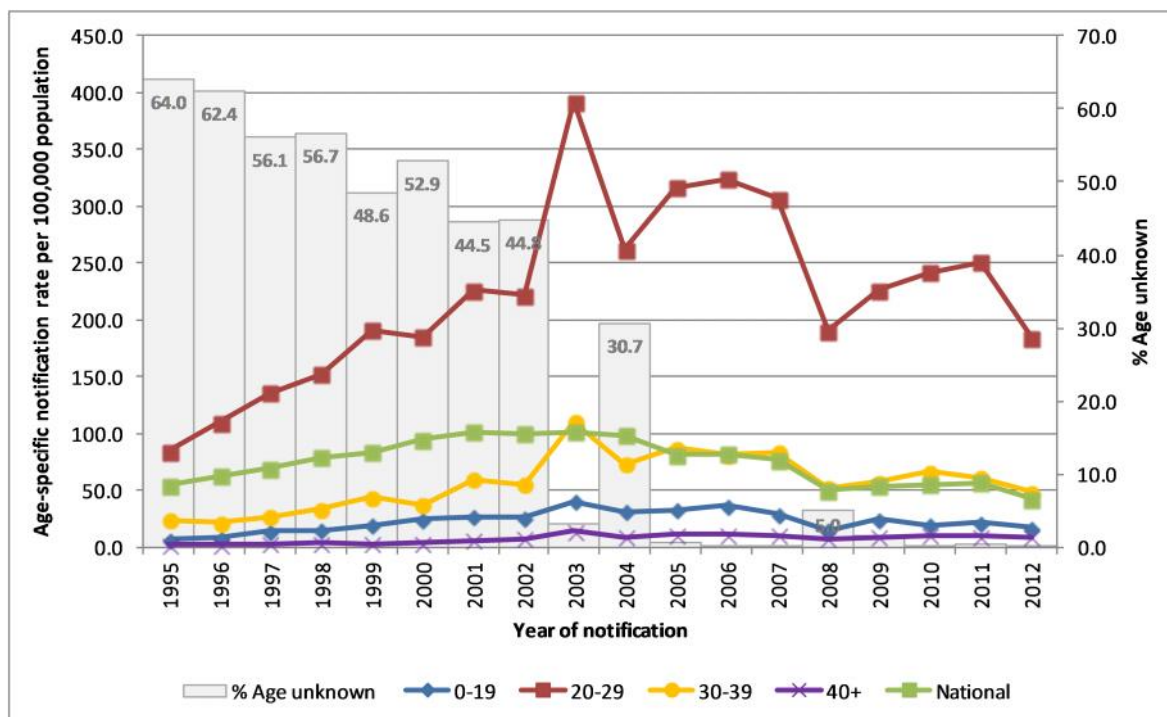


Figure 8: Ano-genital warts age specific notification rates and percentage age unknown by year, 1995-2012

**Herpes simplex (genital)**

Notifications of herpes simplex (genital) increased by 5.0% between 2011 and 2012 (table 1). The notification rate was 28.9 per 100,000, the highest rate recorded for herpes simplex (genital) since it was added to the list of notifiable diseases in 1985 (Table C2). The increase in notifications seen in recent years may be due to improved detection as a result of the introduction of molecular testing which is more sensitive than viral culture. Herpes simplex (genital) was reported among more women (65.3%) than men (32.7%) and was most frequently reported among 20-29 year olds (51.1%).

