



2004 Minnesota Sexually Transmitted Disease Statistics

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Overview of Statistics and Highlights: The number of cases and rates (per 100,000 persons) for all reportable bacterial sexually transmitted diseases (STDs) for the years 2000 through 2004 are presented in Table 1 by year of diagnosis. Table 2 displays chlamydia, gonorrhea and primary/secondary syphilis case numbers and rates by residence, age, gender, and race/ethnicity for 2004. Chlamydia and gonorrhea case numbers and rates by county for 2004 are shown in Table 3.

Between 2003 and 2004 in Minnesota, the chlamydia rate increased by 8%. During the same time period, the rates for gonorrhea and primary/secondary syphilis decreased by 8% and 43%, respectively. While the number of cases of early syphilis (which includes primary, secondary, and early latent stages) decreased between 2003 and 2004, from 92 to 48, gay/bisexual males continued to account for the majority (81%) of cases among males. Additionally, thirty-two percent of the MSM diagnosed with early syphilis were co-infected with HIV. Similar trends have been observed in other parts of the country. MDH continues to collaborate with local physicians, clinics, and community-based organizations to increase community awareness and syphilis testing among MSM.

Between 1996 and 2004 the chlamydia rate in Minnesota has doubled. The increase has been seen across gender, geographical areas, age and race groups. In contrast, the gonorrhea rate has stayed constant for the same time period. However, while the overall rate of gonorrhea has stayed constant, over the past three years the prevalence of quinolone-resistant gonorrhea (QNRG) has increased five fold from 1.5% in 2002 to 8.4% in 2004. Of concern is the high prevalence among gay/bisexual males, which has increased from zero in 2002, to 8.9% in 2003, and 26.9% in 2004. Additionally four of the twenty-two cases among gay/bisexual males were also infected with HIV. CDC no longer recommends the use of fluoroquinolones to treat gonorrhea in gay/bisexual males or for persons that may have acquired the infection in Hawaii, California and other areas with high QNRG prevalence (see: <http://www.cdc.gov/mmwr/preview/mmwehtml/mm5316a1.htm>).

STD rates continue to be highest in the seven-county metropolitan area, particularly in the cities of Minneapolis and St. Paul. Adolescents and young adults aged 15-24 years have the highest rates of chlamydia and gonorrhea, whereas the highest rates of primary/secondary syphilis are among persons in older age groups. Gonorrhea rates are comparable for men and women. However, due to more frequent screening among women, the reported rate of chlamydial infection among women is more than twice the rate among men. Rates of STDs remain elevated among communities of color.

Sources and Limitations of Data: In Minnesota, laboratory-confirmed infections of chlamydia, gonorrhea, syphilis, and chancroid are monitored by the MDH through a combined physician and laboratory-based surveillance system. State law (Minnesota Rule 4605.7040) requires both physicians and laboratories to report all cases of these four bacterial STDs directly to the MDH. Other common sexually transmitted conditions caused by viral pathogens, such as herpes simplex virus (HSV) and human papillomavirus (HPV), are not reported to the MDH. Factors that impact the completeness and accuracy of the available data on STDs include: level of screening, individual test-seeking behavior, accuracy of diagnostic tests, and compliance with case reporting. Thus, any changes in STD rates may be due to one of these factors or due to actual changes in STD occurrence.

Population counts used to calculate rates by residence, by gender, and by race/ethnicity were obtained from the U.S. Census Bureau. Rates were calculated using each year's case data and population counts from the 2000 Census. The 2000 Census data on race include the number of persons by race alone or in combination with one or more races. Thus, persons who identified themselves by more than one race are "overcounted" in the denominators.

Table 1. Number of Cases and Rates (per 100,000 persons) of Chlamydia, Gonorrhea, Syphilis, and Chancroid -- Minnesota, 2000 - 2004

