Quarterly Report on Sexually Transmitted Infections

Quarter 3 2001



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The National Disease Surveillance Centre

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Introduction

During 2001, 14 sexually transmitted infections (STIs) were legally notifiable in Ireland: ano-genital warts, candidiasis, chancroid, *Chlamydia trachomatis*, genital herpes simplex, gonorrhoea, granuloma inguinale, infectious hepatitis B, lymphogranuloma venereum, molluscum contagiosum, non-specific urethritis, *Pediculosis pubis*, syphilis and trichomoniasis. This report details the 14 STIs notifiable during quarter 3 (Q3) 2001.

Aggregate data on the number of notified STIs from Departments of Public Health is collated quarterly. Departments of Public Health are notified of STIs mainly from STI clinics. The number of STIs notified by quarter, health board, age group and gender for Q3 2001 are presented in this report. Rates per 100,000 population are based on the 2002 population census, unless otherwise stated and are reported in appendix A. It should be noted that cases of infectious hepatitis B that are sexually transmitted may also be reported through the weekly infectious disease report published by NDSC.

NDSC would like to thank all those who provided data for this report, particularly the STI Clinics, GPs and Departments of Public Health.

Summary

- Total number of notified STIs increased by 18.6% in Q3 2001, compared to the same quarter in 2000.
- The highest increases recorded during Q3 2001, compared to Q3 2000 were for syphilis (314.3%), infectious hepatitis B (80.0%) and *Chlamydia trachomatis* (42.3%).
- The three most commonly notified STIs in Q3 2001 were ano-genital warts, *Chlamydia trachomatis* and non-specific urethritis.
- Total number of notified STIs increased by 13.0% in the first 3 quarters of 2001, compared to the same period in 2000.
- Comparison (% increase) of the first 3 quarters of 2001 and the same period in 2000: *Increases*
 - o Syphilis 593.3%, infectious hepatitis B 420.0%, gonorrhoea 37.5%, *Chlamydia trachomatis* 23.8%, genital herpes simplex 21.6%, ano-genital warts 11.8%, non-specific urethritis 1.2% and molluscum contagiosum 1.1%.

Description of overall STI trends for Quarter 3 2001

In Q3 2001, 2480 cases of STIs were notified in Ireland, compared to 2092 during the same quarter in 2000 (table 1), representing an 18.6% increase in notifications. The total number of notified STIs for Q3 2001 reached the highest recorded level for this quarter (Q3), increasing from 1119 in 1995 to 2480 in 2001 an increase of 121.6% (tables 2 & 3). It is also worth noting that the total number of STIs notified in the first three quarters of 2001 is higher than the annual totals for each year from 1989 to 1999 (appendix A, table 6).

Notified cases of ano-genital warts, candidiasis, *C. trachomatis*, infectious hepatitis B, non-specific urethritis and syphilis all increased during Q3 2001, compared to the same quarter (Q3) in 2000. Chancroid, genital herpes simplex, gonorrhoea, molluscum contagiosum, *P. pubis* and trichomoniasis decreased in Q3 2001, compared to the same quarter in 2000. No cases of granuloma inguinale and lymphogranuloma venereum were notified in Q3 2001 or in Q3 2000.

During the first three quarters of 2001, notified cases of ano-genital warts, *C. trachomatis*, genital herpes simplex, gonorrhoea, infectious hepatitis B, molluscum contagiosum, non-specific urethritis and syphilis all increased, compared to the same period in 2000. Significantly, notified cases of syphilis increased by 593.0% and infectious hepatitis B by 420.0%. Notified cases of chancroid, *P. pubis* and trichomoniasis decreased in the first 3 quarters of 2001, compared to 2000. No cases of granuloma inguinale or lymphogranuloma venereum were notified during the first 3 quarters of 2000 or 2001 (appendix A, table 8). The cumulative rate per 100,000 population for all notified STIs increased in the first 3 quarters of 2001 to 186.3 per 100,000; compared to a rate of 164.9 per 100,000 in the first 3 quarters of 2000, an increase of 13.0% (appendix A, table 9). Quarterly and annual trends of gonorrhoea, syphilis, *C. trachomatis*, ano-genital warts, non-specific urethritis and genital herpes simplex, are shown in figures 1 & 2.

Table 1: Notified sexually transmitted infections for Q3 2001 and Q3 2000

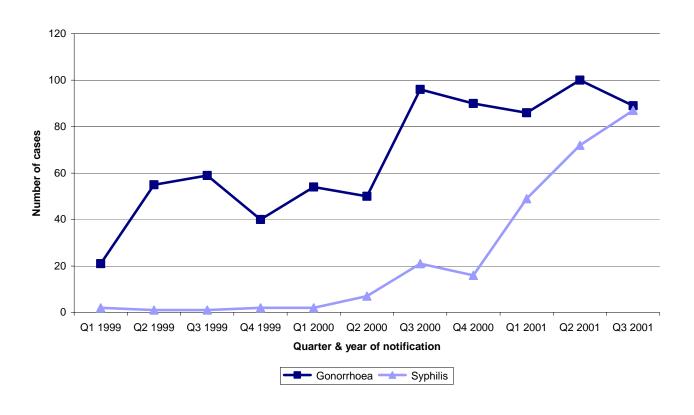
| Sexually Transmitted Infection | Q3 2001 | Q3 2000 | Increase | % Increase |
|--------------------------------|---------|---------|----------|------------|
| Ano-Genital Warts | 974 | 832 | 142 | 17.07 |
| Candidiasis | 347 | 272 | 75 | 27.57 |
| Chancroid | 0 | 5 | -5 | -100.00 |
| Chlamydia Trachomatis | 441 | 310 | 131 | 42.26 |
| Genital Herpes Simplex | 72 | 74 | -2 | -2.70 |
| Gonorrhoea | 89 | 96 | -7 | -7.29 |
| Granuloma Inguinale | 0 | 0 | 0 | 0.00 |
| Infectious Hepatitis B | 9 | 5 | 4 | 80.00 |
| Lymphogranuloma Venereum | 0 | 0 | 0 | 0.00 |
| Molluscum Contagiosum | 19 | 21 | -2 | -9.52 |
| Non-Specific Urethritis | 407 | 404 | 3 | 0.74 |
| Pediculosis Pubis | 19 | 25 | -6 | -24.00 |
| Syphilis | 87 | 21 | 66 | 314.29 |
| Trichomoniasis | 16 | 27 | -11 | -40.74 |
| Total | 2480 | 2092 | 388 | 18.55 |