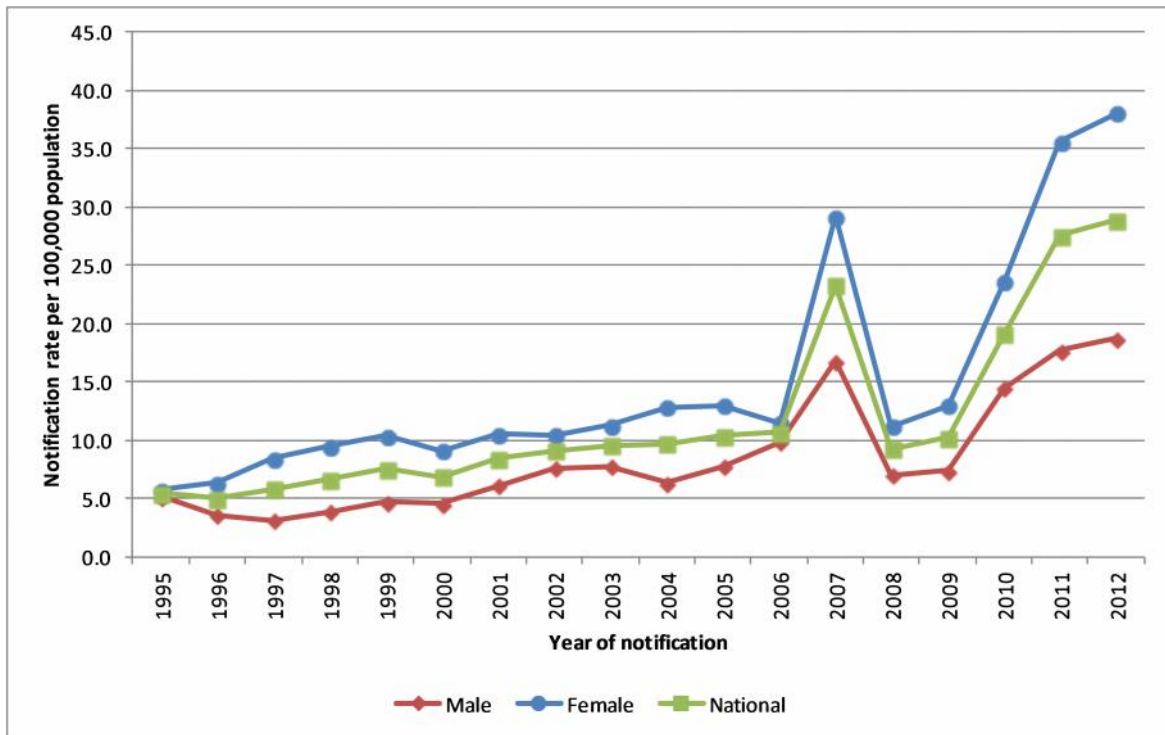


Figure 9: Herpes simplex (genital) notification rates by sex, 1995-2012

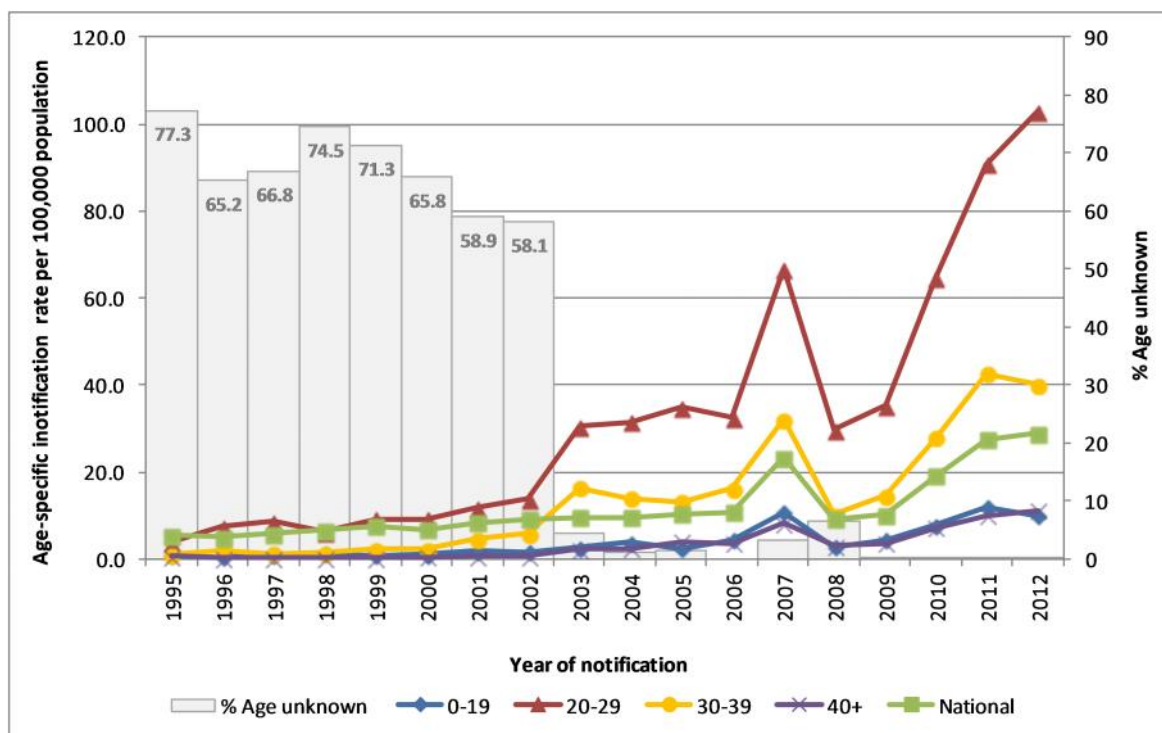


Figure 10: Herpes simplex (genital) age specific notification rates and percentage age unknown by year, 1995-2012

### *Lymphogranuloma venereum (LGV)*

Four cases of LGV were reported in 2012 all in men aged 20-39 years old. Although LGV rarely occurs in Western Europe, outbreaks among MSM have occurred in the United Kingdom and the Netherlands in the past few years.

### Non-specific urethritis

Non-specific urethritis (NSU) notifications decreased by 4% during 2012 (n=1,539) compared to 2011 (n=1,603) (table 1).

### Trichomoniasis

There were 81 cases of trichomoniasis notified in 2012. Where sex was reported, notifications were all female. Trichomoniasis continues to be reported more commonly among older age groups, with just 28.4% of case reported in those aged 20-29 years, while 70.4% of cases were aged 30 years or older.

### References

1. European Centre for Disease Prevention and Control. Sexually transmitted infections in Europe 2011. Stockholm: ECDC; 2013.

## Appendix A: Data collection methods, 2012

### STIs other than syphilis

During 2012, the surveillance of STIs in Ireland was based on the aggregation of notifications received from three sources: STI clinics; laboratories (since 2004); and primary care and other clinicians. Notifications were collated by Departments of Public Health and were then reported to HPSC on a quarterly basis in aggregate form i.e. not as case-based reports. A summary of the sources of notification data in 2012 is given in table A1.

Please note: Data included in this report were extracted from the STI database on the 5<sup>th</sup> July 2013 and were correct at the time of publication. Some data are outstanding (see Table A1).

