



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



HPSC

SEXUALLY TRANSMITTED INFECTIONS IN IRELAND, 2010

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Acknowledgements

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Key Points

- There were 12,162 notifications of sexually transmitted infections (STIs) in 2010, an increase of 10.4% compared with 2009.
- The crude incidence rate (CIR) for all STI notifications in 2010, was 265.1 per 100,000 population.
- Chlamydia was the most common STI in Ireland in 2010, accounting for 45.0% of all STI notifications. The CIR of Chlamydia in 2010 was 119.2 per 100,000 population.
- The STI with the largest increase in the number of notifications in 2010 was herpes simplex (genital) (+91.0%). The rate in 2010 almost doubled from 10.2 per 100,000 population in 2009, to 19.5 per 100,000 population. This was due to retrospective reporting by one laboratory.
- There were more notifications of STIs among men (56.5%) than women (42.3%).
- Almost three-quarters (70.5%) of all STI notifications were among those aged less than 30 years.
- Syphilis and trichomoniasis were notified more frequently in older age groups; 33.3% of notifications of trichomoniasis were in those aged 40 years or older and 40.0% of syphilis notifications were in people aged 30-39 years.
- Notifications of ano-genital warts continued to increase in 2010 (+9.4%). Data are outstanding from one STI clinic so the true figure is likely to be higher.
- The proportion of gonorrhoea notifications among women continued to increase in 2010, to 23.7% compared with 20.3% in 2009, and 16.4% in 2008.
- Three cases of LGV were reported in 2010, the first cases reported since 2007 (n=2).

Introduction

Sexually transmitted infections (STIs) give rise to illness, infertility and death. Early detection and treatment of STIs is important in order to protect the health of the population. The Health Protection Surveillance Centre (HPSC) is responsible for the ongoing, systematic collection, collation and analysis of data relating to trends in the notification of STIs in Ireland. This report is a summary of the key findings from the 2010 STI data returns.

Methods

The surveillance of STIs in Ireland is based on the aggregation of notifications received from three sources: STI clinics; laboratories (since 2004); and primary care and other clinicians. Notifications are collated by Departments of Public Health and are then reported to HPSC on a quarterly basis in aggregate form i.e. not as case-based reports. Because of delays in STI notification, annual data are not available in a timely manner. Data from a number of sources are outstanding for 2010 and so the data included in this report are incomplete. A summary of the sources of notification data in 2010 is given in appendix A.

Results

There were 12,162 notifications of STIs in 2010. This is an increase of 10.4% when compared with 2009 (11,015 notifications, table 1). Between 2009 and 2010, notifications of all STIs increased, except infectious hepatitis B and *C. trachomatis* infection (table 1). *Chlamydia trachomatis* infection was the most frequently reported STI, accounting for 45.0% of all notifications, followed by ano-genital warts (22.2%), and non-specific urethritis (14.3%; table 2).

Table 1. Number and percentage change in STI notifications by disease, 2009-2010

| Sexually transmitted infection | 2010 | 2009 | % Change |
|--|--------------|--------------|--------------|
| Ano-genital warts | 2696 | 2464 | +9.4 |
| Chancroid | 0 | 0 | - |
| <i>Chlamydia trachomatis</i> infection | 5470 | 5781 | -5.4 |
| Gonorrhoea | 636 | 434 | +46.5 |
| Granuloma inguinale | 0 | 0 | - |
| Herpes simplex (genital) | 896 | 469 | +91.0 |
| Infectious hepatitis B | 9 | 9 | 0.0 |
| Lymphogranuloma venereum | 3 | 0 | +300.0 |
| Non-specific urethritis | 1742 | 1209 | +44.1 |
| Syphilis | 623 | 570 | +9.3 |
| Trichomoniasis | 87 | 79 | +10.1 |
| Total | 12162 | 11015 | +10.4 |

During 2010, the crude incidence rate (CIR) for all STI notifications was 265.1 per 100,000 population. The rates in the HSE Mid West (422.1/100,000), HSE East (375.0/100,000), and HSE South East (266.7/100,000) were all greater than the national rate (257.7/100,000; table 3). However, this is likely to be 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.

Males accounted for 56.5% of all notifications and females for 42.3% (table 4). The number of notifications was greater among men than women for non-specific urethritis (91.0%), syphilis (72.4%), gonorrhoea (75.2%), hepatitis B (66.7%) and ano-genital warts (57.5%). However, trichomoniasis, herpes simplex and *C. trachomatis* infection were reported more frequently among women than men (89.7%, 61.5% and 53.6% respectively). All three cases of lymphogranuloma reported in 2010 were in men.

More than half (59.2%) of notifications were among those aged 20 to 29 years (table 5). This age group accounted for the majority of notifications for each STI, except syphilis and trichomoniasis. Syphilis and trichomoniasis were notified more frequently in older age groups; 33.3% of notifications of trichomoniasis were in those aged 40 years or older and 40.0% of syphilis notifications were in people aged 30-39 years.

Table 2. Number and per cent of STI notifications by disease and HSE area, 2010

| Sexually transmitted infection | East | Midlands | Mid West | North East | North West | South East | South | West | Total | % of total STI notifications |
|--|-------------|------------|-------------|------------|------------|-------------|-------------|------------|--------------|------------------------------|
| Ano-genital warts | 794 | 31 | 602 | 0 | 256 | 412 | 564 | 37 | 2696 | 22.2 |
| Chancroid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| <i>Chlamydia trachomatis</i> infection | 2789 | 179 | 548 | 285 | 149 | 711 | 302 | 507 | 5470 | 45.0 |
| Gonorrhoea | 380 | 10 | 59 | 31 | 9 | 72 | 34 | 41 | 636 | 5.2 |
| Granuloma inguinale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Herpes simplex (genital) | 646 | 5 | 38 | 3 | 19 | 53 | 74 | 58 | 896 | 7.4 |
| Infectious hepatitis B | 0 | 0 | 1 | 0 | 2 | 0 | 6 | 0 | 9 | 0.1 |
| Lymphogranuloma venereum | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0.0 |
| Non-specific urethritis | 977 | 0 | 292 | 0 | 115 | 29 | 320 | 9 | 1742 | 14.3 |
| Syphilis | 454 | 18 | 43 | 3 | 1 | 39 | 31 | 34 | 623 | 5.1 |
| Trichomoniasis | 33 | 8 | 18 | 6 | 0 | 10 | 11 | 1 | 87 | 0.7 |
| Total | 6075 | 251 | 1601 | 328 | 551 | 1327 | 1342 | 687 | 12162 | - |

Table 3. Crude incidence rate per 100,000 population* by disease and HSE area, 2010

| Sexually transmitted infection | East | Midlands | Mid West | North East | North West | South East | South | West | Ireland |
|--|--------------|-------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Ano-genital warts | 49.0 | 11.0 | 158.7 | 0.0 | 99.1 | 82.8 | 84.9 | 8.3 | 58.8 |
| Chancroid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| <i>Chlamydia trachomatis</i> infection | 172.2 | 63.4 | 144.5 | 64.7 | 57.7 | 142.9 | 45.4 | 113.8 | 119.2 |
| Gonorrhoea | 23.5 | 3.5 | 15.6 | 7.0 | 3.5 | 14.5 | 5.1 | 9.2 | 13.9 |
| Granuloma inguinale | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Herpes simplex (genital) | 39.9 | 1.8 | 10.0 | 0.7 | 7.4 | 10.7 | 11.1 | 13.0 | 19.5 |
| Infectious hepatitis B | 0.0 | 0.0 | 0.3 | 0.0 | 0.8 | 0.0 | 0.9 | 0.0 | 0.2 |
| Lymphogranuloma venereum | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 |
| Non-specific urethritis | 60.3 | 0.0 | 77.0 | 0.0 | 44.5 | 5.8 | 48.2 | 2.0 | 38.0 |
| Syphilis | 28.0 | 6.4 | 11.3 | 0.7 | 0.4 | 7.8 | 4.7 | 7.6 | 13.6 |
| Trichomoniasis | 2.0 | 2.8 | 4.7 | 1.4 | 0.0 | 2.0 | 1.7 | 0.2 | 1.9 |
| All STIs | 375.0 | 88.9 | 422.1 | 74.4 | 213.3 | 266.7 | 201.9 | 154.3 | 265.1 |