| Disease | 2000 | | 2001 | | 2002 | | 2003 | | 2004 | |
|----------------------------|-------|------|-------|------|--------|------|--------|------|--------|------|
| | Cases | Rate | Cases | Rate | Cases | Rate | Cases | Rate | Cases | Rate |
| Chlamydia | 8,147 | 166 | 8,369 | 170 | 10,118 | 206 | 10,807 | 220 | 11,601 | 236 |
| Gonorrhea | 3,189 | 65 | 2,708 | 55 | 3,050 | 62 | 3,237 | 66 | 2,957 | 60 |
| All Stages of Syphilis | 80 | 1.6 | 135 | 2.7 | 149 | 3.0 | 198 | 4.0 | 145 | 2.9 |
| Primary/Secondary Syphilis | 16 | 0.3 | 33 | 0.7 | 59 | 1.2 | 48 | 1.0 | 27 | 0.5 |
| Early Latent Syphilis | 18 | 0.4 | 16 | 0.3 | 23 | 0.5 | 45 | 0.9 | 21 | 0.4 |
| Late Latent Syphilis* | 44 | 0.9 | 81 | 1.6 | 65 | 1.3 | 105 | 2.1 | 95 | 1.9 |
| Other Syphilis | 0 | 0.0 | 3 | 0.1 | 1 | 0.0 | 0 | 0.00 | 1 | 0.02 |
| Congenital Syphilis** | 2 | 3.0 | 2 | 3.0 | 1 | 1.5 | 0 | 0.0 | 1 | 1.4 |
| Chancroid | 0 | 0.00 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

Data exclude federal and private prisoners.

* Late latent syphilis includes neurosyphilis.

** Congenital syphilis rate is expressed per 100,000 live births.

Table 2. Number of Cases and Rates (per 100,000 persons) of Chlamydia, Gonorrhea, and Primary/Secondary Syphilis by Residence, Age, Gender, and Race/Ethnicity -- Minnesota, 2004

| Group | Chlamydia | | Gonorrhea | | Primary/Secondary Syphilis | |
|------------------------|---------------|------------|--------------|-----------|----------------------------|------------|
| | Cases | Rate | Cases | Rate | Cases | Rate |
| Residence* | | | | | | |
| Minneapolis | 2,655 | 694 | 1,055 | 276 | 16 | 4.2 |
| St. Paul | 1,835 | 639 | 545 | 190 | 3 | 1.0 |
| Suburban** | 3,315 | 168 | 794 | 40 | 7 | 0.4 |
| Greater Minnesota | 3,389 | 149 | 467 | 21 | 1 | 0.0 |
| Age | | | | | | |
| <10 yrs | 3 | 0 | 1 | 0 | 0 | 0.0 |
| 10-14 yrs | 119 | 32 | 34 | 9 | 0 | 0.0 |
| 15-19 yrs | 3,623 | 968 | 740 | 198 | 1 | 0.3 |
| 20-24 yrs | 4,426 | 1372 | 929 | 288 | 3 | 0.9 |
| 25-29 yrs | 1,910 | 597 | 503 | 157 | 4 | 1.3 |
| 30-34 yrs | 840 | 238 | 293 | 83 | 3 | 0.8 |
| 35-44 yrs | 539 | 65 | 334 | 41 | 9 | 1.1 |
| 45+ yrs | 141 | 8 | 123 | 7 | 7 | 0.4 |
| Gender | | | | | | |
| Male | 3,081 | 126 | 1,244 | 51 | 24 | 1.0 |
| Female | 8,520 | 343 | 1,712 | 69 | 3 | 0.1 |
| Transgender | -- | -- | 1 | -- | -- | -- |
| Race^/Ethnicity | | | | | | |
| White | 5,048 | 113 | 966 | 22 | 19 | 0.4 |
| Black | 2,956 | 1456 | 1,202 | 592 | 7 | 3.4 |
| American Indian | 396 | 488 | 72 | 89 | 1 | 1.2 |
| Asian/PI | 438 | 260 | 61 | 36 | 0 | 0.0 |
| Other | 465 | 522 | 86 | 97 | 0 | 0.0 |
| Unknown^^ | 2,298 | -- | 570 | -- | 0 | -- |
| Hispanic^^^ | 852 | 594 | 139 | 97 | 0 | 0.0 |
| TOTAL | 11,601 | 236 | 2,957 | 60 | 27 | 0.5 |

Data exclude federal and private prisoners.

* Residence information missing for 407 Chlamydia cases, 96 Gonorrhea cases and zero Primary & Secondary Syphilis cases

** Suburban is defined as the seven-county metropolitan area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties), excluding the cities of Minneapolis and St. Paul.

^ Case counts include persons by race alone. Population counts used to calculate rates include race alone or in combination.

^^ No comparable population data available to calculate rates.

^^^ Persons of Hispanic origin may be of any race.