Table 2: Notified sexually transmitted infections for Q3 from 1995 to 2001

| Sexually Transmitted Infection | Q3 1995 | Q3 1996 | Q3 1997 | Q3 1998 | Q3 1999 | Q3 2000 | Q3 2001 |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Ano-Genital Warts | 491 | 574 | 508 | 660 | 671 | 832 | 974 |
| Candidiasis | 283 | 348 | 405 | 278 | 273 | 272 | 347 |
| Chancroid | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| Chlamydia Trachomatis | 54 | 74 | 108 | 137 | 152 | 310 | 441 |
| Genital Herpes Simplex | 43 | 44 | 47 | 55 | 38 | 74 | 72 |
| Gonorrhoea | 23 | 22 | 28 | 35 | 59 | 96 | 89 |
| Granuloma Inguinale | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| Infectious Hepatitis B | 1 | 0 | 0 | 0 | 0 | 5 | 9 |
| Lymphogranuloma Venereum | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Molluscum Contagiosum | 14 | 6 | 25 | 21 | 10 | 21 | 19 |
| Non-Specific Urethritis | 170 | 202 | 308 | 275 | 304 | 404 | 407 |
| Pediculosis Pubis | 26 | 18 | 24 | 25 | 21 | 25 | 19 |
| Syphilis | 1 | 2 | 2 | 1 | 1 | 21 | 87 |
| Trichomoniasis | 13 | 7 | 14 | 9 | 9 | 27 | 16 |
| Total | 1119 | 1298 | 1469 | 1496 | 1541 | 2092 | 2480 |

Table 3: Notified sexually transmitted infections by quarter from Q1 1999 to Q3 2001

| Sexually Transmitted Infection | Q1 1999 | Q2 1999 | Q3 1999 | Q4 1999 | Q1 2000 | Q2 2000 | Q3 2000 | Q4 2000 | Q1 2001 | Q2 2001 | Q3 2001 |
|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ano-Genital Warts | 762 | 905 | 671 | 711 | 953 | 952 | 832 | 998 | 1060 | 1025 | 974 |
| Candidiasis | 269 | 263 | 273 | 300 | 317 | 262 | 272 | 244 | 222 | 282 | 347 |
| Chancroid | 0 | 0 | 0 | 1 | 0 | 3 | 5 | 8 | 1 | 0 | 0 |
| Chlamydia Trachomatis | 169 | 295 | 152 | 253 | 309 | 346 | 310 | 378 | 375 | 379 | 441 |
| Genital Herpes Simplex | 94 | 53 | 38 | 90 | 75 | 50 | 74 | 70 | 97 | 73 | 72 |
| Gonorrhoea | 21 | 55 | 59 | 40 | 54 | 50 | 96 | 90 | 86 | 100 | 89 |
| Granuloma Inguinale | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Infectious Hepatitis B | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 7 | 10 | 9 |
| Lymphogranuloma Venereum | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Molluscum Contagiosum | 23 | 29 | 10 | 21 | 33 | 37 | 21 | 27 | 35 | 38 | 19 |
| Non-Specific Urethritis | 243 | 389 | 304 | 329 | 425 | 385 | 404 | 512 | 400 | 421 | 407 |
| Pediculosis Pubis | 35 | 25 | 21 | 32 | 37 | 38 | 25 | 38 | 30 | 30 | 19 |
| Syphilis | 2 | 1 | 1 | 2 | 2 | 7 | 21 | 16 | 49 | 72 | 87 |
| Trichomoniasis | 10 | 15 | 9 | 13 | 18 | 15 | 27 | 18 | 15 | 11 | 16 |
| Total | 1630 | 2030 | 1541 | 1792 | 2223 | 2145 | 2092 | 2409 | 2377 | 2441 | 2480 |



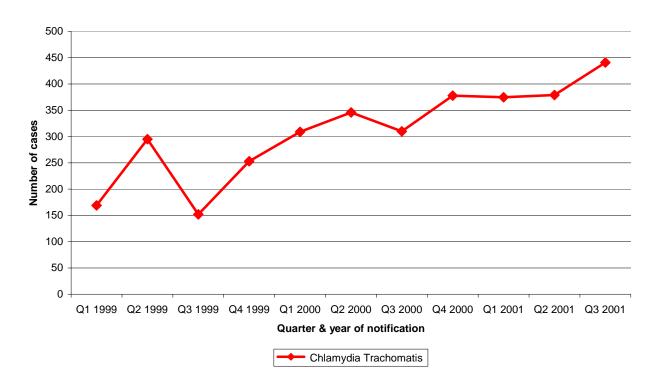
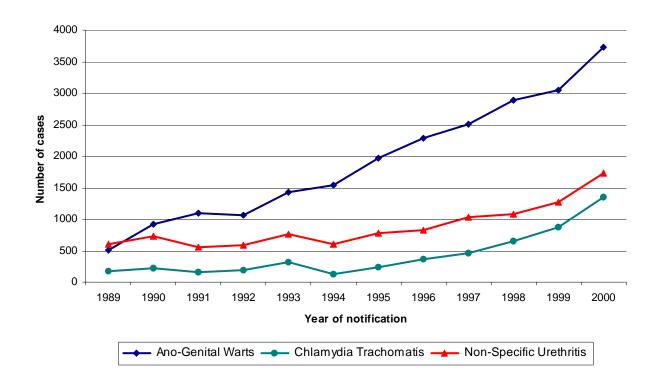