*Denominator population used is Census 2011

Table 4. Number and per cent of STI notifications by disease and gender, 2010

| Sexually transmitted infection | Male | Female | Unknown | Total |
|--|-------------|-------------|------------|--------------|
| Ano-genital warts | 1551 | 1112 | 33 | 2696 |
| Chancroid | 0 | 0 | 0 | 0 |
| <i>Chlamydia trachomatis</i> infection | 2445 | 2930 | 95 | 5470 |
| Gonorrhoea | 478 | 151 | 7 | 636 |
| Granuloma inguinale | 0 | 0 | 0 | 0 |
| Herpes simplex (genital) | 339 | 551 | 6 | 896 |
| Infectious hepatitis B | 6 | 3 | 0 | 9 |
| Lymphogranuloma venereum | 3 | 0 | 0 | 3 |
| Non-specific urethritis | 1586 | 156 | 0 | 1742 |
| Syphilis | 451 | 165 | 7 | 623 |
| Trichomoniasis | 7 | 78 | 2 | 87 |
| Total | 6866 | 5146 | 150 | 12162 |
| % of Total STIs | 56.5 | 42.3 | 1.2 | - |

Table 5. Number and per cent of STI notifications by disease and age group, 2010

| Sexually transmitted infection | 0-19 yrs | 20-29 yrs | 30-39 yrs | 40+ yrs | Unknown | Total |
|--|-------------|--------------|--------------|-------------|------------|--------------|
| Ano-genital warts | 262 | 1683 | 531 | 213 | 7 | 2696 |
| Chancroid | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Chlamydia trachomatis</i> infection | 817 | 3589 | 844 | 203 | 17 | 5470 |
| Gonorrhoea | 78 | 335 | 129 | 78 | 16 | 636 |
| Granuloma inguinale | 0 | 0 | 0 | 0 | 0 | 0 |
| Herpes simplex (genital) | 103 | 435 | 216 | 141 | 1 | 896 |
| Infectious hepatitis B | 0 | 5 | 2 | 2 | 0 | 9 |
| Lymphogranuloma venereum | 0 | 1 | 1 | 1 | 0 | 3 |
| Non-specific urethritis | 107 | 959 | 450 | 220 | 6 | 1742 |
| Syphilis | 7 | 169 | 249 | 196 | 2 | 623 |
| Trichomoniasis | 5 | 27 | 25 | 29 | 1 | 87 |
| Total | 1379 | 7203 | 2447 | 1083 | 50 | 12162 |
| % of Total STIs | 11.3 | 59.2 | 20.1 | 8.9 | 0.4 | - |

Table 6. Number STI notifications by disease and year, 1995-2010

| Sexually transmitted infection | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|
| Ano-genital warts | 1972 | 2286 | 2514 | 2886 | 3049 | 3735 | 3993 | 3932 | 3981 | 4174 | 3456 | 3494 | 3283 | 2134 | 2464 | 2696 |
| Chancroid | 3 | 1 | 1 | 0 | 1 | 16 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| <i>Chlamydia trachomatis</i> infection | 245 | 364 | 462 | 646 | 869 | 1343 | 1649 | 1922 | 2258 | 2803 | 3353 | 3144 | 5023 | 6290 | 5781 | 5470 |
| Gonorrhoea | 91 | 83 | 98 | 125 | 175 | 290 | 349 | 214 | 186 | 270 | 342 | 431 | 417 | 444 | 434 | 636 |
| Granuloma inguinale | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Herpes simplex (genital) | 198 | 181 | 211 | 243 | 275 | 269 | 331 | 358 | 375 | 411 | 441 | 455 | 988 | 394 | 469 | 896 |
| Infectious hepatitis B | 4 | 2 | 0 | 0 | 2 | 15 | 39 | 57 | 112 | 85 | 80 | 20 | 25 | 14 | 9 | 9 |
| Lymphogranuloma venereum | 0 | 0 | 5 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 3 |
| Non-specific urethritis | 781 | 823 | 1034 | 1083 | 1265 | 1726 | 1634 | 2025 | 2332 | 2746 | 2106 | 2161 | 1870 | 1636 | 1209 | 1742 |
| Syphilis | 11 | 17 | 16 | 15 | 6 | 46 | 279 | 303 | 235 | 144 | 282 | 134 | 212 | 312 | 570 | 623 |
| Trichomoniasis | 60 | 71 | 94 | 38 | 47 | 78 | 64 | 73 | 59 | 60 | 83 | 52 | 94 | 70 | 79 | 87 |
| Total | 3365 | 3829 | 4436 | 5037 | 5692 | 7518 | 8339 | 8886 | 9538 | 10695 | 10144 | 9892 | 11915 | 11294 | 11015 | 12162 |

Table 7. Crude incidence rate* per 100,000 population by disease and year, 1995-2010

| Sexually transmitted infection | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 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 | 58.8 |
| 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 |
| <i>Chlamydia trachomatis</i> infection | 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 | 119.2 |
| 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 | 13.9 |
| 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 |
| 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 | 19.5 |
| Infectious hepatitis B | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 | 1.0 | 1.5 | 2.9 | 2.0 | 1.9 | 0.5 | 0.6 | 0.3 | 0.2 | 0.2 |
| 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 |
| 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 | 38.0 |
| 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 | 13.6 |
| 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 | 1.9 |
| All STIs | 92.8 | 105.6 | 122.3 | 138.9 | 157.0 | 191.9 | 212.9 | 226.8 | 243.5 | 252.2 | 239.3 | 233.3 | 281.0 | 266.4 | 240.1 | 265.1 |

*CIR calculated using data from Census 1996 (1995-1999), Census 2002 (2000-2003), Census 2006 (2004-2008) and Census 2011 (2009-2010)

Figure 1. Crude incidence rate* of sexually transmitted infections (>1,000 notifications per year) by year, 1995-2011