**Table A1. Summary of aggregate STI data notification sources, 2012 (data received as of 30<sup>th</sup> June 2013)**

| HSE Area   | Q1, 2012 |        |    | Q2, 2012 |        |    | Q3, 2012 |        |    | Q4, 2012 |        |    |
|------------|----------|--------|----|----------|--------|----|----------|--------|----|----------|--------|----|
|            | Lab      | Clinic | PH | Lab      | Clinic | PH | Lab      | Clinic | PH | Lab      | Clinic | PH |
| East       | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  |
| Midlands   | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  |
| Mid West   | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  |
| North East | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  |
| North      |          |        |    |          |        |    |          |        |    |          |        |    |
| West~      | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  |
| South East | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  |
| South*     | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | ✓        | ✓      | ✓  | -        | -      | -  |
| West       | ✓        | -      | ✓  | ✓        | -      | ✓  | ✓        | -      | ✓  | ✓        | -      | ✓  |

✓ = notifications received; Lab = laboratory notifications; Clinic = notifications from one or more of the STI clinics; PH = notifications received by public health from primary care and other clinicians.

~ Does not include notifications from Altnagelvin Hospital, Derry, for patients with an address in Donegal

\*Data for Quarter 4 2012 from HSE South was received in August 2013 and will be included in future reports.

