
INFECTIOUS DISEASE

Increases in life expectancy over time are associated with reductions in infectious disease mortality, due in part to widespread efforts at immunization. However, infectious diseases remain a major cause of illness, disability, and death. Immunizations can help stop the spread of infectious disease, as can testing and treatment, especially for higher risk populations.



Immunization

Vaccines help protect against diseases, they are safe, and the side effects tend to be mild. They are especially important for preventing illness and death among people who are more susceptible to vaccine-preventable diseases.³⁸

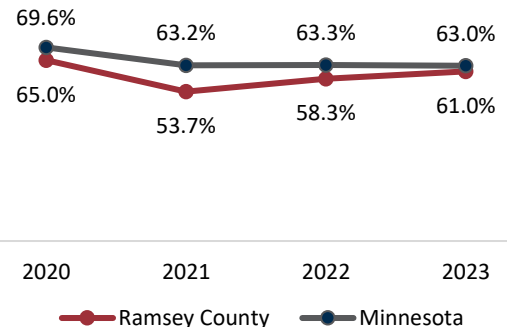
Risk factors

Some children may not have ready access to all the recommended vaccines, and some parents may choose not to vaccinate.¹²⁰ Disparities are seen among BIPOC children, children living in poverty, children in families who are uninsured or under-insured, children living outside of metropolitan areas, and children with at least one foreign-born parent.^{70, 80}

The seven-vaccine series includes a combination of vaccines that include: diphtheria, tetanus, and acellular pertussis (Dtap); polio (IPV); Haemophilus influenza type B (Hib); measles, mumps, and rubella (MMR); Hepatitis B (HepB); pneumococcal conjugate vaccine (PCV); rotavirus; and varicella.²⁰ Completion of the series is recommended by age 24 months.

- Ramsey County saw a drop in the percentage of children receiving the recommended vaccine series during the COVID-19 pandemic. However, rates increased slightly in 2023.
- Statewide vaccination rates remained flat from 2021 to 2023.

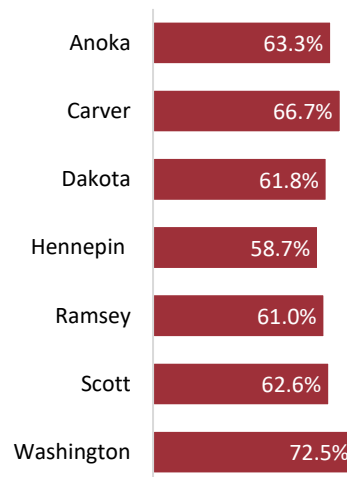
1. Children age 24-35 months who have received the recommended seven-vaccine series



Source: Minnesota Department of Health.¹¹⁶

- With the exception of Hennepin County, Ramsey County's 2023 childhood vaccination rate was slightly lower than other metro-area counties.

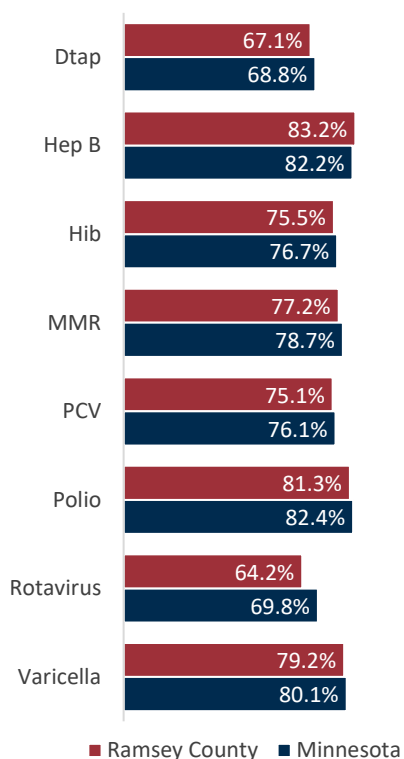
2. Children age 24-35 months who have received the recommended seven-vaccine series by metro-area county, 2023



Source: Minnesota Department of Health.¹¹⁶

- While Ramsey County rates of vaccination among children are similar to the state average for most vaccine types, rates for rotavirus are slightly lower. Rotavirus is a common cause of diarrhea and vomiting among young children.

