Sexually Transmitted Disease (STD) Surveillance Report, 2021

Minnesota Department of Health STD Surveillance System
STDs in Minnesota: Number of Cases Reported in 2021

- Total of 33,706 STD cases reported to MDH in 2021:
  - 22,578 Chlamydia cases
  - 9,671 Gonorrhea cases
  - 1457 Syphilis cases (all stages)
  - 0 Chancroid cases
STDs in Minnesota:
Rate per 100,000 by Year of Diagnosis, 2011-2021

* P&S = Primary and Secondary
Interpreting STD Surveillance Data

- Factors that impact the completeness and accuracy of STD data include:
  - Level of STD screening by healthcare providers
  - Individual test-seeking behavior
  - Sensitivity of diagnostic tests
  - Compliance with case reporting
  - Completeness of case reporting
  - Timeliness of case reporting

- Increases and decreases in STD rates can be due to actual changes in disease occurrence and/or changes in one or more of the above factors.

- COVID-19 lockdowns likely played a role in the number of cases reported/diagnosed this past year.
Syphilis

Minnesota Department of Health STD Surveillance System
Syphilis Rates by Stage of Diagnosis, Minnesota, 2011-2021

* P&S = Primary and Secondary
2021 Minnesota Primary & Secondary Syphilis Rates by County

City of Minneapolis: 49.7 per 100,000 (144 cases)
City of St. Paul: 28.4 per 100,000 (37 cases)
Suburban*: 6.7 per 100,000 (104 cases)
Greater Minnesota: 5.9 per 100,000 (131 cases)
Total: 10.6 per 100,000 (416 cases)

*7-county metro area, excluding the cities of Minneapolis and St. Paul
Primary & Secondary Syphilis Infections by Residence at Diagnosis
Minnesota, 2021

Total Number of Cases = 564

Greater MN = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (excluding Minneapolis), Ramsey (excluding St. Paul), Scott, and Washington counties. Greater MN = All other Minnesota counties outside the seven-county metro area.
Primary & Secondary Syphilis Rates by Gender, Minnesota, 2011-2021

![Graph showing primary and secondary syphilis rates by gender in Minnesota from 2011 to 2021.](graph.png)
Primary & Secondary Syphilis Cases by Race
Minnesota, 2021

Total Number of Cases = 564

- White, Non-Hispanic: 42%
- Black, Non-Hispanic: 26%
- American Indian: 10%
- Asian/PI: 3%
- Hispanic: 7%
- Unknown: 12%*

*Includes people reported with more than one race
Primary & Secondary Syphilis Rates by Race/Ethnicity
Minnesota, 2011-2021

* people of Hispanic ethnicity can be of any race.
Topic of Interest: Syphilis Among Females and Congenital Syphilis in Minnesota

Minnesota Department of Health STD Surveillance System
Female Early Syphilis Cases
Minnesota, 2021

Year

Number of Cases


13 22 12 9 6 8 14 2 5 9 14 13 18 30 41 88 87 91 94 173 163 253
Early Syphilis Infections in Females by Residence at Diagnosis
Minnesota, 2021

Total Number of Cases = 253

- Minneapolis: 24%
- Greater MN: 39%
- Suburban: 22%
- St. Paul: 15%

Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (excluding Minneapolis), Ramsey (excluding St. Paul), Scott, and Washington counties. Greater MN = All other Minnesota counties outside the seven-county metro area.
Early Syphilis Cases in Females by Race/Ethnicity
Minnesota, 2021

Total Number of Cases = 253

- White, Non-Hispanic: 33%
- Black, Non-Hispanic: 21%
- American Indian: 26%
- Hispanic: 8%
- Asian/PI: 2%
- Unknown: 10%*

*Includes people reported with more than one race
Congenital Syphilis Rates Among Infants
Minnesota, 2011-2021

Year
Rate per 100,000 live births
0 1.5 0 0 2.9 7 3 15.1 32.3 11.2 15

Count - Rate
Topic of Interest: Early Syphilis Among Men Who Have Sex With Men in Minnesota

Minnesota Department of Health STD Surveillance System
Number of Early Syphilis† Cases by Gender and MSM
Minnesota, 2011-2021

MSM=Men who have sex with men.

Figure does not include cases diagnosed in transgender people

† Early Syphilis includes primary, secondary, and early latent stages of syphilis.
Early Syphilis† Cases Among MSM by Age
Minnesota, 2021

MSM=Men who have sex with men
† Early Syphilis includes primary, secondary, and early latent stages of syphilis.

444 Total Early Syphilis Cases Among MSM
Mean Age = 38 years
Range: 16 to 77 years
Early Syphilis† (ES) Cases Co-infected with HIV, 2011-2021

MSM=Men who have sex with men
† Early Syphilis includes primary, secondary, and early latent stages of syphilis.
Gonorrhea
2021 Minnesota Gonorrhea Rates by County

City of Minneapolis
764 per 100,000 (2,973 cases)

City of St. Paul
514 per 100,000 (1,524 cases)

Suburban*
126 per 100,000 (3,083 cases)

Greater Minnesota
97 per 100,000 (2,430 cases)

Total
182.3 per 100,000 (9,671 cases)
(150 cases missing residence information)

*7-county metro area, excluding the cities of Minneapolis and St. Paul
Gonorrhea Rates by Gender
Minnesota, 2011-2021

Year | Rate per 100,000 people
---|---
2011 | Males 38, Females 48
2012 | Males 53, Females 63
2013 | Males 70, Females 76
2014 | Males 77, Females 67
2015 | Males 92, Females 63
2016 | Males 109, Females 83
2017 | Males 136, Females 110
2018 | Males 159, Females 125
2019 | Males 165, Females 139
2020 | Males 206, Females 179
2021 | Males 202, Females 163
Gonorrhea Rates by Age
Minnesota, 2011-2021