### Syphilis

In 2012, all syphilis cases were reported through the Computerised Infectious Disease Reporting system, CIDR. A separate report on the epidemiology of syphilis can be found at

<http://www.hpsc.ie/hpsc/A-Z/HIVSTIs/SexuallyTransmittedInfections/Syphilis/EpidemiologicalData/AnnualReports/>

## Appendix B: Data Tables

Table B1: Notifications of STIs by year, 1995-2012

| STI                      | 1995        | 1996        | 1997        | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004         | 2005         | 2006        | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Ano-genital warts        | 1972        | 2286        | 2514        | 2886        | 3049        | 3735        | 3993        | 3932        | 3981        | 4174         | 3456         | 3494        | 3283         | 2134         | 2464         | 2556         | 2605         | 1981         |
| Chancroid                | 3           | 1           | 1           |             | 1           | 16          | 1           | 1           | 0           | 1            | 0            | 1           | 1            | 0            | 0            | 0            | 0            | 0            |
| Chlamydia trachomatis    | 245         | 364         | 462         | 646         | 869         | 1343        | 1649        | 1922        | 2258        | 2803         | 3353         | 3144        | 5023         | 6290         | 5781         | 5399         | 6407         | 6162         |
| Gonorrhoea               | 91          | 83          | 98          | 125         | 175         | 290         | 349         | 214         | 186         | 270          | 342          | 431         | 417          | 444          | 434          | 625          | 834          | 1108         |
| Granuloma inguinale      | 0           | 1           | 1           |             | 1           | 0           | 0           | 0           | 0           | 1            | 0            | 0           | 0            | 0            | 0            | 0            | 0            | 0            |
| Herpes simplex (genital) | 198         | 181         | 211         | 243         | 275         | 269         | 331         | 358         | 375         | 411          | 441          | 455         | 988          | 394          | 469          | 877          | 1263         | 1326         |
| Lymphogranuloma venereum | 0           | 0           | 5           | 1           | 2           | 0           | 0           | 1           | 0           | 0            | 1            | 0           | 2            | 0            | 0            | 3            | 2            | 4            |
| Non-specific urethritis  | 781         | 823         | 1034        | 1083        | 1265        | 1726        | 1634        | 2025        | 2332        | 2746         | 2106         | 2161        | 1870         | 1636         | 1209         | 1657         | 1603         | 1539         |
| Syphilis                 | 11          | 17          | 16          | 15          | 6           | 46          | 279         | 303         | 235         | 144          | 282          | 134         | 212          | 312          | 570          | 614          | 653          | 518          |
| Trichomoniasis           | 60          | 71          | 94          | 38          | 47          | 78          | 64          | 73          | 59          | 60           | 83           | 52          | 94           | 70           | 79           | 84           | 75           | 81           |
| <b>Total</b>             | <b>3361</b> | <b>3827</b> | <b>4436</b> | <b>5037</b> | <b>5690</b> | <b>7503</b> | <b>8300</b> | <b>8829</b> | <b>9426</b> | <b>10610</b> | <b>10064</b> | <b>9872</b> | <b>11890</b> | <b>11280</b> | <b>11006</b> | <b>11815</b> | <b>13442</b> | <b>12719</b> |