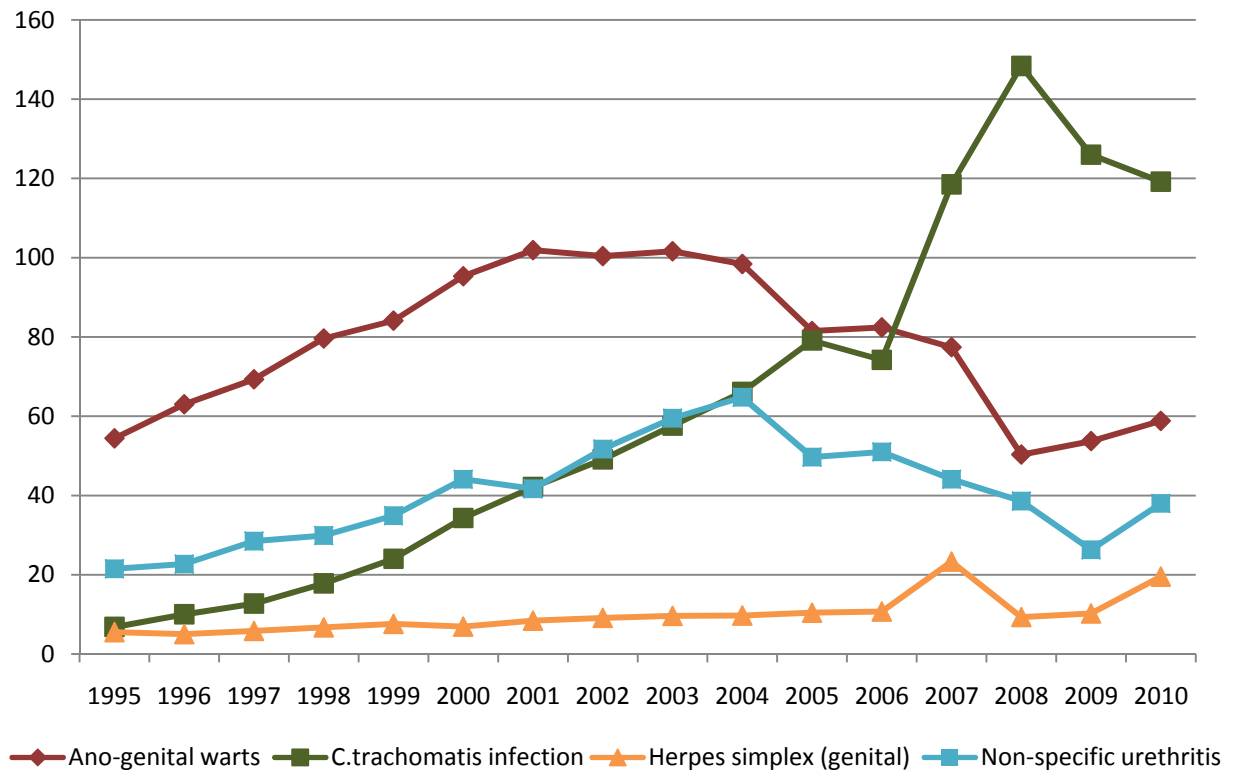
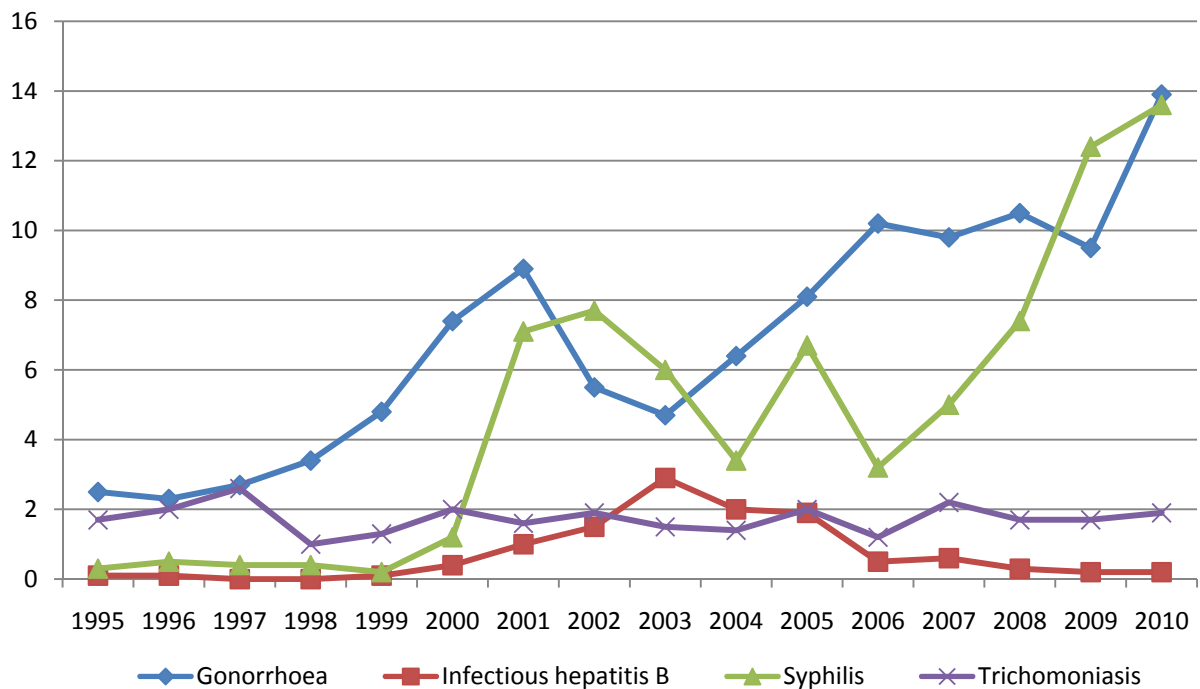


Figure 2. Crude incidence rate* of sexually transmitted infections (<1,000 notifications per year) by year, 1995-2011



*CIR calculated using data from Census 1996 (1995-1999), Census 2002 (2000-2003), Census 2006 (2004-2008) and Census 2011 (2009-2010)

Ano-genital warts

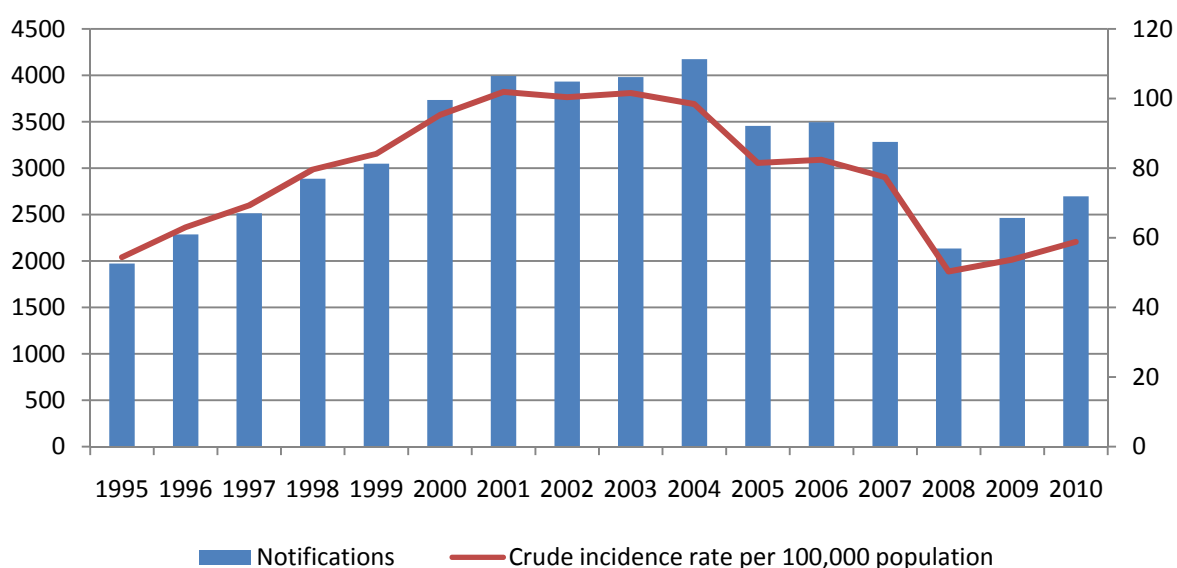
Table 8. Number and per cent of notifications of ano-genital warts by HSE area and gender, 2010

| HSE Area | Male | | Female | | Unknown | | Total |
|--------------|-------------|-------------|-------------|-------------|-----------|------------|-------------|
| | n | % | n | % | n | % | |
| East | 527 | 66.4 | 265 | 33.4 | 2 | 0.3 | 794 |
| Midlands | 0 | 0.0 | 0 | 0.0 | 31 | 100.0 | 31 |
| Mid West | 355 | 59.0 | 247 | 41.0 | 0 | 0.0 | 602 |
| North East | 0 | - | 0 | - | 0 | - | 0 |
| North West | 141 | 55.1 | 115 | 44.9 | 0 | 0.0 | 256 |
| South East | 233 | 56.6 | 179 | 43.4 | 0 | 0.0 | 412 |
| South | 282 | 50.0 | 282 | 50.0 | 0 | 0.0 | 564 |
| West | 13 | 35.1 | 24 | 64.9 | 0 | 0.0 | 37 |
| Total | 1551 | 57.5 | 1112 | 41.2 | 33 | 1.2 | 2696 |

