

2023 MINNESOTA ADOLESCENT SEXUAL HEALTH REPORT

This report details the sexual health of Minnesota's youth. The teen birth rate declined by 3.3% from 2020 to 2021, while the teen pregnancy rate increased by nearly 26%. These are the first data representing experiences of pregnancy and birth during the COVID-19 pandemic, which undoubtedly affected the sexual health of Minnesota's young people. Even with this one-year increase, the teen pregnancy rate among 15–19-year-olds has declined by 71.2% since 1990. The teen birth rate decreased by nearly 76% in that same period. Sexually transmitted infections (STIs) continue to decline from their peaks before the COVID-19 pandemic, which affected STI testing and treatment. The percentage of sexually active youth continues to decline and more youth are talking with partners about STIs and pregnancy, but condom use among young people is also down. In response to the data outlined in this report, the following are recommendations from the University of Minnesota Healthy Youth Development – Prevention Research Center (PRC).

RECOMMENDATIONS

- Adolescent sexual health is much more than the absence of pregnancy or sexually transmitted infections. To fully support young people's health, we need to address their physical, social, emotional, and cognitive development, and give them tools to navigate their teen years. When young people have access to education and services, they are more likely to make informed decisions about their sexual health.
- Sexual health disparities persist among youth who are LGBTQ+, gender diverse, pregnant and/or parenting, from rural areas, homeless/runaway, in foster care, in juvenile justice settings, and/or from populations of color. Advocates must work to dismantle systems of power and privilege which perpetuate health inequities and injustices.
- Families and caregivers need to be empowered in their role as sexuality educators. Honest, accurate, and shame-free information from parents, guardians, and other caring adults is critical to raising children who make informed decisions about sex, sexuality, and relationships.
- Young people need and deserve high quality sexual health information that is delivered through an intersectional lens. Intersectionality implores us to expand sexuality education beyond a white-centered, cisgender, and heteronormative perspective. We must also address key social determinants of health including education, employment, income, housing, community safety and vitality, discrimination, family and social supports, and access to quality health care services.
- We are just beginning to understand the impact of the COVID-19 pandemic on the health of
 youth. STIs decreased, but so did access to testing and treatment. The pregnancy rate increased,
 which may be due to reduced access to condoms and contraception. As we move forward postpandemic, clinicians and educators should continue to utilize innovative strategies to meet the
 sexual health needs of youth.



PREGNANCY & BIRTH

Every day in 2021, approximately 8 adolescents became pregnant and 4 gave birth in Minnesota.¹

Trends in Pregnancy and Birth

Overall, the pregnancy rate among adolescents aged 15-19 increased by 25.9% from 2020 to 2021. The birth rate decreased by 3.3%. While the pregnancy rate increased dramatically, the birth rate is at a historic low. From 2020 to 2021, the number of pregnancies among adolescents younger than 15 increased by 31.9%, while the number of births increased by 30%. These changes are magnified because there are so few adolescents in this age group who become pregnant and/or give birth. Still, this represents a 61% decrease in pregnancies and an 72.3% decrease in births to adolescents younger than 15 since 1990 (Tables 1 and 2).

TABLE 1. MINNESOTA ADOLESCENT PREGNANCY STATISTICS, 1990-2021

NUMBER OF PREGNANCIES	1990	2000	2010	2018	2019	2020	2021	CHANGE SINCE 1990	CHANGE SINCE 2020
Under 15	159	150	89	25	36	47	62	-61%	31.9%
15-17 years	2803	2411	1479	700	612	595	731	-73.9%	22.9%
18-19 years	5833	5164	3872	2177	1932	1800	2293	-60.7%	27.4%
15-19 years	8636	7575	5351	2877	2544	2395	3024	-65%	26.3%
PREGNANCY RATES PER 1,000	1990	2000	2010	2018	2019	2020	2021	CHANGE SINCE 1990	CHANGE SINCE 2020
15-17 years	33.8	21.9	13.8	5.6	5.7	5.5	6.7	-80.2%	21.8%
18-19 years	92.2	70.9	53.9	27.4	27.7	26.2	33.4	-63.8%	27.5%
15-19 years	59	41.4	29.9	14.3	14.4	13.5	17.0	-71.2%	25.9%