**Table 3. Number of Cases and Rates* (per 100,000 persons) of Chlamydia and Gonorrhea
by County of Residence -- Minnesota, 2004**

| County | Chlamydia | | Gonorrhea | | County | Chlamydia | | Gonorrhea | |
|-------------------|-----------|------|-----------|------|-----------------|-----------|------|-----------|------|
| | Cases | Rate | Cases | Rate | | Cases | Rate | Cases | Rate |
| Aitkin | 8 | 52 | 1 | - | Marshall | 3 | - | 0 | - |
| Anoka | 529 | 177 | 109 | 37 | Martin | 26 | 119 | 2 | - |
| Becker | 24 | 80 | 1 | - | Meeker | 15 | 66 | 3 | - |
| Beltrami | 158 | 398 | 17 | 43 | Mille Lacs | 35 | 157 | 7 | 31 |
| Benton | 53 | 155 | 4 | - | Morrison | 35 | 110 | 5 | 16 |
| Big Stone | 3 | - | 0 | - | Mower | 59 | 153 | 2 | - |
| Blue Earth | 201 | 359 | 41 | 73 | Murray | 5 | 55 | 0 | - |
| Brown | 16 | 59 | 2 | - | Nicollet | 18 | 60 | 0 | - |
| Carlton | 53 | 167 | 8 | 25 | Nobles | 34 | 163 | 1 | - |
| Carver | 44 | 63 | 8 | 11 | Norman | 3 | - | 0 | - |
| Cass | 39 | 144 | 3 | - | Olmsted | 299 | 241 | 42 | 34 |
| Chippewa | 14 | 107 | 1 | - | Otter Tail | 30 | 52 | 5 | 9 |
| Chisago | 56 | 136 | 6 | 15 | Pennington | 20 | 147 | 1 | - |
| Clay | 67 | 131 | 4 | - | Pine | 27 | 102 | 2 | - |
| Clearwater | 3 | - | 1 | - | Pipestone | 1 | - | 0 | - |
| Cook | 4 | - | 1 | - | Polk | 31 | 99 | 5 | 16 |
| Cottonwood | 22 | 181 | 1 | - | Pope | 2 | - | 0 | - |
| Crow Wing | 79 | 143 | 7 | 13 | Ramsey | 2136 | 418 | 615 | 120 |
| Dakota | 622 | 175 | 134 | 38 | Red Lake | 3 | - | 0 | - |
| Dodge | 16 | 90 | 0 | - | Redwood | 21 | 125 | 2 | - |
| Douglas | 17 | 52 | 0 | - | Renville | 24 | 140 | 0 | - |
| Faribault | 18 | 111 | 0 | - | Rice | 77 | 136 | 10 | 18 |
| Fillmore | 20 | 95 | 1 | - | Rock | 3 | - | 0 | - |
| Freeborn | 64 | 196 | 2 | - | Roseau | 15 | 92 | 1 | - |
| Goodhue | 73 | 165 | 15 | 34 | St. Louis | 457 | 228 | 101 | 50 |
| Grant | 1 | - | 0 | - | Scott | 100 | 112 | 20 | 22 |
| Hennepin | 4084 | 366 | 1450 | 130 | Sherburne | 67 | 104 | 11 | 17 |
| Houston | 26 | 132 | 10 | 51 | Sibley | 15 | 98 | 1 | - |
| Hubbard | 8 | 44 | 1 | - | Stearns | 333 | 250 | 37 | 28 |
| Isanti | 30 | 96 | 5 | 16 | Steele | 58 | 172 | 14 | 42 |
| Itasca | 67 | 152 | 8 | 18 | Stevens | 5 | 50 | 1 | - |
| Jackson | 8 | 71 | 0 | - | Swift | 10 | 84 | 1 | - |
| Kanabec | 13 | 87 | 1 | - | Todd | 9 | 37 | 0 | - |
| Kandiyohi | 77 | 187 | 6 | 15 | Traverse | 1 | - | 0 | - |
| Kittson | 5 | 95 | 0 | - | Wabasha | 37 | 171 | 4 | - |
| Koochiching | 17 | 118 | 1 | - | Wadena | 14 | 102 | 1 | - |
| Lac qui Parle | 1 | - | 0 | - | Waseca | 38 | 195 | 8 | 41 |
| Lake | 7 | 63 | 1 | - | Washington | 290 | 144 | 58 | 29 |
| Lake of the Woods | 2 | - | 2 | - | Watsonwan | 8 | 67 | 2 | - |
| Le Sueur | 19 | 75 | 1 | - | Wilkin | 1 | - | 0 | - |
| Lincoln | 1 | - | 0 | - | Winona | 78 | 156 | 18 | 36 |
| Lyon | 63 | 248 | 11 | 43 | Wright | 76 | 84 | 13 | 14 |
| McLeod | 21 | 60 | 4 | - | Yellow Medicine | 12 | 108 | 0 | - |
| Mahnomen | 10 | 193 | 0 | - | | | | | |

Data exclude federal and private prisoners.

* Rates not computed for counties with fewer than 5 cases.