Table 9. Number and per cent of notifications of ano-genital warts by HSE area and age group, 2010

| HSE Area | 0-19 yrs | | 20-29 yrs | | 30-39 yrs | | 40+ yrs | | Unknown | | Total |
|--------------------|------------|------------|-------------|-------------|------------|-------------|------------|------------|----------|------------|-------------|
| | n | % | n | % | n | % | n | % | n | % | |
| East | 76 | 9.6 | 461 | 58.1 | 184 | 23.2 | 73 | 9.2 | 0 | 0.0 | 794 |
| Midlands | 4 | 12.9 | 13 | 41.9 | 11 | 35.5 | 3 | 9.7 | 0 | 0.0 | 31 |
| Mid West | 34 | 5.6 | 412 | 68.4 | 121 | 20.1 | 35 | 5.8 | 0 | 0.0 | 602 |
| North East | 0 | - | 0 | - | 0 | - | 0 | - | 0 | - | 0 |
| North West | 28 | 10.9 | 149 | 58.2 | 51 | 19.9 | 28 | 10.9 | 0 | 0.0 | 256 |
| South East | 55 | 13.3 | 257 | 62.4 | 69 | 16.7 | 30 | 7.3 | 1 | 0.2 | 412 |
| South | 63 | 11.2 | 362 | 64.2 | 90 | 16.0 | 43 | 7.6 | 6 | 1.1 | 564 |
| West | 2 | 5.4 | 29 | 78.4 | 5 | 13.5 | 1 | 2.7 | 0 | 0.0 | 37 |
| Grand Total | 262 | 9.7 | 1683 | 62.4 | 531 | 19.7 | 213 | 7.9 | 7 | 0.3 | 2696 |

Figure 3. Number of notifications of ano-genital warts and crude incidence rate per 100,000 population by year, 1995-2010

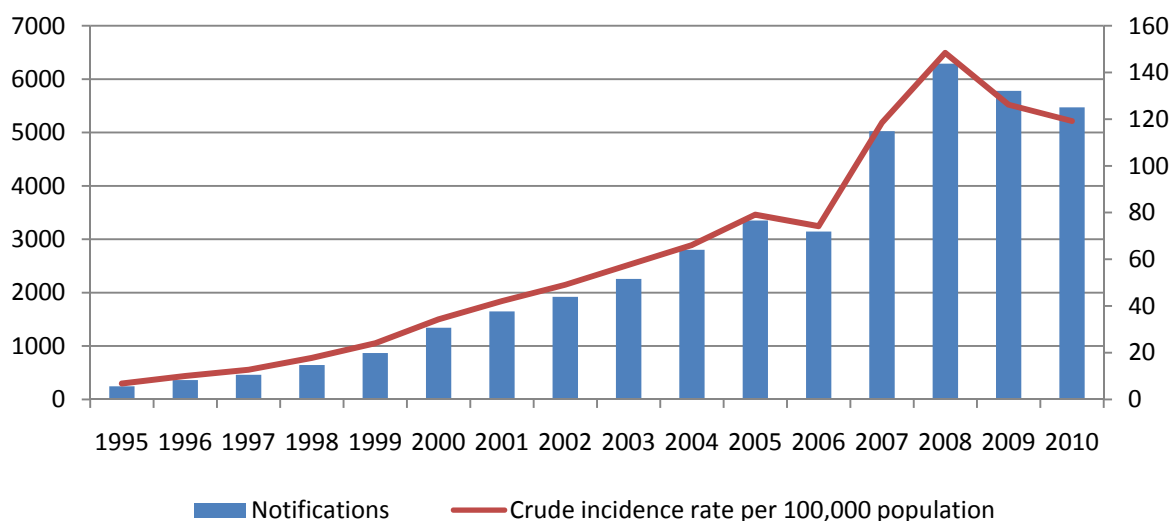


Chlamydia trachomatis infectionTable 10. Number and per cent of notifications of *C. trachomatis* infection by HSE area and gender, 2010

| HSE Area | Male | | Female | | Unknown | | Total |
|--------------|-------------|-------------|-------------|-------------|-----------|------------|-------------|
| | n | % | n | % | n | % | |
| East | 1330 | 47.7 | 1390 | 49.8 | 69 | 2.5 | 2789 |
| Midlands | 75 | 41.9 | 87 | 48.6 | 17 | 9.5 | 179 |
| Mid West | 243 | 44.3 | 302 | 55.1 | 3 | 0.5 | 548 |
| North East | 106 | 37.2 | 178 | 62.5 | 1 | 0.4 | 285 |
| North West | 80 | 53.7 | 69 | 46.3 | 0 | 0.0 | 149 |
| South East | 263 | 37.0 | 445 | 62.6 | 3 | 0.4 | 711 |
| South | 146 | 48.3 | 156 | 51.7 | 0 | 0.0 | 302 |
| West | 202 | 39.8 | 303 | 59.8 | 2 | 0.4 | 507 |
| Total | 2445 | 44.7 | 2930 | 53.6 | 95 | 1.7 | 5470 |

Table 11. Number and per cent of notifications of *C. trachomatis* infection by HSE area and age group, 2010

| HSE Area | 0-19 yrs | | 20-29 yrs | | 30-39 yrs | | 40+ yrs | | Unknown | | Total |
|--------------|------------|-------------|-------------|-------------|------------|-------------|------------|------------|-----------|------------|-------------|
| | n | % | n | % | n | % | n | % | n | % | |
| East | 409 | 14.7 | 1770 | 63.5 | 481 | 17.2 | 117 | 4.2 | 12 | 0.4 | 2789 |
| Midlands | 23 | 12.8 | 134 | 74.9 | 19 | 10.6 | 3 | 1.7 | 0 | 0.0 | 179 |
| Mid West | 79 | 14.4 | 359 | 65.5 | 88 | 16.1 | 22 | 4.0 | 0 | 0.0 | 548 |
| North East | 53 | 18.6 | 186 | 65.3 | 33 | 11.6 | 10 | 3.5 | 3 | 1.1 | 285 |
| North West | 14 | 9.4 | 92 | 61.7 | 35 | 23.5 | 8 | 5.4 | 0 | 0.0 | 149 |
| South East | 141 | 19.8 | 476 | 66.9 | 76 | 10.7 | 18 | 2.5 | 0 | 0.0 | 711 |
| South | 26 | 8.6 | 224 | 74.2 | 42 | 13.9 | 8 | 2.6 | 2 | 0.7 | 302 |
| West | 72 | 14.2 | 348 | 68.6 | 70 | 13.8 | 17 | 3.4 | 0 | 0.0 | 507 |
| Total | 817 | 14.9 | 3589 | 65.6 | 844 | 15.4 | 203 | 3.7 | 17 | 0.3 | 5470 |

Figure 4. Number of notifications of *C. trachomatis* infection and crude incidence rate per 100,000 population by year, 1995- 2010