Table B2: Notification rates of STIs (per 100,000 population) by year, 1995-2012

| STI                      | 1995        | 1996         | 1997         | 1998         | 1999         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         |
|--------------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Ano-genital warts        | 54.4        | 63.0         | 69.3         | 79.6         | 84.1         | 95.3         | 101.9        | 100.4        | 101.6        | 98.4         | 81.5         | 82.4         | 77.4         | 50.3         | 53.7         | 55.7         | 56.8         | 43.2         |
| Chancroid                | 0.1         | 0.0          | 0.0          | 0.0          | 0.0          | 0.4          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          |
| Chlamydia trachomatis    | 6.8         | 10.0         | 12.7         | 17.8         | 24.0         | 34.3         | 42.1         | 49.1         | 57.6         | 66.1         | 79.1         | 74.2         | 118.5        | 148.4        | 126.0        | 117.7        | 139.6        | 134.3        |
| Gonorrhoea               | 2.5         | 2.3          | 2.7          | 3.4          | 4.8          | 7.4          | 8.9          | 5.5          | 4.7          | 6.4          | 8.1          | 10.2         | 9.8          | 10.5         | 9.5          | 13.6         | 18.2         | 24.1         |
| Granuloma inguinale      | 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          |
| Herpes simplex (genital) | 5.5         | 5.0          | 5.8          | 6.7          | 7.6          | 6.9          | 8.4          | 9.1          | 9.6          | 9.7          | 10.4         | 10.7         | 23.3         | 9.3          | 10.2         | 19.1         | 27.5         | 28.9         |
| Lymphogranuloma venereum | 0.0         | 0.0          | 0.1          | 0.0          | 0.1          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.1          | 0.0          | 0.1          |
| Non-specific urethritis  | 21.5        | 22.7         | 28.5         | 29.9         | 34.9         | 44.1         | 41.7         | 51.7         | 59.5         | 64.8         | 49.7         | 51.0         | 44.1         | 38.6         | 26.3         | 36.1         | 34.9         | 33.5         |
| Syphilis                 | 0.3         | 0.5          | 0.4          | 0.4          | 0.2          | 1.2          | 7.1          | 7.7          | 6.0          | 3.4          | 6.7          | 3.2          | 5.0          | 7.4          | 12.4         | 13.4         | 14.2         | 11.3         |
| Trichomoniasis           | 1.7         | 2.0          | 2.6          | 1.0          | 1.3          | 2.0          | 1.6          | 1.9          | 1.5          | 1.4          | 2.0          | 1.2          | 2.2          | 1.7          | 1.7          | 1.8          | 1.6          | 1.8          |
| <b>Total</b>             | <b>92.7</b> | <b>105.5</b> | <b>122.3</b> | <b>138.9</b> | <b>156.9</b> | <b>191.5</b> | <b>211.9</b> | <b>225.4</b> | <b>240.6</b> | <b>250.2</b> | <b>237.4</b> | <b>232.8</b> | <b>280.4</b> | <b>266.0</b> | <b>239.9</b> | <b>257.5</b> | <b>293.0</b> | <b>277.2</b> |

**Table B3: Notifications of STIs by HSE public health area, 2012**

| STI                      | HSE-E       | HSE-M      | HSE-MW      | HSE-NE     | HSE-NW     | HSE-S       | HSE-SE      | HSE-W      | Ireland      |
|--------------------------|-------------|------------|-------------|------------|------------|-------------|-------------|------------|--------------|
| Ano-genital warts        | 629         | 32         | 427         | 2          | 140        | 357         | 393         | 1          | <b>1981</b>  |
| Chancroid                | 0           | 0          | 0           | 0          | 0          | 0           | 0           | 0          | <b>0</b>     |
| Chlamydia trachomatis    | 3435        | 205        | 540         | 278        | 250        | 189         | 708         | 557        | <b>6162</b>  |
| Herpes simplex (genital) | 1043        | 10         | 50          | 16         | 20         | 56          | 74          | 57         | <b>1326</b>  |
| Gonorrhoea               | 817         | 12         | 63          | 37         | 23         | 29          | 70          | 57         | <b>1108</b>  |
| Granuloma inguinale      | 0           | 0          | 0           | 0          | 0          | 0           | 0           | 0          | <b>0</b>     |
| Lymphogranuloma venereum | 2           | 0          | 2           | 0          | 0          | 0           | 0           | 0          | <b>4</b>     |
| Non-specific urethritis  | 1064        | 1          | 80          | 0          | 7          | 355         | 32          | 0          | <b>1539</b>  |
| Syphilis                 | 392         | 17         | 38          | 20         | 9          | 25          | 3           | 14         | <b>518</b>   |
| Trichomoniasis           | 41          | 8          | 8           | 4          | 2          | 8           | 9           | 1          | <b>81</b>    |
| <b>Total</b>             | <b>7423</b> | <b>285</b> | <b>1208</b> | <b>357</b> | <b>451</b> | <b>1019</b> | <b>1289</b> | <b>687</b> | <b>12719</b> |