Figure 1: Number of notified cases of gonorrhoea, syphilis and *C. trachomatis* from Q1 1999 to Q3 2001



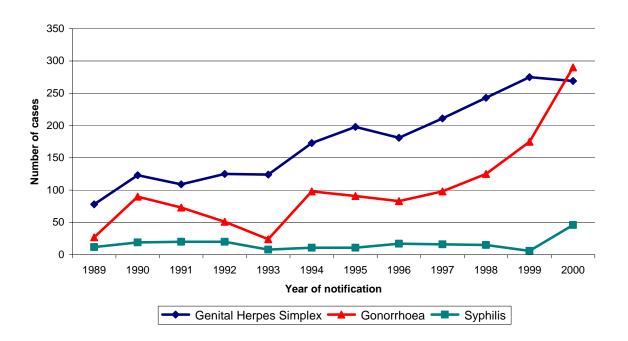


Figure 2: Number of notified cases of ano-genital warts, *C. trachomatis*, non-specific urethritis, genital herpes simplex, gonorrhoea & syphilis, by year between 1989 and 2000.

Notified STIs by Health Board for Quarter 3 2001

Notified cases of STIs by health board are presented in table 4. It is important to note that STI surveillance is mainly clinic based. At the time these notifications were made there were no STI clinics in the MHB and NEHB. For Q3 2001, 48.5% (1202) of all STI notifications were from the ERHA, 14.0% (348) from the MWHB, 11.7% (289) from the WHB, 11.1% (274) from the SHB, 9.4% (234) from the SEHB, 5.3% (131) from the NWHB, 0.04% (1) from the MHB and 0.04% (1) from the NEHB.

Table 4: Notified sexually transmitted infections by health board for O3 2001

| Sexually Transmitted Infection | ERHA | МНВ | MWHB | NEHB | NWHB | SEHB | SHB | WHB | Total |
|--------------------------------|------|-----|------|------|------|------|-----|-----|-------|
| Ano-Genital Warts | 460 | 0 | 120 | 0 | 57 | 85 | 146 | 106 | 974 |
| Candidiasis | 137 | 0 | 38 | 0 | 13 | 22 | 29 | 108 | 347 |
| Chancroid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chlamydia Trachomatis | 235 | 0 | 51 | 0 | 6 | 61 | 50 | 38 | 441 |
| Genital Herpes Simplex | 47 | 0 | 5 | 0 | 1 | 7 | 3 | 9 | 72 |
| Gonorrhoea | 62 | 0 | 2 | 0 | 4 | 9 | 7 | 5 | 89 |
| Granuloma Inguinale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Infectious Hepatitis B | 5 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 9 |
| Lymphogranuloma Venereum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Molluscum Contagiosum | 5 | 0 | 0 | 0 | 0 | 3 | 8 | 3 | 19 |
| Non-Specific Urethritis | 166 | 0 | 120 | 0 | 44 | 39 | 27 | 11 | 407 |
| Pediculosis Pubis | 8 | 0 | 0 | 0 | 1 | 3 | 1 | 6 | 19 |
| Syphilis | 67 | 1 | 7 | 1 | 3 | 3 | 2 | 3 | 87 |
| Trichomoniasis | 10 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 16 |
| Total | 1202 | 1 | 348 | 1 | 131 | 234 | 274 | 289 | 2480 |

Notified STIs by Age Group for Quarter 3 2001

Notified cases of STIs by age group (years) are presented in table 5. Data presented below and in table 3 should be interpreted with caution, as the age group data for 40.5% (1005) of cases notified during Q3 2001 was unknown. Rates are reported in appendix A table 10. For Q3 2001, where the age group was known (n=1475), 14.9% (220) of notified STIs were 0 to 19 years old, 59.1% (871) were 20 to 29, 18.1% (267) were 30 to 39 and 7.9% (117) were aged over 40 years of age. For all STIs, the 20-29 year age group represented the largest age group, with the exception of syphilis where the majority of cases were aged between 30 and 39 years of age.

Notified STIs by Gender for Quarter 3 2001

During Q3 2001, 52.2% (1295) of all cases of notified STIs were amongst females, whilst 47.4% (1176) were amongst males (table 5). Data was not available for 9 cases. Rates are reported in appendix A, table 11. Figure 3 represents the percentage of male and female cases for each of the notifiable STIs, during Q3 2001. The majority of cases of infectious hepatitis B (88.9%), syphilis (80.5%), non-specific urethritis (76.9%), gonorrhoea (76.4%), *P. pubis* (68.4%) and molluscum contagiosum (52.6%) were amongst males. The majority of cases of trichomoniasis (100.0%), candidiasis (88.8%), genital herpes simplex (75.0%), *C. trachomatis* (57.4%) and ano-genital warts (53.2%) were amongst females.