Gonorrhoea

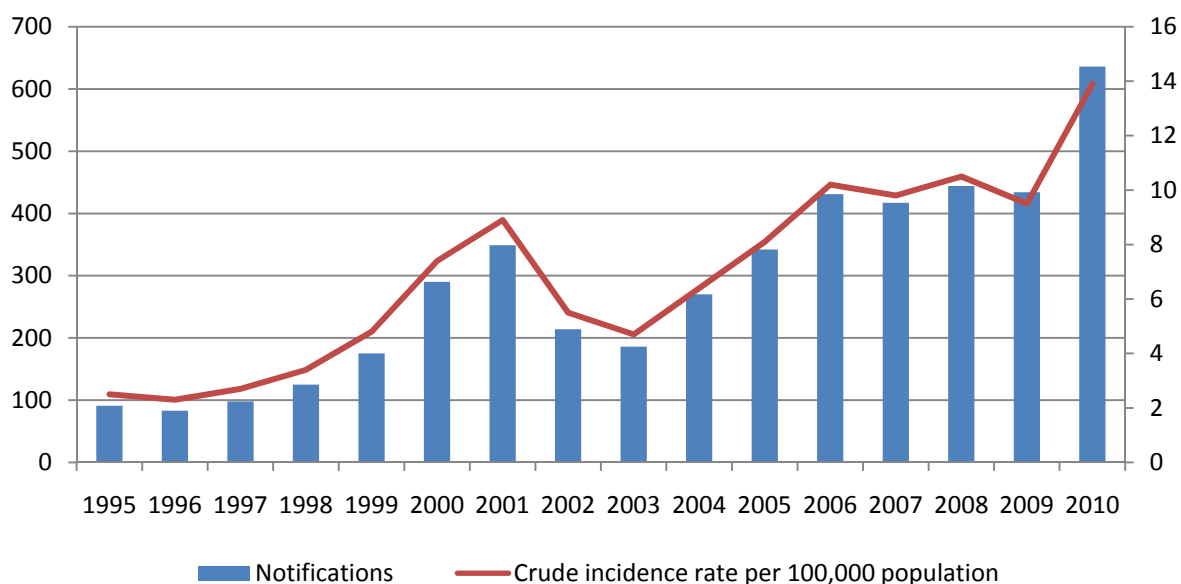
Table 12. Number and per cent of notifications of gonorrhoea by HSE area and gender, 2010

| HSE Area | Male | | Female | | Unknown | | Total |
|--------------|------------|-------------|------------|-------------|----------|------------|------------|
| | n | % | n | % | n | % | |
| East | 309 | 81.3 | 65 | 17.1 | 6 | 1.6 | 380 |
| Midlands | 9 | 90.0 | 1 | 10.0 | 0 | 0.0 | 10 |
| Mid West | 42 | 71.2 | 17 | 28.8 | 0 | 0.0 | 59 |
| North East | 18 | 58.1 | 13 | 41.9 | 0 | 0.0 | 31 |
| North West | 7 | 77.8 | 2 | 22.2 | 0 | 0.0 | 9 |
| South East | 41 | 56.9 | 31 | 43.1 | 0 | 0.0 | 72 |
| South | 28 | 82.4 | 6 | 17.6 | 0 | 0.0 | 34 |
| West | 24 | 58.5 | 16 | 39.0 | 1 | 2.4 | 41 |
| Total | 478 | 75.2 | 151 | 23.7 | 7 | 1.1 | 636 |

Table 13. Number and per cent of notifications of gonorrhoea by HSE area and age group, 2010

| HSE Area | 0-19 yrs | | 20-29 yrs | | 30-39 yrs | | 40+ yrs | | Unknown | | Total |
|--------------------|-----------|-------------|------------|-------------|------------|-------------|-----------|-------------|-----------|------------|------------|
| | n | % | n | % | n | % | n | % | n | % | |
| East | 38 | 10.0 | 194 | 51.1 | 93 | 24.5 | 53 | 13.9 | 2 | 0.5 | 380 |
| Midlands | 4 | 40.0 | 5 | 50.0 | 1 | 10.0 | 0 | 0.0 | 0 | 0.0 | 10 |
| Mid West | 4 | 6.8 | 37 | 62.7 | 10 | 16.9 | 8 | 13.6 | 0 | 0.0 | 59 |
| North East | 4 | 12.9 | 18 | 58.1 | 5 | 16.1 | 3 | 9.7 | 1 | 3.2 | 31 |
| North West | 0 | 0.0 | 6 | 66.7 | 2 | 22.2 | 1 | 11.1 | 0 | 0.0 | 9 |
| South East | 18 | 25.0 | 31 | 43.1 | 6 | 8.3 | 6 | 8.3 | 11 | 15.3 | 72 |
| South | 2 | 5.9 | 21 | 61.8 | 6 | 17.6 | 4 | 11.8 | 1 | 2.9 | 34 |
| West | 8 | 19.5 | 23 | 56.1 | 6 | 14.6 | 3 | 7.3 | 1 | 2.4 | 41 |
| Grand Total | 78 | 12.3 | 335 | 52.7 | 129 | 20.3 | 78 | 12.3 | 16 | 2.5 | 636 |

Figure 5. Number of notifications of gonorrhoea and crude incidence rate per 100,000 population by year, 1995-2010



Herpes simplex

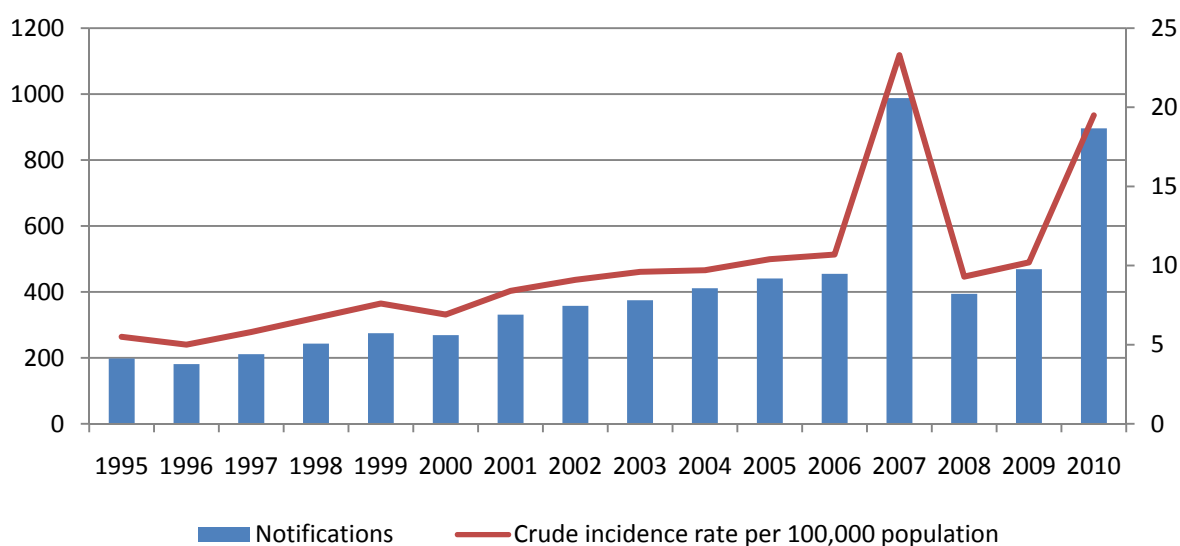
Table 14. Number and per cent of notifications of herpes simplex by HSE area and gender, 2010

| HSE Area | Male | | Female | | Unknown | | Total |
|--------------|------------|-------------|------------|-------------|----------|------------|------------|
| | n | % | n | % | n | % | |
| East | 260 | 40.2 | 381 | 59.0 | 5 | 0.8 | 646 |
| Midlands | 0 | 0.0 | 5 | 100.0 | 0 | 0.0 | 5 |
| Mid West | 16 | 42.1 | 22 | 57.9 | 0 | 0.0 | 38 |
| North East | 1 | 33.3 | 2 | 66.7 | 0 | 0.0 | 3 |
| North West | 6 | 31.6 | 13 | 68.4 | 0 | 0.0 | 19 |
| South East | 18 | 34.0 | 35 | 66.0 | 0 | 0.0 | 53 |
| South | 21 | 28.4 | 53 | 71.6 | 0 | 0.0 | 74 |
| West | 17 | 29.3 | 40 | 69.0 | 1 | 1.7 | 58 |
| Total | 339 | 37.8 | 551 | 61.5 | 6 | 0.7 | 896 |