**Table B4: Notification rates (per 100,000 population) of STIs by HSE public health area, 2012**

| STI                      | HSE-E        | HSE-M        | HSE-MW       | HSE-NE      | HSE-NW       | HSE-S        | HSE-SE       | HSE-W        | Ireland      |
|--------------------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Ano-genital warts        | 38.8         | 11.3         | 112.6        | 0.5         | 54.2         | 53.7         | 79.0         | 0.2          | <b>43.2</b>  |
| Chancroid                | 0.0          | 0.0          | 0.0          | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | <b>0.0</b>   |
| Chlamydia trachomatis    | 212.0        | 72.6         | 142.4        | 63.1        | 96.8         | 28.4         | 142.3        | 125.1        | <b>134.3</b> |
| Herpes simplex (genital) | 64.4         | 3.5          | 13.2         | 3.6         | 7.7          | 8.4          | 14.9         | 12.8         | <b>28.9</b>  |
| Gonorrhoea               | 50.4         | 4.2          | 16.6         | 8.4         | 8.9          | 4.4          | 14.1         | 12.8         | <b>24.1</b>  |
| Granuloma inguinale      | 0.0          | 0.0          | 0.0          | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | <b>0.0</b>   |
| Lymphogranuloma venereum | 0.1          | 0.0          | 0.5          | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | <b>0.1</b>   |
| Non-specific urethritis  | 65.7         | 0.4          | 21.1         | 0.0         | 2.7          | 53.4         | 6.4          | 0.0          | <b>33.5</b>  |
| Syphilis                 | 24.2         | 6.0          | 10.0         | 4.5         | 3.5          | 3.8          | 0.6          | 3.1          | <b>11.3</b>  |
| Trichomoniasis           | 2.5          | 2.8          | 2.1          | 0.9         | 0.8          | 1.2          | 1.8          | 0.2          | <b>1.8</b>   |
| <b>Total</b>             | <b>458.2</b> | <b>100.9</b> | <b>318.5</b> | <b>81.0</b> | <b>174.6</b> | <b>153.3</b> | <b>259.1</b> | <b>154.3</b> | <b>277.2</b> |

Table B5: Notifications of STIs by sex and age group, 2012

| STI                      | Sex         |             |            | Age group   |             |             |             |           | Total        |
|--------------------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-----------|--------------|
|                          | Male        | Female      | Unknown    | 0-19        | 20-29       | 30-39       | 40+         | Unknown   |              |
| Ano-genital warts        | 1122        | 850         | 9          | 217         | 1215        | 372         | 174         | 3         | 1981         |
| Chancroid                | 0           | 0           | 0          | 0           | 0           | 0           | 0           | 0         | 0            |
| Chlamydia trachomatis    | 2712        | 3300        | 150        | 812         | 4012        | 987         | 330         | 21        | 6162         |
| Gonorrhoea               | 864         | 234         | 10         | 162         | 616         | 213         | 115         | 2         | 1108         |
| Granuloma inguinale      | 0           | 0           | 0          | 0           | 0           | 0           | 0           | 0         | 0            |
| Herpes simplex (genital) | 434         | 866         | 26         | 127         | 678         | 303         | 215         | 3         | 1326         |
| Lymphogranuloma venereum | 4           | 0           | 0          | 0           | 1           | 3           | 0           | 0         | 4            |
| Non-specific urethritis  | 1535        | 4           | 0          | 116         | 863         | 372         | 181         | 7         | 1539         |
| Syphilis                 | 399         | 106         | 13         | 6           | 115         | 185         | 209         | 3         | 518          |
| Trichomoniasis           | 0           | 80          | 1          | 1           | 23          | 27          | 30          | 0         | 81           |
| <b>Total</b>             | <b>7070</b> | <b>5440</b> | <b>209</b> | <b>1441</b> | <b>7523</b> | <b>2462</b> | <b>1254</b> | <b>39</b> | <b>12719</b> |
| % of all STIs            | 55.6        | 42.8        | 1.6        | 11.3        | 59.1        | 19.4        | 9.9         | 0.3       |              |