Table 5: Notified sexually transmitted infections by age group (years) and gender for Q3 2001

| Sexually Transmitted Infection | 0 - 19 | 20 - 29 | 30 - 39 | 40+ | Age UK ¹ | Male | Female | Gender UK ¹ | Total |
|-----------------------------------|--------|---------|---------|-----|---------------------|------|--------|------------------------|-------|
| Ano-Genital Warts | 92 | 363 | 84 | 24 | 411 | 454 | 518 | 2 | 974 |
| Candidiasis | 34 | 103 | 39 | 42 | 129 | 39 | 308 | 0 | 347 |
| Chancroid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chlamydia Trachomatis | 52 | 159 | 34 | 8 | 188 | 183 | 253 | 5 | 441 |
| Genital Herpes Simplex | 10 | 20 | 4 | 1 | 37 | 18 | 54 | 0 | 72 |
| Gonorrhoea | 3 | 24 | 7 | 5 | 50 | 68 | 21 | 0 | 89 |
| Granuloma Inguinale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Infectious Hepatitis B | 0 | 3 | 1 | 0 | 5 | 8 | 1 | 0 | 9 |
| Lymphogranuloma Venereum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Molluscum Contagiosum | 4 | 9 | 2 | 0 | 4 | 10 | 9 | 0 | 19 |
| Non-Specific Urethritis | 19 | 156 | 59 | 13 | 160 | 313 | 94 | 0 | 407 |
| Pediculosis Pubis | 3 | 7 | 2 | 0 | 7 | 13 | 6 | 0 | 19 |
| Syphilis | 3 | 24 | 33 | 23 | 4 | 70 | 15 | 2 | 87 |
| Trichomoniasis | 0 | 3 | 2 | 1 | 10 | 0 | 16 | 0 | 16 |
| Total | 220 | 871 | 267 | 117 | 1005 | 1176 | 1295 | 9 | 2480 |

¹UK=Unknown

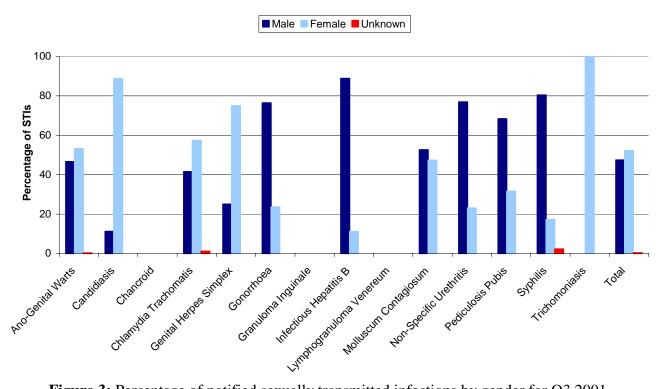


Figure 3: Percentage of notified sexually transmitted infections by gender for Q3 2001

Disease-specific trends, Q3 2001

Data tables are detailed in appendix A, pages 12-15.

Please note that quarterly STI data is only available from Q1 1995 & annual STI data is only available from 1989.

Ano-genital warts

Ano-genital warts accounted for the majority (39.3%) of all STI notifications in Q3 2001 and for the first 3 quarters of 2001 (41.9%). Notifications of ano-genital warts have increased each year since 1992. In 1989, 505 (14.3/100,000) cases were notified, increasing to 1972 (54.4/100,000) in 1995 and 3735 (95.4/100,000) in 2000. Between Q1 2000 and Q3 2001, numbers of notified cases of ano-genital warts remained stable, with a mean of 971 cases per quarter. In Q3 2001, males accounted for 46.6% of cases and females for 53.2% with gender unknown for 0.2%. Where the age group was known (in 57.8% of cases), 0-19 year olds accounted for 16.3% of cases, 64.5% of cases were 20-29, 14.9% were 30-39 and 4.3% were aged 40 years or older.

Candidiasis

Between 1990 and 1997, the mean number of notified candidiasis cases was 1293 per year, peaking in 1997 at 1521 cases (42.0/100,000). Notified cases have decreased each year since 1997, reaching 1095 in 2000 (28.0/100,000). During Q3 2001, this decreasing trend was reversed, with 8.9 candidiasis cases per 100,000 population notified, the highest rate for any quarter since Q4 1998 (9.5/100,000). Candidiasis accounted for 14.0% of all STI notifications in Q3 2001 and 11.7% in the first 3 quarters of 2001. In Q3 2001, males accounted for 11.2% of cases and females for 88.8%. Where the age group was known (in 62.8% of cases), 0-19 year olds accounted for 15.6% of cases, 20-29 year olds for 47.3%, 30-39 year olds for 17.9% and 19.3% were aged 40 years or older.

Chancroid

No cases of chancroid were notified during Q3 2001. With the exception of the year 2000 (when 16 cases were notified), between 0 and 2 cases of chancroid were notified each year between 1989 and 1999.

Chlamydia trachomatis

During Q3 2001, 441 cases of *C. trachomatis* were notified, the highest number notified in any one quarter on record. From 1989 to 1995 the number of notified cases of *C. trachomatis* generally remained stable fluctuating around a mean of 200 per year. In 1995 there was a marked increase of 84.2% on the previous year (from 133 cases, 3.7/100,000 to 245 cases, 6.8/100,000). Since 1995 there has been an increasing number of cases reported each year reaching 1343 in 2000 (34.3/100,000). Notified cases have increased from 165 (4.6/100,000) in the first 3 quarters of 1995 to 1195 (30.5/100,000) in 2001. During the first 3 quarters of 2001, the number of male cases increased by 15.4% and the number of female cases by 30.4%, when compared to the same period in 2000. In Q3 2001, where the age group was known (in 57.4% of cases), 0-19 year olds accounted for 20.6% of cases, 20-29 year olds for 62.9%, 30-39 year olds for 13.4% and 3.2% were 40 years or older.

Genital herpes simplex

There was a 23.8% increase in the number of notified cases of genital herpes simplex during the first 3 quarters of 2001 compared to 2000, with cases decreasing slightly (by 2.7%) in Q3 2001 compared to the same quarter in 2000. Genital herpes simplex cases increased from 78 (2.2/100,000) in 1989 to 198 (5.5/100,000) in 1995 and 269 (6.9/100,000) in 2000. During Q3 2001, 25% of cases were male and 75% of cases were female. The majority of cases (57.1%) were aged between 20 and 29 (where the age group was known).