Table 15. Number and per cent of notifications of herpes simplex by HSE area and age group, 2010

| HSE Area | 0-19 yrs | | 20-29 yrs | | 30-39 yrs | | 40+ yrs | | Unknown | | Total |
|--------------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|----------|------------|------------|
| | n | % | n | % | n | % | n | % | n | % | |
| East | 61 | 9.4 | 311 | 48.1 | 164 | 25.4 | 109 | 16.9 | 1 | 0.2 | 646 |
| Midlands | 1 | 20.0 | 2 | 40.0 | 1 | 20.0 | 1 | 20.0 | 0 | 0.0 | 5 |
| Mid West | 5 | 13.2 | 17 | 44.7 | 5 | 13.2 | 11 | 28.9 | 0 | 0.0 | 38 |
| North East | 1 | 33.3 | 1 | 33.3 | 0 | 0.0 | 1 | 33.3 | 0 | 0.0 | 3 |
| North West | 1 | 5.3 | 11 | 57.9 | 6 | 31.6 | 1 | 5.3 | 0 | 0.0 | 19 |
| South East | 6 | 11.3 | 26 | 49.1 | 13 | 24.5 | 8 | 15.1 | 0 | 0.0 | 53 |
| South | 15 | 20.3 | 38 | 51.4 | 15 | 20.3 | 6 | 8.1 | 0 | 0.0 | 74 |
| West | 13 | 22.4 | 29 | 50.0 | 12 | 20.7 | 4 | 6.9 | 0 | 0.0 | 58 |
| Grand Total | 103 | 11.5 | 435 | 48.5 | 216 | 24.1 | 141 | 15.7 | 1 | 0.1 | 896 |

Figure 6. Number of notifications of herpes simplex and crude incidence rate per 100,000 population by year, 1995-2010



Non-specific urethritis

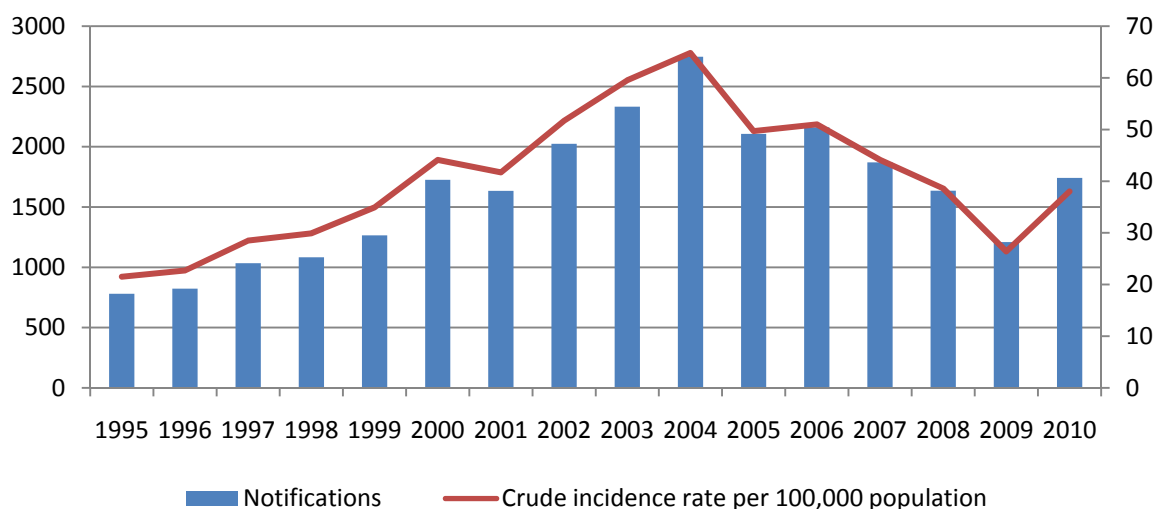
Table 16. Number and per cent of notifications of non-specific urethritis by HSE area and gender, 2010

| HSE Area | Male | | Female | | Unknown | | Total |
|--------------|-------------|-------------|------------|------------|----------|------------|-------------|
| | n | % | n | % | n | % | |
| East | 976 | 99.9 | 1 | 0.1 | 0 | 0.0 | 977 |
| Midlands | - | - | - | - | 0 | - | 0 |
| Mid West | 170 | 58.2 | 122 | 41.8 | 0 | 0.0 | 292 |
| North East | 0 | - | 0 | - | 0 | - | 0 |
| North West | 85 | 73.9 | 30 | 26.1 | 0 | 0.0 | 115 |
| South East | 29 | 100.0 | 0 | 0.0 | 0 | 0.0 | 29 |
| South | 317 | 99.1 | 3 | 0.9 | 0 | 0.0 | 320 |
| West | 9 | 100.0 | 0 | 0.0 | 0 | 0.0 | 9 |
| Total | 1586 | 91.0 | 156 | 9.0 | 0 | 0.0 | 1742 |

Table 17. Number and per cent of notifications of non-specific urethritis by HSE area and age group, 2010

| HSE Area | 0-19 yrs | | 20-29 yrs | | 30-39 yrs | | 40+ yrs | | Unknown | | Total |
|--------------|------------|------------|------------|-------------|------------|-------------|------------|-------------|----------|------------|-------------|
| | n | % | n | % | n | % | n | % | n | % | |
| East | 60 | 6.1 | 495 | 50.7 | 270 | 27.6 | 151 | 15.5 | 1 | 0.1 | 977 |
| Midlands | - | - | - | - | - | - | - | - | - | - | 0 |
| Mid West | 17 | 5.8 | 175 | 59.9 | 70 | 24.0 | 30 | 10.3 | 0 | 0.0 | 292 |
| North East | 0 | - | 0 | - | 0 | - | 0 | - | 0 | - | 0 |
| North West | 11 | 9.6 | 82 | 71.3 | 19 | 16.5 | 3 | 2.6 | 0 | 0.0 | 115 |
| South East | 8 | 27.6 | 15 | 51.7 | 4 | 13.8 | 2 | 6.9 | 0 | 0.0 | 29 |
| South | 11 | 3.4 | 187 | 58.4 | 83 | 25.9 | 34 | 10.6 | 5 | 1.6 | 320 |
| West | 0 | 0.0 | 5 | 55.6 | 4 | 44.4 | 0 | 0.0 | 0 | 0.0 | 9 |
| Total | 107 | 6.1 | 959 | 55.1 | 450 | 25.8 | 220 | 12.6 | 6 | 0.3 | 1742 |

Figure 7. Number of notifications of non-specific urethritis and crude incidence rate per 100,000 population by year, 1995-2010



Syphilis

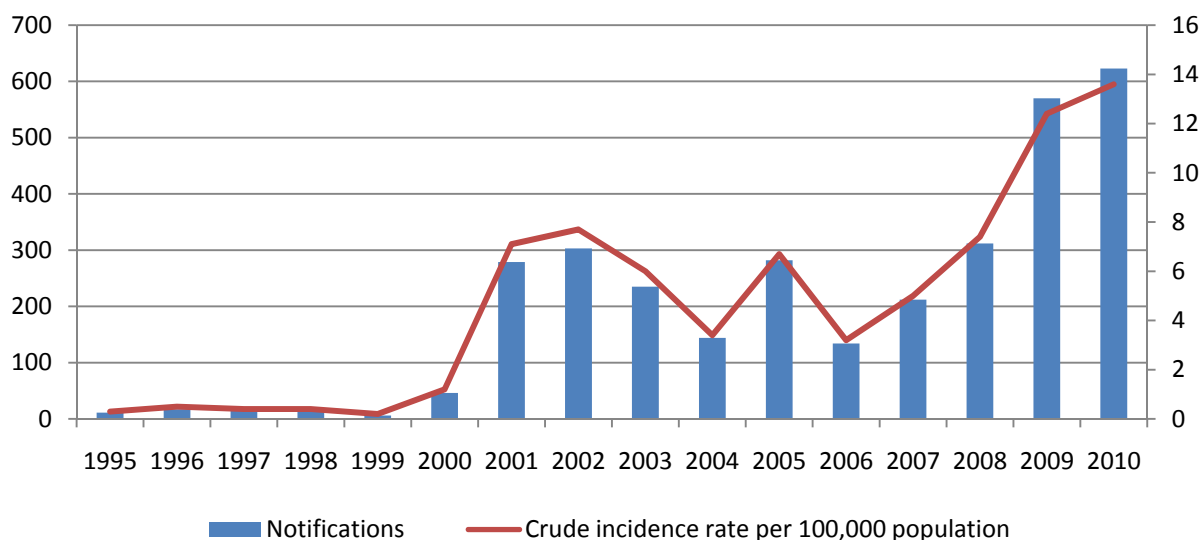
Table 18. Number and per cent of notifications of syphilis by HSE area and gender, 2010