Year
Rate per 100,000 people
105 45 86 103 123 149 217 265 311 388 361
45 65 86 103 123 149 217 265 311 388 361
159 213 177 218 238 302 317 339 553 560 532
227 290 360 362 352 416 491 543 713 642 397

Lines by Age Group:
- 15-19
- 20-24
- 25-29
- 30-39
Age-Specific Gonorrhea Rates by Gender
Minnesota, 2021

Age in Years

- 10-14: Males 6, Females 29
- 15-19: Males 260, Females 466
- 20-24: Males 601, Females 682
- 25-29: Males 600, Females 461
- 30-39: Males 474, Females 316
- 40-44: Males 222, Females 114
- 45-49: Males 108, Females 49
- 50+: Males 45, Females 8

Rate per 100,000 people
Gonorrhea Rates by Race/Ethnicity
Minnesota, 2011-2021

2021 rates compared with white rates:
Black, Non-Hispanic = 20.5x higher
American Indian = 9.2x higher
Asian/PI = 1.5x higher
Hispanic* = 3.7x higher

* people of Hispanic ethnicity can be of any race
Chlamydia

Minnesota Department of Health STD Surveillance System
2021 Minnesota Chlamydia Rates by County

City of Minneapolis: 1,206 per 100,000 (4,613 cases)
City of St. Paul: 894 per 100,000 (2,548 cases)
Suburban*: 348 per 100,000 (7,585 cases)
Greater Minnesota: 306 per 100,000 (7,519 cases)
Total: 425.7 per 100,000 (22,578 cases)

*7-county metro area, excluding the cities of Minneapolis and St. Paul
(315 cases missing residence information)
Age-Specific Chlamydia Rates by Gender, Minnesota, 2021

The diagram shows the rate of chlamydia per 100,000 people by age and gender in Minnesota for the year 2021. It is observed that the highest rates are among individuals aged 20-24, with females having a significantly higher rate compared to males. The rates decrease as age increases, with the lowest rates observed in the 50+ age group.
Chlamydia Rates by Race/Ethnicity Minnesota, 2011-2021 (1/2)

2021 rates compared with white rates:
- Black, Non-Hispanic = 10.3x higher
- American Indian = 4.9x higher
- Asian/PI = 1.9x higher
- Hispanic* = 4.0x higher

* people of Hispanic ethnicity can be of any race
Chlamydia Disproportionately Impacts Youth and Young Adults

MN Population
(n = 5,303,925)

Chlamydia Cases in 2021
(n = 22,578)

- 25-34 yrs: 13%
- 35+ yrs: 53%
- 15-24 yrs: 14%
- <15 yrs: 20%

- 25-29 yrs: 17%
- 30-44 yrs: 18%
- 45+ yrs: 4%
- <15 yrs: 1%
- 15-24 yrs: 60%
Gonorrhea Disproportionately Impacts Youth and Young Adults

**MN Population**
(n = 5,303,925)

- 25-34 yrs: 13%
- 35+ yrs: 53%
- 15-24 yrs: 14%
- <15 yrs: 20%

**Gonorrhea Cases in 2021**
(n = 9,671)

- 30-44 yrs: 34%
- 45+ yrs: 8%
- <15 yrs: 1%
- 25-29 yrs: 20%
- 15-24 yrs: 37%
Chlamydia and Gonorrhea Rates Among Adolescents & Young Adults† by Gender in Minnesota, 2011-2021

Rate = Cases per 100,000 people based on 2010 U.S. Census counts.

† Adolescents defined as 15-19 year-olds; Young Adults defined as 20-24 year-olds.
Summary Characteristics of Adolescents & Young Adults† Diagnosed With Chlamydia or Gonorrhea in 2021

<table>
<thead>
<tr>
<th></th>
<th>Cases</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>5,399</td>
<td>32%</td>
</tr>
<tr>
<td>Female</td>
<td>11,695</td>
<td>68%</td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>6,267</td>
<td>36%</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>5,021</td>
<td>30%</td>
</tr>
<tr>
<td>Am Indian</td>
<td>452</td>
<td>3%</td>
</tr>
<tr>
<td>Asian/PI</td>
<td>563</td>
<td>3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1,604</td>
<td>9%</td>
</tr>
<tr>
<td>Unknown/Other</td>
<td>3,187</td>
<td>19%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17,094</strong></td>
<td></td>
</tr>
</tbody>
</table>

† Adolescents defined as 15-19 year-olds; young adults defined as 20-24 year-olds, excludes 4 transgender + 22 missing/unknown
From 2011-2021, the chlamydia rate increased by 34%. The rate of gonorrhea increased by 324%, syphilis has increased by 305%.

Syphilis has resurfaced in MN over the past decade, with MSM and those co-infected with HIV being especially impacted. However, the number of females impacted is near the record high for the last decade.

People of color continue to be disproportionally affected by all STDs in Minnesota. Disparities in the rates of STDs are not explained by differences in sexual behavior, but are due to differences in health insurance coverage, employment status and access to healthcare with preventative, screening, and treatment services.
Updates to STD Reporting and Current Follow-Up

• A new chlamydia and gonorrhea case report form is available on the MDH website, to accommodate changes in treatment guidelines and highlight DGI reporting.

• The case report form can be filled out and mailed or faxed to MDH at **651-201-4040**.

• More information may be requested on gonorrhea cases for Enhanced Gonorrhea Surveillance as part of the CDC PCHD grant.

• All cases co-infected with early syphilis will continue to be assigned to MDH Partner Services for follow-up.

• All STD cases continue to have the potential for being contacted by MDH for additional follow-up.