This report details the sexual health of Minnesota’s youth. Overall, there is much to celebrate. Teen pregnancy and birth rates are at historic lows. The adolescent gonorrhea rate continues to decline while the chlamydia rate remains essentially unchanged. Young people are to be commended for making wise and healthy choices about their sexual health. However, many challenges remain. The following recommendations are the University of Minnesota Healthy Youth Development • Prevention Research Center’s (PRC) response to the issues outlined in this report.

RECOMMENDATIONS

• Adolescent sexual health comprises much more than the absence of pregnancy, early childbearing, or infection. To fully support young people’s health, we need to address their physical, social, emotional and cognitive development, and give them skills and supports to navigate healthy relationships.

• Fostering young people’s health, including their sexual health, requires that we address social determinants of health like education, employment, income, housing, community safety and vitality, discrimination, family and social supports, and access to quality health care services.

• The systems that educate young people are not providing the supports needed to ensure overall health, including sexual health. Schools, out-of-school time programs, clinics and faith communities must be better prepared to have open and nonjudgmental conversations with youth.

• Parents need to be supported in their role as sexuality educators. Honest, accurate and developmentally appropriate information from parents, grandparents, and other adult caregivers is the first step toward raising healthy children who make responsible decisions about sex, sexuality and relationships.

• Disparities in pregnancy, birth and STIs persist. We need to assure that programs and services meet the unique needs of youth from underserved populations, including those who are LGBTQ, gender non-conforming, from rural areas, homeless, in foster care, in juvenile justice settings, and/or from populations of color.

• Current Minnesota programs and policies inadequately address the distinct needs of adolescent parents and their children. Young parents need access to confidential sexual health services, high quality education, home visiting services and parenting support.

• Traumatic childhood experiences impact health and health behaviors during adolescence and throughout the life course. Being aware of the potential impacts of adverse childhood events, providing trauma-informed services, and offering strengths-based programs and services are critical to health promotion with vulnerable groups of young people.
PREGNANCY & BIRTH

Every day in 2014, approximately 10 adolescents became pregnant and 7 gave birth in Minnesota.¹

Trends in Pregnancy and Birth

Overall, the birth rate among adolescents age 15-19 in Minnesota decreased 8.1% from 2013 to 2014. Pregnancy rates decreased by 8.2%. Both pregnancy and birth rates are at historic lows, having declined 66% for pregnancy and 58% for births since the early 1990s. Mirroring national trends, the declines are driven by dramatic decreases in rates among Minnesota’s adolescent populations of color.²

The number of pregnancies for adolescents under 15 decreased by 7% and the number of births for this age group decreased nearly 26% from 2013 to 2014. This change is magnified because so few adolescents in this age group become pregnant and give birth each year.

National Comparison

From 2007 to 2014, the birth rate for youth aged 15–19 in the US dropped nearly 45%, reaching a record low of 24 per 1,000 in 2014.³ The overall decline in the adolescent birth rate over the past two decades has been attributed to delayed initiation of sexual activity and improvements in teens’ contraceptive use.⁴⁵

Despite reaching historic lows in 2014, the United States continues to have the highest adolescent pregnancy and birth rates among developed nations. The U.S. teen birth rate is six times higher than Denmark, Japan and the Netherlands, and eight times higher than Switzerland.⁶

Subsequent Births (Additional births to adolescent mothers)⁷

- Nationally, 17% of births to adolescents are subsequent births.
- In Minnesota, 13% of births to adolescents are subsequent births.

Pregnancy prevention among adolescent mothers is a complex issue. Subsequent births to adolescents may be associated with many factors, such as maternal age at first birth, contraceptive use, educational attainment and living with an intimate partner rather than living with a parent.⁸ Education systems offer little support to adolescent parents; when their academic success is curtailed, it may have longer lasting effects on their children’s development than maternal age at first birth.⁹ In Minnesota, teens with the highest percent of subsequent births are from communities of color. Over 22% of births to American Indian and Asian/Pacific Islander youth are subsequent births compared to 10% of births to white adolescents.¹⁰