| HSE Area | Male | | Female | | Unknown | | Total |
|--------------|------------|-------------|------------|-------------|----------|------------|------------|
| | n | % | n | % | n | % | |
| East | 351 | 77.3 | 96 | 21.1 | 7 | 1.5 | 454 |
| Midlands | 3 | 16.7 | 15 | 83.3 | 0 | 0.0 | 18 |
| Mid West | 29 | 67.4 | 14 | 32.6 | 0 | 0.0 | 43 |
| North East | 1 | 33.3 | 2 | 66.7 | 0 | 0.0 | 3 |
| North West | 1 | 100.0 | 0 | 0.0 | 0 | 0.0 | 1 |
| South East | 19 | 48.7 | 20 | 51.3 | 0 | 0.0 | 39 |
| South | 23 | 74.2 | 8 | 25.8 | 0 | 0.0 | 31 |
| West | 24 | 70.6 | 10 | 29.4 | 0 | 0.0 | 34 |
| Total | 451 | 72.4 | 165 | 26.5 | 7 | 1.1 | 623 |

Table 19. Number and per cent of notifications of syphilis by HSE area and age group, 2010

| HSE Area | 0-19 yrs | | 20-29 yrs | | 30-39 yrs | | 40+ yrs | | Unknown | | Total |
|--------------------|----------|------------|------------|-------------|------------|-------------|------------|-------------|----------|------------|------------|
| | n | % | n | % | n | % | n | % | n | % | |
| East | 6 | 1.3 | 123 | 27.1 | 182 | 40.1 | 143 | 31.5 | 0 | 0.0 | 454 |
| Midlands | 1 | 5.6 | 3 | 16.7 | 12 | 66.7 | 2 | 11.1 | 0 | 0.0 | 18 |
| Mid West | 0 | 0.0 | 12 | 27.9 | 14 | 32.6 | 17 | 39.5 | 0 | 0.0 | 43 |
| North East | 0 | 0.0 | 0 | 0.0 | 2 | 66.7 | 1 | 33.3 | 0 | 0.0 | 3 |
| North West | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 100.0 | 0 | 0.0 | 1 |
| South East | 0 | 0.0 | 16 | 41.0 | 11 | 28.2 | 12 | 30.8 | 0 | 0.0 | 39 |
| South | 0 | 0.0 | 7 | 22.6 | 13 | 41.9 | 9 | 29.0 | 2 | 6.5 | 31 |
| West | 0 | 0.0 | 8 | 23.5 | 15 | 44.1 | 11 | 32.4 | 0 | 0.0 | 34 |
| Grand Total | 7 | 1.1 | 169 | 27.1 | 249 | 40.0 | 196 | 31.5 | 2 | 0.3 | 623 |

Figure 8. Number of notifications of syphilis and crude incidence rate per 100,000 population by year, 1995-2010



Trichomoniasis

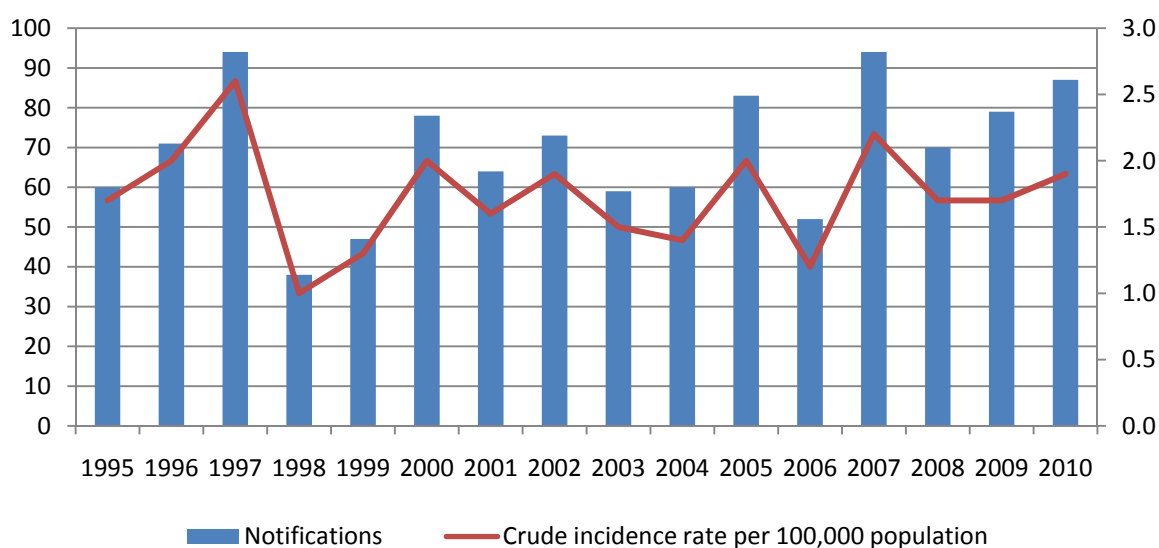
Table 20. Number and per cent of notifications of trichomoniasis by HSE area and gender, 2010

| HSE Area | Male | | Female | | Unknown | | Total |
|--------------|----------|------------|-----------|-------------|----------|------------|-----------|
| | n | % | n | % | n | % | |
| East | 0 | 0.0 | 32 | 97.0 | 1 | 3.0 | 33 |
| Midlands | 1 | 12.5 | 7 | 87.5 | 0 | 0.0 | 8 |
| Mid West | 3 | 16.7 | 14 | 77.8 | 1 | 5.6 | 18 |
| North East | 0 | 0.0 | 6 | 100.0 | 0 | 0.0 | 6 |
| North West | 0 | - | 0 | - | 0 | - | 0 |
| South East | 1 | 10.0 | 9 | 90.0 | 0 | 0.0 | 10 |
| South | 1 | 9.1 | 10 | 90.9 | 0 | 0.0 | 11 |
| West | 1 | 100.0 | 0 | 0.0 | 0 | 0.0 | 1 |
| Total | 7 | 8.0 | 78 | 89.7 | 2 | 2.3 | 87 |

Table 21. Number and per cent of notifications of trichomoniasis by HSE area and age group, 2010

| HSE Area | 0-19 yrs | | 20-29 yrs | | 30-39 yrs | | 40+ yrs | | Unknown | | Total |
|--------------------|----------|------------|-----------|-------------|-----------|-------------|-----------|-------------|----------|------------|-----------|
| | n | % | n | % | n | % | n | % | n | % | |
| East | 1 | 3.0 | 8 | 24.2 | 10 | 30.3 | 14 | 42.4 | 0 | 0.0 | 33 |
| Midlands | 0 | 0.0 | 2 | 25.0 | 3 | 37.5 | 3 | 37.5 | 0 | 0.0 | 8 |
| Mid West | 3 | 16.7 | 6 | 33.3 | 5 | 27.8 | 4 | 22.2 | 0 | 0.0 | 18 |
| North East | 0 | 0.0 | 2 | 33.3 | 3 | 50.0 | 1 | 16.7 | 0 | 0.0 | 6 |
| North West | 0 | - | 0 | - | 0 | - | 0 | - | 0 | - | 0 |
| South East | 1 | 10.0 | 1 | 10.0 | 4 | 40.0 | 4 | 40.0 | 0 | 0.0 | 10 |
| South | 0 | 0.0 | 8 | 72.7 | 0 | 0.0 | 2 | 18.2 | 1 | 9.1 | 11 |
| West | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 100.0 | 0 | 0.0 | 1 |
| Grand Total | 5 | 5.7 | 27 | 31.0 | 25 | 28.7 | 29 | 33.3 | 1 | 1.1 | 87 |