3. Children ages 24-35 months who have received vaccinations, by type, 2023



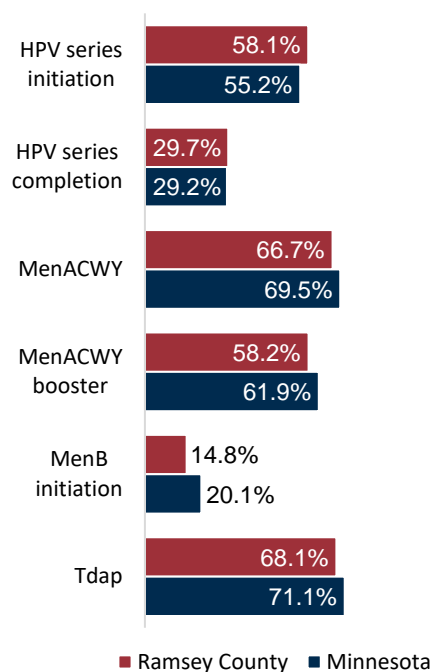
Source: Minnesota Department of Health.¹¹⁶

Recommended vaccines during adolescence include: human papillomavirus (HPV) initiation and completion; meningitis ACWY (MenACWY), a booster which protects against meningococcal groups A, C, W, and Y bacteria; MenB, which protects against meningococcal group B bacteria; and tetanus, diphtheria, and pertussis (Tdap).

- Minnesota adolescents were least likely to have received the recommended MenB vaccine initiation, and Ramsey County adolescents were even less likely compared to the state average.

Only 30% of Ramsey County adolescents completed the HPV vaccine series.

4. Adolescents who received recommended vaccinations, 2023



Source: Minnesota Department of Health.¹¹⁶

HIV and AIDS

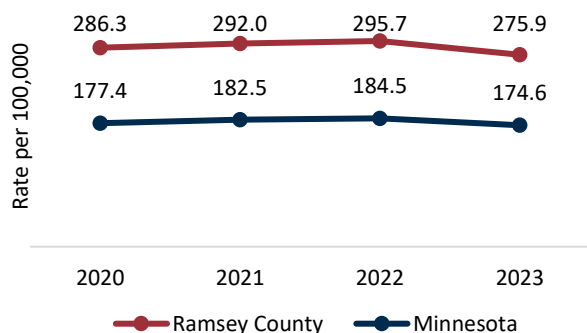
Human immunodeficiency virus (HIV) is the pathogen that causes acquired immunodeficiency syndrome (AIDS). HIV/AIDS cases in Minnesota are relatively low, and deaths due to AIDS have declined sharply due to the availability of better therapies.¹⁰⁴

! Risk factors

While new HIV infections are rising among women, most new cases occur among males. Both African American and African-born men and women are disproportionately affected by HIV/AIDS, as are men who have sex with men. Injection drug use is associated with a high proportion of new HIV cases.¹⁰⁴ As of September 2024, MDH noted that Ramsey and Hennepin Counties were experiencing outbreaks in HIV cases, primarily among individuals who spent time in encampments, individuals who inject drugs, and men who have sex with men and inject drugs. The data are based on new HIV diagnoses on or after December 1, 2018.¹¹¹

- In 2023, Ramsey County had 879 people living with HIV (non-AIDS) and 601 living with AIDS, for a total of 1,480 people and a rate of 275.9 per 100,000. That is considerably higher than the statewide rate of 174.6 per 100,000.
- Ramsey County's 2023 rate reversed an increasing trend from 2020 to 2022 – similar to the pattern seen statewide.

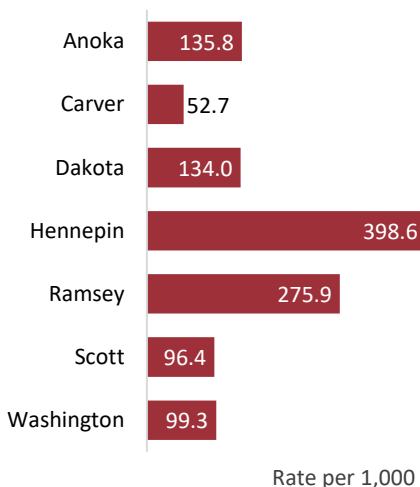
5. People living with HIV and AIDS



Source: Minnesota Department of Health.¹⁰¹

- Ramsey County had the second highest rate in metro-area counties of people living with HIV and AIDS.