Gonorrhoea

Reported notifications of gonorrhoea have increased consistently since 1996; increasing from 83 (2.3/100,000) in 1996 to 290 (7.4/100,000) in 2000. Notifications of gonorrhoea have remained high since Q3 2000, when there was a 92% increase in the number of cases (from 50 in Q2 2000 to 96 in Q3 2000). During the first 3 quarters of 2001, gonorrhoea cases increased by 37.5% compared to the same period in 2000. In Q3 2001, males accounted for 76.4% of cases and females for 23.6%. Where the age group was known (43.8%), 0-19 year olds accounted for 7.7% of cases, 20-29 year olds for 61.5%, 30-39 year olds for 18.0% and those 40 years or older for 12.8% of cases in Q3 2001.

Granuloma Inguinale

No cases of granuloma inguinale were notified during Q3 2001. The number of cases of granuloma inguinale has ranged from 0 to 6 cases per year, between 1989 and 2000.

Infectious Hepatitis B

Between 1989 and 1999, infectious hepatitis B cases reported through the STI quarterly notification system ranged from 0 to 4 cases per year. Between 1999 and 2000, there was a 650% increase in notifications, when 15 cases were notified in the last 2 quarters of 2000. During 2001, this increase has continued with 26 cases reported during the first 3 quarters of 2001, a 420% increase on the first 3 quarters of 2000. During the first 3 quarters of 2001, the number of male cases increased by 300% and the number of female cases increased from zero cases to 6 cases, compared to the same period in 2000. In Q3 2001, where age group data was known (in 44.4% of cases), 75% of cases were aged between 20 and 29 years and 25% of cases were aged between 30-39 years.

Lymphogranuloma venereum

No cases of lymphogranuloma venereum were notified during Q3 2001. The number of notified cases of lymphogranuloma venereum ranged from 0 to 5 cases per year, between 1989 and 2000.

Molluscum contagiosum

Notified cases of molluscum contagiosum have increased from 31 (0.9/100,000) in 1989, to 59 (1.6/100,000) in 1995 and 118 (3.0/100,000) in 2000. During the first 3 quarters of 2001, the number of molluscum contagiosum notifications changed little compared to 2000, increasing by only 1.1%. However, in Q3 2001, notified cases of molluscum contagiosum decreased to 19, the lowest quarterly level since Q3 1999. During the first 3 quarters of 2001, the number of male cases increased by 14.3% and female cases decreased by 12.2%, compared to the same period in 2000. In Q3 2001, where the age group was known (79.0% of cases), 0-19 year olds accounted for 26.7% of cases, 60.0% were 20-29, 13.3% were 30-39 and 0.0% were aged 40 years or older.

Non-specific urethritis

Non-specific urethritis notifications increased marginally between 1990 and 1995, from 738 (20.9/100,000) in 1990 to 781 (21.5/100,000) in 1995, a 5.8% increase. However, between 1995 and 2000, notified cases increased by 121.0%, from 781 (21.5/100,000) in 1995 to 1726 (44.1/100,000) in 2000. During 2001, notified cases remained relatively constant compared to 2000, increasing by only 1.2% in the first 3 quarters and 0.7% in the third quarter. In Q3 2001, 76.9% of cases were male and 23.1% were female. Where the age group was known (60.7% of cases), 0-19 year olds accounted for 7.7% of cases, 63.2% were 20-29, 23.9% were 30-39 and 5.3% were aged 40 years or older.

Pediculosis pubis

P. pubis notifications increased gradually between 1996 and 2000, with 79 (2.2/100,000) cases notified in 1996 and 138 (3.5/100,000) cases in 2000. This increasing trend was reversed in Q3 2001, when 19 (0.5/100,000) cases were notified, the lowest number notified since Q3 1996. During the first 3 quarters of 2001, 50 male and 27 female *P. pubis* cases were notified, a decrease of 29.6% and 6.9%, respectively, on the first 3 quarters of 2000. In Q3 2001, where the age group was known (63.2% of cases), 0-19 year olds accounted for 25.0% of cases, 58.3% were 20-29, 16.7% were 30-39 and 0.0% were aged 40 years or older.

Syphilis

There has been a dramatic increase in syphilis amongst men who have sex with men (MSM) in Dublin since early 2000. This was against a low incidence of syphilis nationally throughout the 1990s, which in 1999 reached its lowest level in 10 years (6 cases, 0.2/100,000). Between Q2 and Q3 2000, syphilis notifications increased significantly by 200% (from 7, 0.2/100,000 to 21, 0.5/100,000). A total of 46 syphilis cases were notified through the STI quarterly notification system in 2000, the highest number on record. This was followed by a further increase of 206% between Q4 2000 (16, 0.4/100,00) and Q1 2001 (49, 1.3/100,000). Following this, the numbers increased further to 72 (1.8/100,000) in Q2 2001 and 87 (2.2/100,000) in Q3 2001. During the first 3 quarters of 2001, 208 (5.3/100,000) syphilis notifications were reported, compared to 30 (0.8/100,000) in the first 3 quarters of 2000 and 4 (0.1/100,000) in the first 3 quarters of 1999. More syphilis cases were notified in the first 3 quarters of 2001, then the yearly totals for each year between 1989 and 2000. During Q3 2001, 80.5% (70) of cases were male and 17.2% (15) were female. Where the age group was known (in 95.4% of cases), 0-19 year olds accounted for 3.6% of cases, 28.9% were 20-29, 39.8% were 30-39 and 27.7% were aged 40 years or older. The age group of syphilis cases is markedly different to all other STIs notified, with the majority of cases aged between 30 and 39 years.

In response to this increase the Director of Public Health in the Eastern Regional Health Authority (ERHA) established an outbreak control team in October 2000. An enhanced surveillance system was introduced by NDSC to capture data on all syphilis cases from January 2000. The enhanced surveillance data for syphilis is not presented in this report.