Figure 9. Number of notifications of trichomoniasis and crude incidence rate per 100,000 population by year, 1995-2010



Discussion

The gaps in the data for 2010 make it difficult to interpret the trends in STI notifications. In spite of missing data, the overall trend in STI notifications is upwards (+10.4%). There were more than 12,000 cases of STIs notified in 2010, the highest number since reporting began and almost the same number as all other notifiable diseases reported in 2010.¹

Where data were submitted, data completeness was very good, with gender and age group missing for just 1.2% and 0.4% of cases, respectively. The lack of timely case based data and information on risk and behavior has been highlighted previously as a serious deficit of the current aggregate quarterly reporting system. The notification process and datasets should be updated as a matter of urgency in line with the 2005 report of the STI subcommittee for the Scientific Advisory Committee "Surveillance of STIs".²

Ano-genital warts

The increase (+9.4%, table 1) in notifications of ano-genital warts in 2010 is most likely attributable to data returns from a large STI clinic in 2010 which did not submit data in 2009. However, since this is a clinical diagnosis and annual data remain outstanding for another large STI clinic, the figures presented here are probably an under estimation of the true number of cases. There were slightly more men (57.5%) than women (41.2%) notified with ano-genital warts (table 8), and almost three-quarters of notifications (table 9) were among people aged less than 30 years.

Chlamydia trachomatis infection

Despite a decrease in notifications (-5.4%, table 1), Chlamydia remained the most commonly reported STI in Ireland in 2010, with a CIR of 119.2 per 100,000 population. Chlamydia was reported more frequently among women (53.6%) and those aged 20-29 years (65.6%).

Gonorrhoea

The number of gonorrhoea notifications increased by 46.5% in 2010 to 636. The rise in cases of gonorrhoea comes against a background of increasing antimicrobial resistance which threatens the treatment and control of gonorrhoea. A European gonococcal antimicrobial surveillance project conducted between 2004-2008 identified high rates of resistance to ciprofloxacin and azithromycin across Europe (63% and 13%, respectively) and rising minimum inhibitory concentrations (MIC) values for ceftriaxone. The report concluded that ciprofloxacin is no longer appropriate for use as a first-line empirical therapy.³

During 2010, the proportion of notifications of gonorrhoea among those aged less than 20 years decreased slightly to 12.3% compared to 16.1% in 2009. The proportion of notifications among women continued to increase in 2010, to 23.7% compared with 20.3% in 2009, and 16.4% in 2008. Almost two-thirds of notifications were among people aged less than 30 years.

Hepatitis B

The data presented here for hepatitis B reflects only those cases notified through STI services. Only 9 cases, from three HSE areas, were reported in total. This is unlikely to represent the true incidence of sexually-acquired hepatitis B in the population. Of the nine cases reported, six were in men and 5 were aged 20-29 years

Herpes simplex (genital)

The STI with the largest increase in the number of notifications in 2010 was herpes simplex (genital) (+91.0%). The rate in 2010 almost doubled from 10.2 per 100,000 population in 2009 to 19.5 per 100,000 population. This was due to retrospective reporting by one laboratory. There were more cases among women (61.5%) and almost half of cases (48.5%) were in the age group 20-29 years.

Lymphogranuloma venereum (LGV)

Three cases of LGV were reported in 2010. LGV was last reported in Ireland in 2007 when two cases were reported. All three cases in 2010 were in men, all aged 20 years or older. Since 2003, outbreaks of LGV have been reported among MSM in Western Europe, including the UK. During 2010, the LGV outbreak in the UK intensified with a third of all cases reported since 2003 being reported in 2010. A report by the HPA and the UK LGV Incident Group, showed that cases were exclusively among MSM (99.5%) and most were seen in London, Brighton or Manchester (77%).⁴

Non-specific urethritis

The crude incidence rate of non-specific urethritis (NSU) increased to 38.0 per 100,000 population compared to 26.3/100,000 in 2009. Data returns from a large STI clinic in 2010, which did not submit data in 2009, may partly explain the increase in this clinical diagnosis. However, annual data remain outstanding for another large STI clinic. Therefore in the absence of complete reporting, the true incidence of NSU in the population is likely to be higher. While the case definition for NSU notifications in 2010 specifies a “clinically compatible case in a male”, NSU continues to be reported among women (n=156, 9.0%; table 16).

Syphilis

The number of syphilis notifications continued to rise in 2010 (+9.3% compared with 2009), resulting in an increased crude incidence rate of 13.6 per 100,000 population. The majority of syphilis notifications (72.4%) were in men and among those aged 30-39 years (40.0%). Further information is available in the report *Epidemiology of syphilis in Ireland, 2010*, available on the HPSC website (www.hpsc.ie).

Trichomoniasis

Notifications of trichomoniasis increased from 79 in 2009 to 87 in 2010. Notifications were almost exclusively among women (89.7%). Notifications were spread across all age groups, with approximately one-third of cases being notified in each of the age groups 20-29 years (31.0%), 30-39 years (28.7%) and 40+ years (33.3%).

Appendix A: Summary of aggregates STI data notification sources, 2010

| HSE Area | Q1, 2010 | | | Q2, 2010 | | | Q3, 2010 | | | Q4, 2010 | | |
|-------------------------|----------|--------|----|----------|--------|----|----------|--------|----|----------|--------|----|
| | Lab | Clinic | PH | Lab | Clinic | PH | Lab | Clinic | PH | Lab | Clinic | PH |
| East | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Midlands | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Mid West | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| North East [#] | ✓ | n/a | ✓ | ✓ | n/a | ✓ | ✓ | n/a | ✓ | ✓ | n/a | ✓ |
| North West [~] | - | ✓ | - | - | ✓ | - | - | ✓ | - | - | ✓ | - |
| South East | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| South | - | ✓ | - | - | ✓ | - | - | ✓ | - | - | ✓ | - |
| West [*] | ✓ | - | ✓ | ✓ | - | ✓ | ✓ | - | ✓ | ✓ | - | ✓ |

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

[#] There is no STI clinic in the North East

[~] Includes notifications from Altnagelvin Hospital, Derry, for patients with an address in Donegal

^{*} Includes a small number STI clinic cases notified to Public Health but full annual returns outstanding

References

1. Health Protection Surveillance Centre, Annual Report 2010; <http://www.hpsc.ie/hpsc/AboutHPSC/AnnualReports/File,13092,en.pdf> accessed April, 2012
2. Scientific Advisory Committee of the Health Protection Surveillance Centre, Surveillance of STIs. 2005; <http://www.hpsc.ie/hpsc/A-Z/HIVSTIs/SexuallyTransmittedInfections/Publications/File,1437,en.pdf> accessed April, 2012.
3. European Centre for Disease Prevention and Control. Gonococcal antimicrobial susceptibility surveillance in Europe 2009. Stockholm: ECDC; 2011
4. Epidemic of Lymphogranuloma venereum (LGV) in men who have sex with men in the UK intensifies, *Health Protection Report* vol. 5 no. 24, 17 June 2011; <http://www.hpa.org.uk/hpr/archives/2011/hpr2411.pdf> accessed April 2012