TABLE 2. MINNESOTA ADOLESCENT BIRTH STATISTICS, 1990-2021

NUMBER OF BIRTHS	1990	2000	2010	2018	2019	2020	2021	CHANGE SINCE 1990	CHANGE SINCE 2020
Under 15	94	87	47	20	12	20	26	-72.3%	30%
15-17 years	1648	1710	1072	402	400	380	419	-74.6%	10.3%
18-19 years	3688	3686	2951	1392	1390	1230	1143	-69%	-7.1%
15-19 years	5336	5396	4023	1794	1790	1610	1562	-70.7%	-3%
BIRTH RATES PER 1,000	1990	2000	2010	2018	2019	2020	2021	CHANGE SINCE 1990	CHANGE SINCE 2020
15-17 years	19.9	15.5	10	3.8	3.7	3.5	3.8	-80.9%	8.6%
18-19 years	58.3	50.6	41.1	20.0	19.9	17.9	16.6	-71.5%	-7.3%
15-19 years	36.5	29.5	22.4	10.2	10.1	9.1	8.8	-75.9%	-3.3%

National Comparison

From 1991 to 2021, the birth rate among adolescents aged 15–19 in the United States dropped 78%, reaching a record low of 13.9 births per 1,000 in 2021.2 The decline in adolescent pregnancy over the past two decades is likely due to a combination of improved contraceptive use and delayed initiation of sexual activity.3 More recent declines have mainly been driven by increased use of highly effective contraceptive methods (IUDs and implants) and dual methods.45

Despite reaching historic lows, the United States continues to have one of the highest adolescent pregnancy and birth rates among high-income nations.⁶

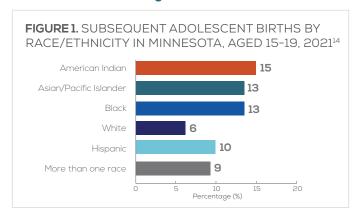
Subsequent Births

(Births to adolescents who have previously given birth):2

Nationally, 17.7% of births to adolescents are subsequent births.¹³ In Minnesota, 12.5% of births to adolescents are subsequent births, which is a 16.6% decrease from 2020.

Pregnancy prevention among adolescent parents is a complex issue. Adolescents who experience a subsequent birth are more likely to: be younger at first sex and first birth; have lower educational expectations and attainment; have intended their first birth; be living with a partner; and have not been employed or in school after their first birth.⁷

In Minnesota, BIPOC (Black, Indigenous, People of Color) youth experience higher percentages of subsequent births (Figure 1).²



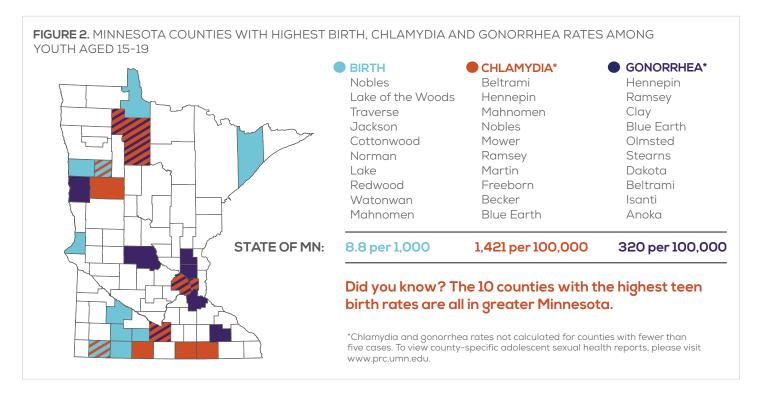
GEOGRAPHIC DISPARITIES**

Pregnancy and birth disproportionately impact greater Minnesota while STIs affect youth regardless of geography.

Although the numbers of pregnancies and births are larger in the Twin Cities metro area, the rates of pregnancies and births are highest in greater Minnesota.

In rural areas, access to confidential, affordable, youth-friendly health care may be limited. There are large geographic disparities in sexual health clinic hours of availability and distance to service. For example, there are 33* sexual health clinics in Hennepin and Ramsey Counties with services available five days per week. In contrast, 37%* of rural counties in Minnesota have no sexual health clinic location in the county itself. In

*Statistics are based on the Minnesota Department of Health directory of Family Planning Special Projects and Title X family planning services. Statistics may not include hospitals and clinics that provide sexual health services.