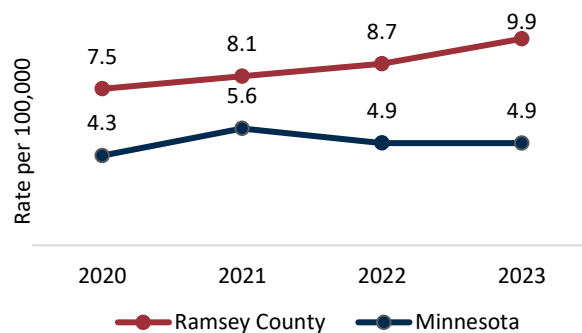
6. People living with HIV and AIDS by metro-area county, 2023



Source: Minnesota Department of Health.¹⁰¹

- The rate of new cases of HIV diagnosis in Ramsey County climbed steadily from 2020 to 2023, creating a widening gap between the county and state rates.

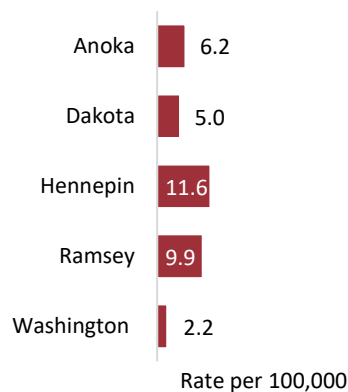
7. New cases of HIV diagnosis (both non-AIDS and AIDS)



Source: Minnesota Department of Health.¹⁰¹

- In 2023, the rate of new HIV diagnoses in the seven county metro were only higher in Hennepin as compared to Ramsey.

8. New cases of HIV diagnosis (both non-AIDS and AIDS) by metro-area county, 2023



Source: Minnesota Department of Health.¹⁰¹

Note: Carver County and Scott County data are suppressed due to small numbers.

- Ramsey County HIV/AIDS rates are considerably higher among males compared to females.

9. New cases of HIV and people living with HIV and AIDS by gender, Ramsey County, 2023

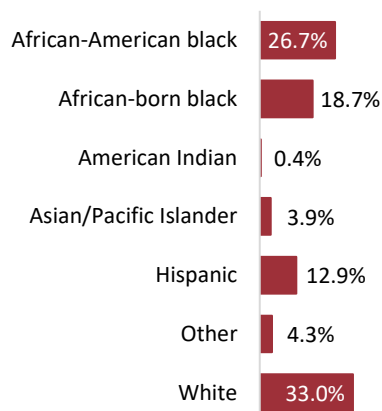
Males	Number of cases	Percentage of cases	Rate per 100,000
New HIV diagnoses	42	79%	15.9
People living with HIV and AIDS	1,039	72%	405.3

Females	Number of cases	Percentage of cases	Rate per 100,000
New HIV diagnoses	11	21%	4.0
People living with HIV and AIDS	411	28%	150.7

Source: Minnesota Department of Health.¹²⁶

- Among Ramsey County residents living with HIV, a third are white and nearly half are Black (African-American or African-born).

10. Ramsey County residents living with HIV by race/ethnicity, 2023



Source: Minnesota Department of Health.¹²⁶

Note: Data on Hispanics is for any race. Data by race include only non-Hispanic individuals.

Sexually transmitted diseases and infections

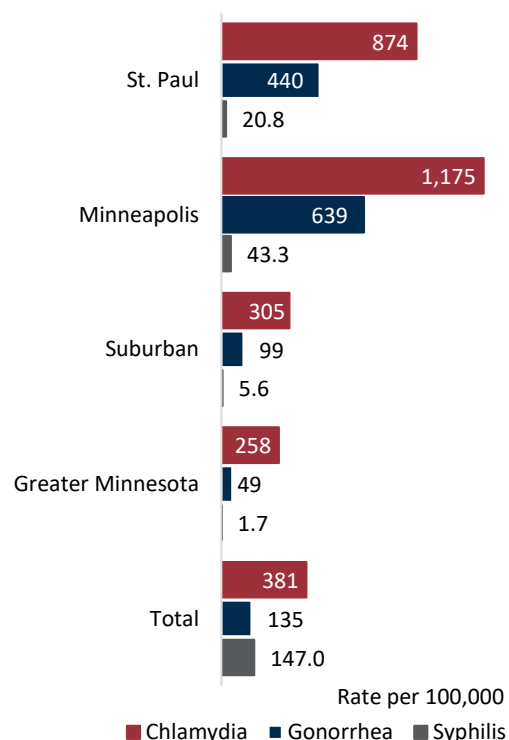
In addition to HIV/AIDS, Minnesota and Ramsey County track sexually transmitted infections (STIs) including chlamydia, gonorrhea, and syphilis.