### FIGURE 1. MINNESOTA ADOLESCENT PREGNANCY STATISTICS, 1990-2014

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<td>Under 15 years</td>
<td>159</td>
<td>154</td>
<td>150</td>
<td>57</td>
<td>53</td>
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<td>-7%</td>
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<td>15–17 years</td>
<td>2803</td>
<td>2782</td>
<td>2411</td>
<td>1004</td>
<td>951</td>
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<td>18–19 years</td>
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<td>4664</td>
<td>5164</td>
<td>2874</td>
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<tr>
<td>15–19 years</td>
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<td>7446</td>
<td>7575</td>
<td>3878</td>
<td>3561</td>
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<td>PREGNANCY RATES PER 1,000</td>
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<td></td>
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<tr>
<td>Under 15 years</td>
<td>33.8</td>
<td>31.2</td>
<td>21.9</td>
<td>9.7</td>
<td>9.1</td>
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<td>40</td>
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<td>47.3</td>
<td>41.4</td>
<td>22.2</td>
<td>20.4</td>
<td>-65.5%</td>
<td>-8.2%</td>
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</tbody>
</table>

### FIGURE 2. MINNESOTA ADOLESCENT BIRTH STATISTICS, 1990-2014

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<td>Under 15 years</td>
<td>94</td>
<td>84</td>
<td>87</td>
<td>31</td>
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<td>15–17 years</td>
<td>1648</td>
<td>1939</td>
<td>1710</td>
<td>758</td>
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<td>18–19 years</td>
<td>3688</td>
<td>3273</td>
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<td>2192</td>
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<tr>
<td>BIRTH RATES PER 1,000</td>
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</tr>
<tr>
<td>Under 15 years</td>
<td>19.9</td>
<td>21.7</td>
<td>15.5</td>
<td>7.3</td>
<td>6.8</td>
<td>-65.8%</td>
<td>-6.8%</td>
</tr>
<tr>
<td>15–17 years</td>
<td>58.3</td>
<td>48.1</td>
<td>50.6</td>
<td>30.5</td>
<td>28.4</td>
<td>-51.3%</td>
<td>-6.9%</td>
</tr>
<tr>
<td>15–19 years</td>
<td>36.5</td>
<td>33.1</td>
<td>29.5</td>
<td>16.9</td>
<td>15.5</td>
<td>-57.6%</td>
<td>-8.1%</td>
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RETHINKING HEALTH DISPARITIES

Taking a broader view of disparities reveals systemic impacts on teen pregnancy and sexual health.

The 2016 Adolescent Sexual Health Report includes data about disparities by race/ethnicity, geographic region and sexual orientation. It highlights how young people are disproportionately impacted by STIs as well as the disparate sexual health outcomes for young people who experience Adverse Childhood Experiences (ACEs). Viewed collectively, this broader grouping of disparities data reveals that not all Minnesota communities receive the same level of support and investment. It also illustrates the need to address systemic influences — economy, housing and employment policies, educational systems — as core strategies for promoting sexual health.

GEOGRAPHIC DISPARITIES

Pregnancy and birth disproportionately impact greater Minnesota counties, while STIs are widespread throughout the state.11,12

Although the numbers of pregnancies, births and STIs are larger in the metro area, these issues also affect greater Minnesota (Figures 3, 4 and 5). In these areas, adolescent sexual health care is often offered in the form of family planning services, which can appear geared toward females. Improving adolescent sexual health in Minnesota requires a heightened focus on rural areas and on serving young men.

FIGURE 3. MINNESOTA COUNTIES WITH HIGHEST BIRTH, CHLAMYDIA AND GONORRHEA RATES AMONG YOUTH AGED 15-19

Did you know? The 10 counties with the highest teen birth rates are all in greater Minnesota.

*Chlamydia and gonorrhea rates not calculated for counties with fewer than five cases. To view county-specific adolescent sexual health reports, please visit prc.umn.edu.

FIGURE 4. CHLAMYDIA CASES AMONG YOUTH AGED 15-19 BY GEOGRAPHIC LOCATION, 2015

Suburban counties: Anoka, Carver, Dakota, Scott, and Washington. All other MN counties are rural.

FIGURE 5. GONORRHEA CASES AMONG YOUTH AGED 15-19 BY GEOGRAPHIC LOCATION, 2015

Total cases = 640
RACIAL/ETHNIC DISPARITIES

The birth rates for American Indian, Black and Hispanic/Latina youth in Minnesota are more than three times greater than that of White youth (Figure 6).

From 2013 to 2014, birth rates decreased among adolescents in every racial group. The birth rate fell most markedly among American Indian and Asian/Pacific Islander youth, which saw declines of 15% and 19%, respectively. Although adolescent pregnancy and birth rates are highest among Minnesota populations of color, the largest number of adolescent births is among White youth, who account for 59% of teen births in Minnesota.