SEXUALLY TRANSMITTED INFECTIONS (STIS)

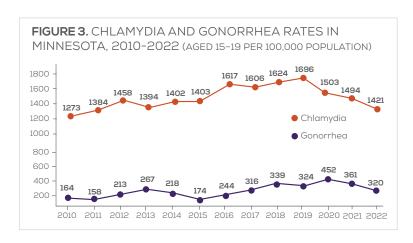
Although they account for only 6.5% of the population in Minnesota, adolescents age 15-19 accounted for 24% of the chlamydia and 14% of the gonorrhea cases in Minnesota in 2022. 9,11

Adolescents experience a disproportionately high rate of STIs, and females have a significantly higher rate of gonorrhea and chlamydia compared to males.

Chlamydia rates were 3 times higher among females (2,219) vs. males (661), and gonorrhea rates were nearly 2 times higher among females (413) vs. males (229).

There were 20 new cases of HIV among 15-19 year olds in Minnesota in 2022, an 82% increase from 2021, when there were 11 new cases diagnosed. There are currently 59 adolescents (aged 15-19) living with HIV in Minnesota. Higher STI rates among young people are likely due to a combination of: biological, behavioral, and cultural factors; barriers to accessing health services such as transportation, cost, and concerns about confidentiality; and peer and media influences. 12

Gonorrhea and chlamydia both decreased slightly among Minnesota youth from 2021 to 2022 (Figure 3).



RACIAL/ETHNIC DISPARITIES^{2,8,9}

Compared to the birth rate for white adolescents:

6X The birth rate for American Indian adolescents is **over 6 times higher**

The birth rate for Black adolescents is almost 4 times higher

adolescents:(Figure 4)

The birth rate for Hispanic adolescents is **almost 5 times higher**

Birth rates for American Indian and Asian/ Pacific Islander adolescents in Minnesota are significantly higher than national figures

From 2020 to 2021, birth rates decreased among white (-3.3%), American Indian (-14.4), and Asian and Pacific Islander youth (-16.9%); they increased slightly among Black (2.8%) and Hispanic (0.8%) youth.

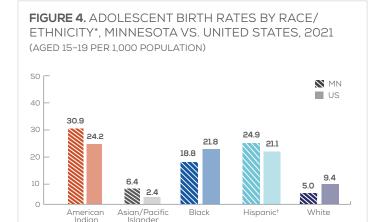
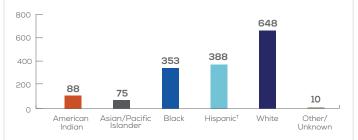


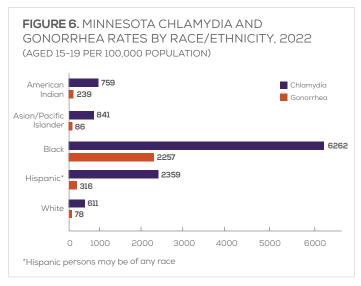
FIGURE 5. NUMBER OF BIRTHS TO YOUTH AGED 15-19 IN MINNESOTA BY RACE/ETHNICITY*, 2021



- * Racial categories are disaggregated as non-Hispanic white and non-Hispanic Black
- † This category represents Hispanic ethnicity, accounting for persons who identify as Hispanic of any race

Sexually Transmitted Infections

STI rates are disproportionately high among BIPOC youth in Minnesota. The rates of chlamydia and gonorrhea are highest among Black and Hispanic youth. The gonorrhea rate is nearly 29 times higher and the chlamydia rate is over 10 times higher among Black youth compared to white youth, who have the lowest STI rates of all racial/ethnic groups.

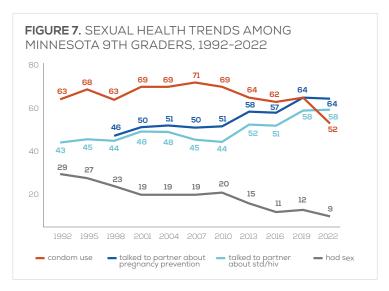


Social Determinants of Health Healthy People 2030

The Healthy People Initiative, now in its 5th iteration, has specific goals for adolescents for Healthy People 2030.15 Social determinants of health (SDOH), like socioeconomic status, access to education, access to health care, neighborhood, environment, and quality of services, all have significant effects on young people.16 SDOH are thought to account for over 50% of our health outcomes, while clinical care only accounts for about 20%. ¹⁷ The behaviors present during adolescence carry into adulthood and can affect one's health and well-being later in life. The risk of preventable health problems is disproportionate for certain races/ethnicities and household income. Experiencing adverse events and dealing with structural racism can increase the likelihood of risky behaviors and poorer health outcomes. By using a Positive Youth Development framework to empower youth and promote healthy behaviors, practitioners and educators can greatly impact health outcomes for the young people they serve.