Table B6: *C. trachomatis* infection notifications by age group, sex and HSE public health area, 2012

| HSE area     | Sex         |             |            | Age group  |             |            |            |           | Total       |
|--------------|-------------|-------------|------------|------------|-------------|------------|------------|-----------|-------------|
|              | Male        | Female      | Unknown    | 0-19       | 20-29       | 30-39      | 40+        | Unknown   |             |
| HSE-E        | 1574        | 1752        | 109        | 407        | 2192        | 613        | 214        | 9         | 3435        |
| HSE-M        | 77          | 127         | 1          | 24         | 142         | 28         | 10         | 1         | 205         |
| HSE-MW       | 256         | 283         | 1          | 76         | 348         | 84         | 32         | 0         | 540         |
| HSE-NE       | 105         | 141         | 32         | 52         | 168         | 44         | 10         | 4         | 278         |
| HSE-NW       | 92          | 158         | 0          | 44         | 166         | 31         | 6          | 3         | 250         |
| HSE-S        | 92          | 97          | 0          | 13         | 146         | 23         | 7          | 0         | 189         |
| HSE-SE       | 272         | 430         | 6          | 124        | 461         | 91         | 28         | 4         | 708         |
| HSE-W        | 244         | 312         | 1          | 72         | 389         | 73         | 23         | 0         | 557         |
| <b>Total</b> | <b>2712</b> | <b>3300</b> | <b>150</b> | <b>812</b> | <b>4012</b> | <b>987</b> | <b>330</b> | <b>21</b> | <b>6162</b> |



**Table B7: Gonorrhoea infection notifications by age group, sex and HSE public health area, 2012**

| HSE area     | Sex        |            |           | Age group  |            |            |            |          | Total       |
|--------------|------------|------------|-----------|------------|------------|------------|------------|----------|-------------|
|              | Male       | Female     | Unknown   | 0-19       | 20-29      | 30-39      | 40+        | Unknown  |             |
| HSE - E      | 654        | 155        | 8         | 94         | 445        | 178        | 98         | 2        | <b>817</b>  |
| HSE - M      | 9          | 3          | 0         | 4          | 6          | 1          | 1          | 0        | <b>12</b>   |
| HSE - MW     | 40         | 23         | 0         | 18         | 35         | 6          | 4          | 0        | <b>63</b>   |
| HSE - NE     | 22         | 13         | 2         | 6          | 20         | 7          | 4          | 0        | <b>37</b>   |
| HSE - NW     | 14         | 9          | 0         | 7          | 9          | 5          | 2          | 0        | <b>23</b>   |
| HSE - S      | 27         | 2          | 0         | 0          | 25         | 2          | 2          | 0        | <b>29</b>   |
| HSE - SE     | 54         | 16         | 0         | 22         | 39         | 9          | 0          | 0        | <b>70</b>   |
| HSE - W      | 44         | 13         | 0         | 11         | 37         | 5          | 4          | 0        | <b>57</b>   |
| <b>Total</b> | <b>864</b> | <b>234</b> | <b>10</b> | <b>162</b> | <b>616</b> | <b>213</b> | <b>115</b> | <b>2</b> | <b>1108</b> |