Trichomoniasis

The number of trichomoniasis notifications reported between 1989 and 2000 has fluctuated around a mean of 68 per year, peaking in 1991 at 163 (4.6/100,000). During the first 3 quarters of 2001, 42 (1.1/100,000) cases were notified, a decrease of 30% from the first 3 quarters of 2000 when 60 (1.5/100,000) cases were notified. In Q3 2001, all 16 cases notified were female. Where the age group was known (in 37.5% of cases), 0-19 year olds accounted for 0.0% of cases, 50.0% were 20-29, 33.3% were 30-39 and 16.7% were aged 40 years or older.

Appendix A: data tables

*Rates per 100,000 population for 1989 to 1993 are based on the 1991 population census; rates for 1994 to 1999 are based on the 1996 population census and rates for 2000 and 2001 are based on the 2002 population census.

Table 6: Notified sexually transmitted infections from 1989 to 2000

| Sexually Transmitted Infection | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Ano-Genital Warts | 505 | 917 | 1089 | 1066 | 1432 | 1532 | 1972 | 2286 | 2514 | 2886 | 3049 | 3735 |
| Candidiasis | 688 | 1056 | 1257 | 1157 | 1400 | 1360 | 1271 | 1321 | 1521 | 1277 | 1105 | 1095 |
| Chancroid | 2 | 0 | 0 | 2 | 0 | 2 | 3 | 1 | 1 | 0 | 1 | 16 |
| Chlamydia Trachomatis | 174 | 215 | 164 | 192 | 315 | 133 | 245 | 364 | 462 | 646 | 869 | 1343 |
| Genital Herpes Simplex | 78 | 123 | 109 | 125 | 124 | 173 | 198 | 181 | 211 | 243 | 275 | 269 |
| Gonorrhoea | 27 | 90 | 73 | 51 | 24 | 98 | 91 | 83 | 98 | 125 | 175 | 290 |
| Granuloma Inguinale | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| Infectious Hepatitis B | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 2 | 15 |
| Lymphogranuloma Venereum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 2 | 0 |
| Molluscum Contagiosum | 31 | 39 | 43 | 44 | 34 | 56 | 59 | 34 | 74 | 84 | 83 | 118 |
| Non-Specific Urethritis | 600 | 738 | 549 | 585 | 756 | 610 | 781 | 823 | 1034 | 1083 | 1265 | 1726 |
| Pediculosis Pubis | 60 | 70 | 72 | 70 | 77 | 69 | 86 | 79 | 81 | 105 | 113 | 138 |
| Syphilis | 12 | 19 | 20 | 20 | 8 | 11 | 11 | 17 | 16 | 15 | 6 | 46 |
| Trichomoniasis | 51 | 86 | 163 | 41 | 57 | 29 | 60 | 71 | 94 | 38 | 47 | 78 |
| Total | 2228 | 3353 | 3539 | 3353 | 4233 | 4073 | 4781 | 5263 | 6112 | 6503 | 6993 | 8869 |

Table 7: Notified sexually transmitted infections per 100,000* population from 1989 to 2000

| Sexually Transmitted Infection | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|--------------------------------|-------|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Ano-Genital Warts | 14.32 | 26.01 | 30.89 | 30.23 | 40.62 | 42.25 | 54.38 | 63.04 | 69.33 | 79.59 | 84.09 | 95.35 |
| Candidiasis | 19.51 | 29.95 | 35.65 | 32.82 | 39.71 | 37.51 | 35.05 | 36.43 | 41.95 | 35.22 | 30.47 | 27.95 |
| Chancroid | 0.06 | 0.00 | 0.00 | 0.06 | 0.00 | 0.06 | 0.08 | 0.03 | 0.03 | 0.00 | 0.03 | 0.41 |
| Chlamydia Trachomatis | 4.94 | 6.10 | 4.65 | 5.45 | 8.93 | 3.67 | 6.76 | 10.04 | 12.74 | 17.82 | 23.97 | 34.28 |
| Genital Herpes Simplex | 2.21 | 3.49 | 3.09 | 3.55 | 3.52 | 4.77 | 5.46 | 4.99 | 5.82 | 6.70 | 7.58 | 6.87 |
| Gonorrhoea | 0.77 | 2.55 | 2.07 | 1.45 | 0.68 | 2.70 | 2.51 | 2.29 | 2.70 | 3.45 | 4.83 | 7.40 |
| Granuloma Inguinale | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 0.00 |
| Infectious Hepatitis B | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.06 | 0.00 | 0.00 | 0.06 | 0.38 |
| Lymphogranuloma Venereum | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.03 | 0.06 | 0.00 |
| Molluscum Contagiosum | 0.88 | 1.11 | 1.22 | 1.25 | 0.96 | 1.54 | 1.63 | 0.94 | 2.04 | 2.32 | 2.29 | 3.01 |
| Non-Specific Urethritis | 17.02 | 20.93 | 15.57 | 16.59 | 21.44 | 16.82 | 21.54 | 22.70 | 28.52 | 29.87 | 34.89 | 44.06 |
| Pediculosis Pubis | 1.70 | 1.99 | 2.04 | 1.99 | 2.18 | 1.90 | 2.37 | 2.18 | 2.23 | 2.90 | 3.12 | 3.52 |
| Syphilis | 0.34 | 0.54 | 0.57 | 0.57 | 0.23 | 0.30 | 0.30 | 0.47 | 0.44 | 0.41 | 0.17 | 1.17 |
| Trichomoniasis | 1.45 | 2.44 | 4.62 | 1.16 | 1.62 | 0.80 | 1.65 | 1.96 | 2.59 | 1.05 | 1.30 | 1.99 |
| Total | 63.19 | 95.10 | 100.38 | 95.10 | 120.06 | 112.32 | 131.85 | 145.14 | 168.56 | 179.34 | 192.85 | 226.41 |