MINNESOTA STUDENT SURVEY

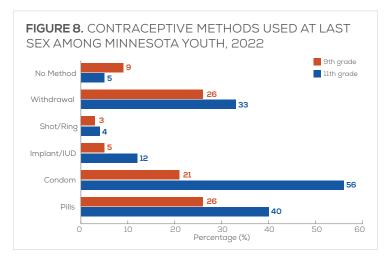
The 2022 Minnesota Student Survey was administered to public school students in grades 5, 8, 9 and 11. In 2022, 70% of Minnesota school districts and 135,000 students participated in the survey (Figure 7).



Sexual Activity

Sexual activity among Minnesota teens is lower than national figures, with 9% of 9th graders and 29% of 11th graders reporting ever having sex in 2022, compared to 16% of 9th graders and 35% of 11th graders in the United States in 2021.¹⁹

Encouragingly, trends indicate that more sexually active youth are talking with their partners about preventing pregnancy (64% of 9th graders; 78% of 11th graders) and protecting against STI/HIV (58% of 9th graders; 70% of 11th graders). The majority of students report no sexual partners within the last year. Of the students who report having had sexual intercourse within the last 12 months, most students report only one partner.



Condom Use

The rate of condom use in 2022 is the lowest in nearly 30 years. Condom use has been slowly declining over the last 15 years, but the change from 2019 to 2022 was dramatic, suggesting that the COVID-19 pandemic may have had an impact on provision of condoms. Further research and additional data is needed to be able to interpret this decrease.

Contraceptive Use

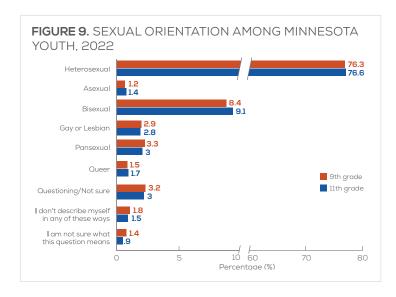
Condoms were the most common contraceptive method reported by 11th graders, but condom use among 9th graders changed dramatically from 2019 to 2022 – a decrease of nearly 67% (Figure 7). Notably, the percentage of youth who reported using withdrawal/pullout method decreased 10% among 9th graders and 7% among 11th graders since 2019. Fewer young people report using the pill as a contraceptive method, while the percentage of youth using shot/ring and implant/IUD increased.

Substance Use

The vast majority of 9th and 11th graders – 86% of sexually active students – reported no alcohol or drug use before last sexual intercourse.

Sexual Orientation

From 2019 to 2022, the number of students who identified as something other than heterosexual (straight) increased dramatically. In 2022, 12% of male high school students and 35% of female high school students identified as something other than heterosexual. These figures were similar among 9th and 11th grade students (Figure 9).



Gender Identity

The 2022 MSS asked students about their gender identity. 11% of students identified as transgender, two-spirit, genderfluid, non-binary (those whose experience of their gender doesn't match their birth-assigned sex), or said they were unsure or didn't answer the question. Importantly, transgender, genderfluid, and genderqueer students are represented throughout Minnesota, in urban, suburban and rural areas alike.