Pregnancy, birth and STI rates among youth continue to vary across racial and ethnic groups in Minnesota. To eliminate these persistent disparities, we must address social determinants of health (i.e. poverty, racism, unequal access to health care and education), which disproportionately affect the health of young people in communities of color.

Sexually Transmitted Infections: STI rates are disproportionately high for populations of color in Minnesota. The rates for both chlamydia and gonorrhea are highest among Black youth, followed by American Indian youth. The gonorrhea rate is 33 times higher for Black youth and 11 times higher for American Indian youth when compared to White youth (Figure 7).

SEXUAL ORIENTATION DISPARITIES

Minnesotan lesbian, gay, bisexual and questioning youth represent a population that has significant sexual health needs. Pregnancy can affect any young person, regardless of their sexual orientation.

Bisexual females are five times more likely to have been pregnant than straight females. Questioning and gay males are four times more likely than straight males to report getting someone pregnant.
ADVERSE CHILDHOOD EXPERIENCES

Young people who experience traumatic childhood events are at increased risk for negative sexual health outcomes during adolescence.

Adverse Childhood Experiences (ACEs) are traumatic events such as abuse, neglect, witnessing crime, parental conflict, parental mental illness and/or parental substance abuse. ACEs can create dangerous levels of stress, disrupt healthy development and result in long-term effects on young people’s health, including their sexual health.20

**ACEs are traumatic events experienced during childhood that include:**
- verbal, physical and sexual abuse by a caregiver,
- parental substance misuse or abuse,
- parental intimate partner violence,
- parental incarceration21

The impact of ACEs is cumulative. With each additional ACE, teens are:
- 49% more likely to have had sex
- 62% more likely to have gotten pregnant or gotten someone pregnant

Data from the Minnesota Student Survey indicate that 30% of 9th graders reported exposure to at least one ACE. Increased exposure to ACEs increases the likelihood of sexual activity in 9th grade students (Figure 11).

**FIGURE 11. THE CUMULATIVE IMPACT OF ACES ON SEXUAL RISK BEHAVIORS**

![Graph showing the cumulative impact of ACEs on sexual risk behaviors](image)

Special thanks to Myriam Forster, MPH, PhD, University of Minnesota IRTCAPC Fellow for her assistance with these analyses.

SEXUALLY TRANSMITTED INFECTIONS

Even though they account for only 7% of the population in Minnesota,22 adolescents aged 15-19 accounted for 24% of chlamydia and 16% of gonorrhea cases in 2015.23

Adolescents and young adults experience a disproportionately high incidence of sexually transmitted infections. This is likely related to a lack of access to STI prevention services, poverty, discomfort with facilities designed for adults and concerns about confidentiality.24

Gonorrhea rates among 15-19 year olds have varied over time, but last year marked a 17% decline in gonorrhea among teens25 (Figure 12). The chlamydia rate for adolescents aged 15-19 increased very slightly, by 0.7%, from 2014 to 201526. Despite the recent leveling off of chlamydia rates, Minnesota has experienced a 51% increase in chlamydia infection among youth in the last decade27. Gonorrhea tends to be reported in certain counties and communities, while chlamydia is widespread throughout the state of Minnesota.

There were 12 new cases of HIV among adolescents ages 13-19 in Minnesota in 2015, which is a decrease of 29% from 2014 when 17 new cases diagnosed among this age group. Even though HIV indiscriminately affects individuals in the general population, HIV cases among Minnesota youth predominantly affect men who have sex with men.28

**FIGURE 12. GONORRHEA AND CHLAMYDIA IN MINNESOTA, 2007 - 2015 (AGED 15-19 PER 100,000 POPULATION)**

![Graph showing gonorrhea and chlamydia rates](image)
ADVERSE CHILDHOOD EXPERIENCES

result in long-term effects on young people's health, including abuse, neglect, witnessing crime, parental conflict, parental substance misuse or abuse, parental incarceration, and parental intimate partner violence. 

The impact of ACEs is cumulative. With each exposure to ACEs increases the likelihood of sexual activity in 9th grade girls. 


For 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 (HYD-PRC), 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 and advance the fields of health promotion and prevention.

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.

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13 MDH, Center for Health Statistics, 2014 Birth Data.
17 Ibid.
18 Ibid.
19 MDH, Center for Health Statistics, 2013 MN Student Survey.
21 Ibid.


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