Table 8: Cumulative notified sexually transmitted infections for Q1 to Q3 2001 and Q1 to Q3 2000

| Sexually Transmitted Infection | Q1 to Q3 2001 | Q1 to Q3 2000 | Increase | % Increase |
|--------------------------------|---------------|---------------|----------|------------|
| Ano-Genital Warts | 3059 | 2737 | 322 | 11.76 |
| Candidiasis | 851 | 851 | 0 | 0.00 |
| Chancroid | 1 | 8 | -7 | -87.50 |
| Chlamydia Trachomatis | 1195 | 965 | 230 | 23.83 |
| Genital Herpes Simplex | 242 | 199 | 43 | 21.61 |
| Gonorrhoea | 275 | 200 | 75 | 37.50 |
| Granuloma Inguinale | 0 | 0 | 0 | 0.00 |
| Infectious Hepatitis B | 26 | 5 | 21 | 420.00 |
| Lymphogranuloma Venereum | 0 | 0 | 0 | 0.00 |
| Molluscum Contagiosum | 92 | 91 | 1 | 1.10 |
| Non-Specific Urethritis | 1228 | 1214 | 14 | 1.15 |
| Pediculosis Pubis | 79 | 100 | -21 | -21.00 |
| Syphilis | 208 | 30 | 178 | 593.33 |
| Trichomoniasis | 42 | 60 | -18 | -30.00 |
| Total | 7298 | 6460 | 838 | 12.97 |

Table 9: Notified sexually transmitted infections per 100,000* population for Q3 2001 and Q3 2000 and cumulative notified cases per 100,000* population for Q1 to Q3 2001 and Q1 to Q3 2000.

| Sexually Transmitted Infection | Q3 2001 | Q3 2000 | Increase | Q1 to Q3 2001 | Q1 to Q3 2000 | Increase |
|--------------------------------|---------|---------|----------|---------------|---------------|----------|
| Ano-Genital Warts | 24.86 | 21.24 | 3.62 | 78.09 | 69.87 | 8.22 |
| Candidiasis | 8.86 | 6.94 | 1.92 | 21.72 | 21.72 | 0.00 |
| Chancroid | 0.00 | 0.13 | -0.13 | 0.03 | 0.20 | -0.17 |
| Chlamydia Trachomatis | 11.26 | 7.91 | 3.35 | 30.51 | 24.63 | 5.88 |
| Genital Herpes Simplex | 1.84 | 1.89 | -0.05 | 6.18 | 5.08 | 1.10 |
| Gonorrhoea | 2.27 | 2.45 | -0.18 | 7.02 | 5.11 | 1.91 |
| Granuloma Inguinale | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Infectious Hepatitis B | 0.23 | 0.13 | 0.10 | 0.66 | 0.13 | 0.53 |
| Lymphogranuloma Venereum | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Molluscum Contagiosum | 0.49 | 0.54 | -0.05 | 2.35 | 2.32 | 0.03 |
| Non-Specific Urethritis | 10.39 | 10.31 | 0.08 | 31.35 | 30.99 | 0.36 |
| Pediculosis Pubis | 0.49 | 0.64 | -0.15 | 2.02 | 2.55 | -0.53 |
| Syphilis | 2.22 | 0.54 | 1.68 | 5.31 | 0.77 | 4.54 |
| Trichomoniasis | 0.41 | 0.69 | -0.28 | 1.07 | 1.53 | -0.46 |
| Total | 63.31 | 53.41 | 9.90 | 186.31 | 164.91 | 21.40 |

Table 10: Notified sexually transmitted infections per 100,000* population by age group (years) Q3 2001

| Sexually Transmitted Infection | 0 - 19 | 20 - 29 | 30 - 39 | 40+ | Unknown | Total |
|--------------------------------|--------|---------|---------|------|---------|-------|
| Ano-Genital Warts | 8.07 | 56.63 | 14.10 | 1.56 | 10.49 | 24.86 |
| Candidiasis | 2.98 | 16.07 | 6.55 | 2.73 | 3.29 | 8.86 |
| Chancroid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Chlamydia Trachomatis | 4.56 | 24.80 | 5.71 | 0.52 | 4.80 | 11.26 |
| Genital Herpes Simplex | 0.88 | 3.12 | 0.67 | 0.06 | 0.94 | 1.84 |
| Gonorrhoea | 0.26 | 3.74 | 1.18 | 0.32 | 1.28 | 2.27 |
| Granuloma Inguinale | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Infectious Hepatitis B | 0.00 | 0.47 | 0.17 | 0.00 | 0.13 | 0.23 |
| Lymphogranuloma Venereum | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Molluscum Contagiosum | 0.35 | 1.40 | 0.34 | 0.00 | 0.10 | 0.49 |
| Non-Specific Urethritis | 1.67 | 24.34 | 9.91 | 0.84 | 4.08 | 10.39 |
| Pediculosis Pubis | 0.26 | 1.09 | 0.34 | 0.00 | 0.18 | 0.49 |
| Syphilis | 0.26 | 3.74 | 5.54 | 1.49 | 0.10 | 2.22 |
| Trichomoniasis | 0.00 | 0.47 | 0.34 | 0.06 | 0.26 | 0.41 |
| Total | 19.29 | 135.88 | 44.83 | 7.60 | 25.66 | 63.31 |