! Risk factors

People of color and youth ages 15-24 are disproportionately affected by STIs. Risk factors include unprotected sex, transmission through blood, and transmission from mother to child during pregnancy and childbirth.⁸⁸

- Following Minneapolis, St. Paul had the second highest rate of chlamydia, gonorrhea, and syphilis cases in 2023.

11. Sexually transmitted infections, 2023

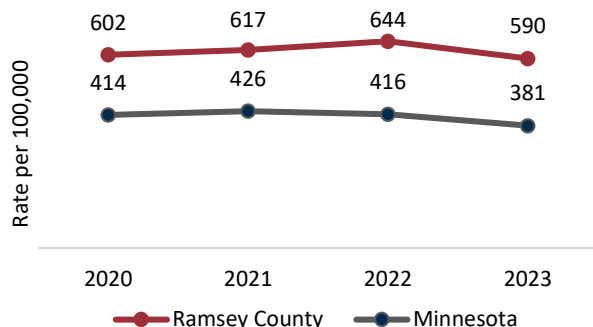


Source: Minnesota Department of Health.¹¹⁸

Note: Suburban includes the seven-county metro area except Minneapolis and St. Paul. Syphilis rates are reported by the Minnesota Department of Health at the tenths place, while chlamydia and gonorrhea rates are reported as whole numbers.

- Ramsey County chlamydia rates increased slightly from 2020 to 2022, then decreased in 2023, but remained consistently higher than the statewide average.

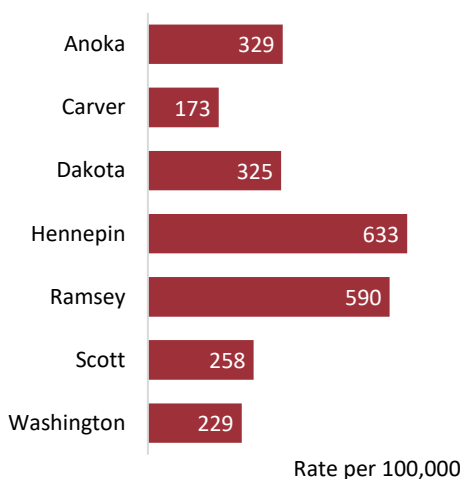
12. Chlamydia cases



Source: Minnesota Department of Health.¹¹⁸

- Ramsey County had the second highest rates of chlamydia cases in metro-area counties in 2023, after Hennepin County.

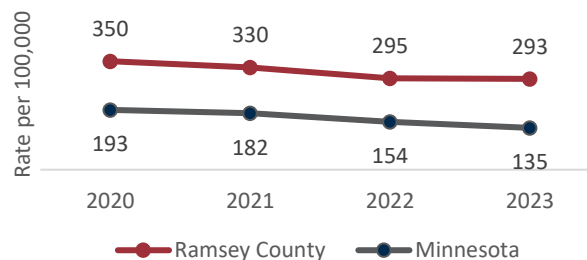
13. Chlamydia cases by metro-area county, 2023



Source: Minnesota Department of Health.¹¹⁸

- While gonorrhea cases have steadily declined from 2020 to 2023, Ramsey County rates remained consistently higher than the statewide average.

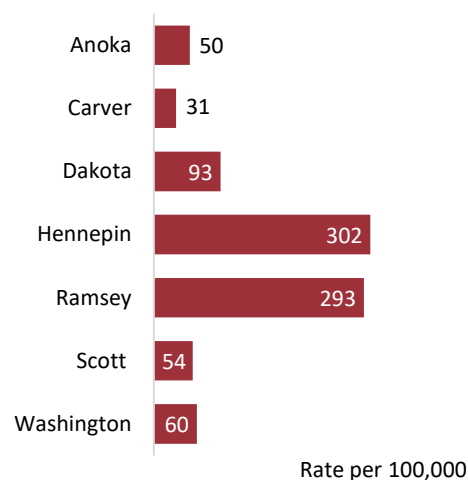
14. Gonorrhea cases



Source: Minnesota Department of Health.¹¹⁸

- Ramsey County had the second highest rate of gonorrhea cases in metro-area counties in 2023, after Hennepin County.