**Table B8: Ano-genital warts notifications by age group, sex and HSE public health area, 2012**

| HSE area     | Sex         |            |          | Age group  |             |            |            |          | Total       |
|--------------|-------------|------------|----------|------------|-------------|------------|------------|----------|-------------|
|              | Male        | Female     | Unknown  | 0-19       | 20-29       | 30-39      | 40+        | Unknown  |             |
| HSE - E      | 355         | 271        | 3        | 75         | 369         | 132        | 53         | 0        | <b>629</b>  |
| HSE - M      | 15          | 17         | 0        | 4          | 23          | 5          | 0          | 0        | <b>32</b>   |
| HSE - MW     | 261         | 166        | 0        | 47         | 269         | 73         | 38         | 0        | <b>427</b>  |
| HSE - NE     | 0           | 2          | 0        | 1          | 1           | 0          | 0          | 0        | <b>2</b>    |
| HSE - NW     | 76          | 58         | 6        | 29         | 68          | 26         | 16         | 1        | <b>140</b>  |
| HSE - S      | 196         | 161        | 0        | 24         | 249         | 56         | 26         | 2        | <b>357</b>  |
| HSE - SE     | 219         | 174        | 0        | 37         | 236         | 80         | 40         | 0        | <b>393</b>  |
| HSE - W      | 0           | 1          | 0        | 0          | 0           | 0          | 1          | 0        | <b>1</b>    |
| <b>Total</b> | <b>1122</b> | <b>850</b> | <b>9</b> | <b>217</b> | <b>1215</b> | <b>372</b> | <b>174</b> | <b>3</b> | <b>1981</b> |

**Table B9: Herpes simplex (genital) notifications by age group, sex and HSE public health area, 2012**

| HSE area     | Sex        |            |           | Age group  |            |            |            |          | Total       |
|--------------|------------|------------|-----------|------------|------------|------------|------------|----------|-------------|
|              | Male       | Female     | Unknown   | 0-19       | 20-29      | 30-39      | 40+        | Unknown  |             |
| HSE- E       | 359        | 665        | 19        | 89         | 532        | 240        | 180        | 2        | 1043        |
| HSE- M       | 4          | 6          | 0         | 5          | 3          | 2          | 0          | 0        | 10          |
| HSE- MW      | 13         | 37         | 0         | 6          | 30         | 9          | 5          | 0        | 50          |
| HSE- NE      | 3          | 8          | 5         | 3          | 5          | 5          | 3          | 0        | 16          |
| HSE- NW      | 4          | 16         | 0         | 2          | 14         | 2          | 2          | 0        | 20          |
| HSE- S       | 15         | 41         | 0         | 4          | 30         | 17         | 4          | 1        | 56          |
| HSE- SE      | 22         | 52         | 0         | 15         | 29         | 15         | 15         | 0        | 74          |
| HSE- W       | 14         | 41         | 2         | 3          | 35         | 13         | 6          | 0        | 57          |
| <b>Total</b> | <b>434</b> | <b>866</b> | <b>26</b> | <b>127</b> | <b>678</b> | <b>303</b> | <b>215</b> | <b>3</b> | <b>1326</b> |

**Table B10: Non-specific urethritis notifications by age group, sex and HSE public health area, 2012**

| HSE area     | Sex         |          |          | Age group  |            |            |            |          | Total       |
|--------------|-------------|----------|----------|------------|------------|------------|------------|----------|-------------|
|              | Male        | Female   | Unknown  | 0-19       | 20-29      | 30-39      | 40+        | Unknown  |             |
| HSE - E      | 1063        | 1        | 0        | 85         | 600        | 242        | 136        | 1        | 1064        |
| HSE - M      | 1           | 0        | 0        | 0          | 0          | 1          | 0          | 0        | 1           |
| HSE - MW     | 77          | 3        | 0        | 8          | 47         | 22         | 3          | 0        | 80          |
| HSE - NE     | 0           | 0        | 0        | 0          | 0          | 0          | 0          | 0        | 0           |
| HSE - NW     | 7           | 0        | 0        | 0          | 5          | 1          | 1          | 0        | 7           |
| HSE - S      | 355         | 0        | 0        | 22         | 192        | 99         | 37         | 5        | 355         |
| HSE - SE     | 32          | 0        | 0        | 1          | 19         | 7          | 4          | 1        | 32          |
| HSE - W      | 0           | 0        | 0        | 0          | 0          | 0          | 0          | 0        | 0           |
| <b>Total</b> | <b>1535</b> | <b>4</b> | <b>0</b> | <b>116</b> | <b>863</b> | <b>372</b> | <b>181</b> | <b>7</b> | <b>1539</b> |