Table 11: Notified sexually transmitted infections per 100,000* population by gender for Q3 2001

| Sexually Transmitted Infection | Male | Female | Unknown | Total |
|--------------------------------|-------|--------|---------|-------|
| Ano-Genital Warts | 23.33 | 26.28 | 0.05 | 24.86 |
| Candidiasis | 2.00 | 15.63 | 0.00 | 8.86 |
| Chancroid | 0.00 | 0.00 | 0.00 | 0.00 |
| Chlamydia Trachomatis | 9.40 | 12.84 | 0.13 | 11.26 |
| Genital Herpes Simplex | 0.92 | 2.74 | 0.00 | 1.84 |
| Gonorrhoea | 3.49 | 1.07 | 0.00 | 2.27 |
| Granuloma Inguinale | 0.00 | 0.00 | 0.00 | 0.00 |
| Infectious Hepatitis B | 0.41 | 0.05 | 0.00 | 0.23 |
| Lymphogranuloma Venereum | 0.00 | 0.00 | 0.00 | 0.00 |
| Molluscum Contagiosum | 0.51 | 0.46 | 0.00 | 0.49 |
| Non-Specific Urethritis | 16.08 | 4.77 | 0.00 | 10.39 |
| Pediculosis Pubis | 0.67 | 0.30 | 0.00 | 0.49 |
| Syphilis | 3.60 | 0.76 | 0.05 | 2.22 |
| Trichomoniasis | 0.00 | 0.81 | 0.00 | 0.41 |
| Total | 60.43 | 65.70 | 0.23 | 63.31 |

Table 12: Notified sexually transmitted infections per 100,000* population by quarter from Q1 1999 to Q3 2001

| Sexually Transmitted Infection | Q1 1999 | Q2 1999 | Q3 1999 | Q4 1999 | Q1 2000 | Q2 2000 | Q3 2000 | Q4 2000 | Q1 2001 | Q2 2001 | Q3 2001 |
|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ano-Genital Warts | 21.01 | 24.96 | 18.50 | 19.61 | 24.33 | 24.30 | 21.24 | 25.48 | 27.06 | 26.17 | 24.86 |
| Candidiasis | 7.42 | 7.25 | 7.53 | 8.27 | 8.09 | 6.69 | 6.94 | 6.23 | 5.67 | 7.20 | 8.86 |
| Chancroid | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.08 | 0.13 | 0.20 | 0.03 | 0.00 | 0.00 |
| Chlamydia Trachomatis | 4.66 | 8.14 | 4.19 | 6.98 | 7.89 | 8.83 | 7.91 | 9.65 | 9.57 | 9.68 | 11.26 |
| Genital Herpes Simplex | 2.59 | 1.46 | 1.05 | 2.48 | 1.91 | 1.28 | 1.89 | 1.79 | 2.48 | 1.86 | 1.84 |
| Gonorrhoea | 0.58 | 1.52 | 1.63 | 1.10 | 1.38 | 1.28 | 2.45 | 2.30 | 2.20 | 2.55 | 2.27 |
| Granuloma Inguinale | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Infectious Hepatitis B | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.26 | 0.18 | 0.26 | 0.23 |
| Lymphogranuloma Venereum | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Molluscum Contagiosum | 0.63 | 0.80 | 0.28 | 0.58 | 0.84 | 0.94 | 0.54 | 0.69 | 0.89 | 0.97 | 0.49 |
| Non-Specific Urethritis | 6.70 | 10.73 | 8.38 | 9.07 | 10.85 | 9.83 | 10.31 | 13.07 | 10.21 | 10.75 | 10.39 |
| Pediculosis Pubis | 0.97 | 0.69 | 0.58 | 0.88 | 0.94 | 0.97 | 0.64 | 0.97 | 0.77 | 0.77 | 0.49 |
| Syphilis | 0.06 | 0.03 | 0.03 | 0.06 | 0.05 | 0.18 | 0.54 | 0.41 | 1.25 | 1.84 | 2.22 |
| Trichomoniasis | 0.28 | 0.41 | 0.25 | 0.36 | 0.46 | 0.38 | 0.69 | 0.46 | 0.38 | 0.28 | 0.41 |
| Total | 44.95 | 55.98 | 42.50 | 49.42 | 56.75 | 54.76 | 53.41 | 61.50 | 60.68 | 62.31 | 63.31 |

Table 13: Notified sexually transmitted infections per 100,000* population for Q3 1995 to 2001

| Sexually Transmitted Infection | Q3 1995 | Q3 1996 | Q3 1997 | Q3 1998 | Q3 1999 | Q3 2000 | Q3 2001 |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Ano-Genital Warts | 13.54 | 15.83 | 14.01 | 18.20 | 18.50 | 21.24 | 24.86 |
| Candidiasis | 7.80 | 9.60 | 11.17 | 7.67 | 7.53 | 6.94 | 8.86 |
| Chancroid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.00 |
| Chlamydia Trachomatis | 1.49 | 2.04 | 2.98 | 3.78 | 4.19 | 7.91 | 11.26 |
| Genital Herpes Simplex | 1.19 | 1.21 | 1.30 | 1.52 | 1.05 | 1.89 | 1.84 |
| Gonorrhoea | 0.63 | 0.61 | 0.77 | 0.97 | 1.63 | 2.45 | 2.27 |
| Granuloma Inguinale | 0.00 | 0.03 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 |
| Infectious Hepatitis B | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.23 |
| Lymphogranuloma Venereum | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 |
| Molluscum Contagiosum | 0.39 | 0.17 | 0.69 | 0.58 | 0.28 | 0.54 | 0.49 |
| Non-Specific Urethritis | 4.69 | 5.57 | 8.49 | 7.58 | 8.38 | 10.31 | 10.39 |
| Pediculosis Pubis | 0.72 | 0.50 | 0.66 | 0.69 | 0.58 | 0.64 | 0.49 |
| Syphilis | 0.03 | 0.06 | 0.06 | 0.03 | 0.03 | 0.54 | 2.22 |
| Trichomoniasis | 0.36 | 0.19 | 0.39 | 0.25 | 0.25 | 0.69 | 0.41 |
| Total | 30.86 | 35.80 | 40.51 | 41.26 | 42.50 | 53.41 | 63.31 |