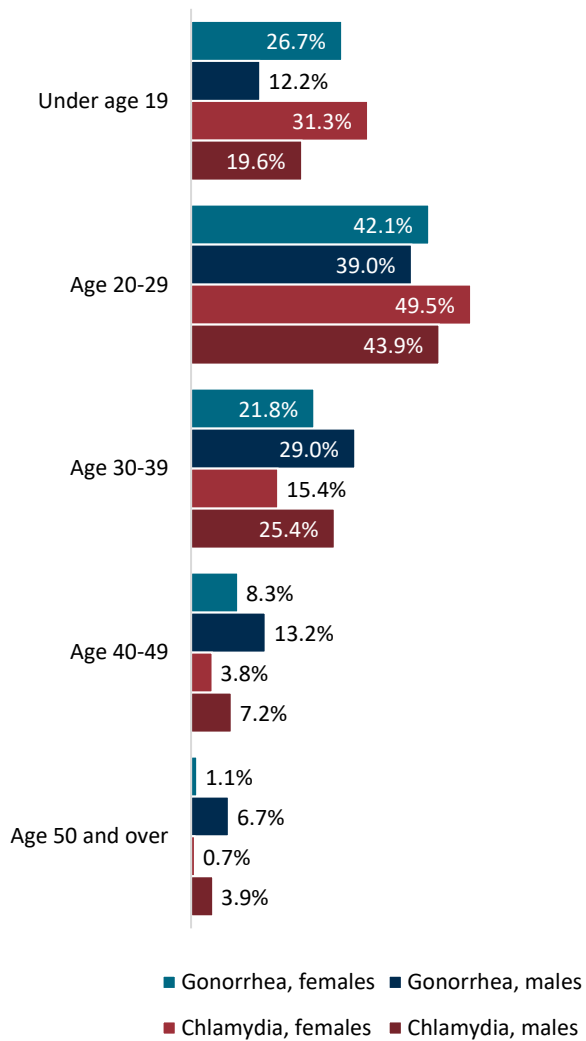
15. Gonorrhea cases by metro-area county, 2023



Source: Minnesota Department of Health.¹¹⁸

- Among adults younger than age 20, rates of chlamydia and gonorrhea are higher among Ramsey County females compared to males. Among adults age 40 and older, rates become higher for males compared to females.

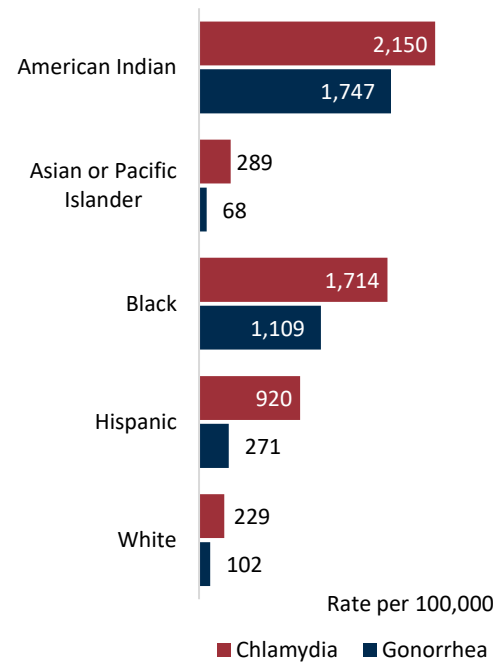
16. Chlamydia and gonorrhea cases by age and gender, Ramsey County, 2023



Source: Minnesota Department of Health.¹¹⁸

■ In 2023, rates of chlamydia and gonorrhea were highest among American Indian Ramsey County residents, followed by non-Hispanic Black residents.

17. Ramsey County chlamydia and gonorrhea cases, 2023



Source: Minnesota Department of Health.¹¹⁸