REFERENCES

- 1. Minnesota Department of Health (MDH), Center for Health Statistics. Minnesota Health Statistics Annual Summary, 2023.
- 2. Osterman, M.J.K., Hamilton, B.E., Martin, J.A., Driscoll, A.K., Valenzuela, C.P. (2023). Births: Final Data for 2021. *National Vital Statistics Reports*, 72(1), 1-53. Retrieved from https://www.cdc.gov/nchs/data/nvsr/nvsr72/nvsr72-01.pdf
- 3. Boonstra HD. What is Behind the Declines in Teen Pregnancy Rates? Guttmacher Institute: Policy review. 2014;17(3)15-21.
- 4. Wind R. Declines in Teen Pregnancy Risk Entirely Driven by Improved Contraceptive Use. Guttmacher Institute. https://www.guttmacher.org/news-release/2016/declines-teen-pregnancy-risk-entirely-driven-improved-contraceptive-use. Published August 30, 2016. Accessed April 25, 2023.
- 5. Wind R. U.S. Rates of Pregnancy, Birth and abortion Among Adolescents and Young Adults Continues to Decline. Guttmacher Institute. https://www.guttmacher.org/news-release/2017/us-rates-pregnancy-birth-and-abortion-among-adolescents-and-young-adults-continue. Published September 7, 2017. Accessed April 25, 2023.
- 6. World Development Indicators: Reproductive Indicators. Washington, D.C.: The World Bank Group; 2019. https://data.worldbank.org/indicator/sp.ado.tfrt. Accessed April 27, 2023.
- 7. Association of Maternal & Child Health Programs. Life Course Indicator: Repeat Teen Birth (LC-53). https://amchp.org/wp-content/up-loads/2022/02/LC-54-Teen-Births_Final-9-10-2014.pdf. Published September 2014. Accessed May 5, 2023.
- 8. MDH, Center for Health Statistics. 2021 Birth Data.
- 9. MDH, STD and HIV/AIDS Surveillance System. Surveillance Statistics 2022.
- 10. MDH, Directory of Family Planning Services. https://www.health.state.mn.us/people/womeninfants/familyplanning/directory.html. Updated April 13, 2023. Accessed April 22, 2023.
- 11. United States Census Bureau. State Population by Characteristics: 2020-2022. Annual Estimates of the Resident Population by Single Year of Age and Sex for Minnesota: April 1, 2020 to July 1, 2021 https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-detail.html. Accessed April 26, 2023.
- 12. Centers for Disease Control and Prevention (CDC). Sexually Transmitted Diseases, Adolescents and Young Adults. https://www.cdc.gov/std/life-stages-populations/adolescents-youngadults.htm. Updated April 8, 2021. Accessed April 24, 2023.
- 13. Martin, J.A., Osterman, M.J.K. (n.d.) User Guide to the 2021 Natality Public Use File. Centers for Disease Control and Prevention. Retrieved from https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/DVS/natality/UserGuide2021.pdf
- 14. Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Natality on CDC WONDER Online Database. Data are from the Natality Records 2016-2021, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/natality-expanded-current.html on Apr 30, 2023
- 15. Healthy People 2030: Adolescents. (2023). Office of Disease Prevention and Health Promotion. Retrieved April 23, 2023, from https://health.gov/healthypeople/objectives-and-data/browse-objectives/adolescents. Accessed April 23, 2023.
- 16. Monroe, P., Campbell, J. A., Harris, M., & Egede, L. E. (2023, March 1). Racial/ethnic differences in social determinants of health and health outcomes among adolescents and youth ages 10–24 years old: a scoping review BMC Public Health. BMC Public Health. Retrieved April 23, 2023, from https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-023-15274-x
- 17. Whitman, A., De Lew, N., Chappel, A., Aysola, V., Zuckerman, R., & Sommers, B. D. (2022, April 1). Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts. ASPE Office of Health Policy. Retrieved April 23, 2023, from https://aspe.hhs.gov/sites/default/files/documents/e2b650cd64cf84aae8ff0fae7474af82/SDOH-Evidence-Review.pdf
- 18. MDH, Center for Health Statistics. 2022 Minnesota Student Survey Data
- 19. Centers for Disease Control and Prevention. 2021 Youth Risk Behavior Survey Data. Available at: www.cdc.gov/YRBSS. Accessed on May 5, 2023.
- 20. Minnesota Department of Education. Minnesota Student Survey Reports 2013-2022. Retrieved May 4, 2023 from https://public.education.mn.gov/MDEAnalytics/DataTopic.jsp?TOPICID=242

Suggested citation: Farris, J., Olson, H. (2023). 2023 Adolescent Sexual Health Report. Minneapolis, MN: University of Minnesota Healthy Youth Development – Prevention Research Center.





Healthy Youth Development • Prevention Research Center



For over 30 years, the Centers for Disease Control and Prevention have worked to eliminate health disparities and create healthy communities by funding Prevention Research Centers (PRCs) throughout the United States.

The Healthy Youth Development • Prevention Research Center, housed at the University of Minnesota, Department of Pediatrics, is one in a network of 26 academic centers whose main objective - as a PRC - is to link science to practice through collaborations with public health agencies and community-based organizations.

The HYD•PRC collaborates with state and local organizations and communities to conduct research, provide training, and disseminate actionable knowledge and best practices that promote healthy development and health equity for all youth.

Thanks to the Minnesota Department of Health and the Centers for Disease Control and Prevention for their financial support of this report.