Sexually Transmitted Diseases among Nebraska Youth

According to the Centers for Disease Control and Prevention (CDC), young people aged 15 to 24 acquire approximately half of all new Sexually Transmitted Diseases (STDs) while making up only about one quarter of the sexually active population. Chlamydia and gonorrhea are the most prevalent STDs for this age group, both nationally and in Nebraska. In 2018, the reported rate of gonorrhea infections per 100,000 Nebraska youth aged 15 to 19 was 137.3 and 788.9 for chlamydia. Significant disparities exist in chlamydia and gonorrhea infections by race and ethnicity.

This is disconcerting because STDs can significantly impact the physical and mental well-being of young people. Specific physical impacts include genital pain and discomfort, pelvic inflammatory disease (PID), ectopic pregnancy, infertility, and increased susceptibility to HIV infection. Moreover, the social stigma surrounding STDS can negatively impact mental health causing feelings of shame, guilt, and anxiety.

Criterion 1: Disparities Exist Related to Health Outcomes

Young people make up a disproportionate amount of new STD infections due to a combination of biological, developmental and cultural factors. ^{2,3,4} In addition to these factors, young Nebraskans who identify as Black or African American, American Indian, Native Hawaiian / Pacific Islander, and Hispanic experience rates of chlamydia and gonorrhea infection at disproportionate rates when compared to White youth.

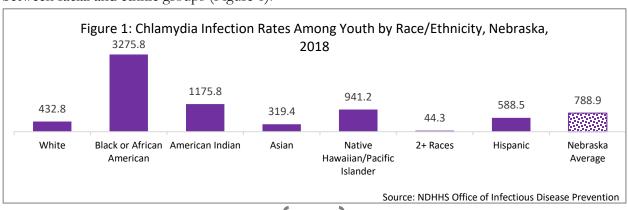
Nebraska rates of infection for both chlamydia and gonorrhea have remained relatively constant over time.

Historical inequities persist among racial and ethnic minorities, with substantial disparities between racial and ethnic groups (Figure 1).⁵

The rates for American Indian (1175.8) and Native Hawaiian / Pacific Islander (941.2) are more than twice that of White (432.8) youth. The most significant disparity exists for Black youth (3275.8) for which the rate is more than seven times higher than White youth and more than twice the rate of the group with the second highest rate, American Indian youth.

Likewise, the rate of gonorrhea has not improved over time. The incidence compared to chlamydia is lower, but disparities among racial and ethnic groups are present (Figure 2).

Particularly noteworthy is the disparity in the rate of gonorrhea among Black youth when compared to all other racial and ethnic groups. Black youth experienced a rate of 903/100,000 compared to 189.6 for American Indian youth, the group with the second highest rate.



The pervasiveness of these infections and their disparate effects on young people are rooted in historical and systemic barriers to education and healthcare. These barriers exist because of, and are perpetuated by, income inequality, racial discrimination, high incarceration rates, oppressive systems of authority, and cultural and linguistic differences.

Criterion 2: Data Exists to Document the Problem

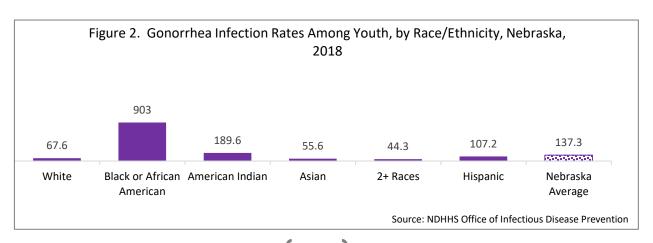
Data from the NDHHS STD program's STD surveillance system documents the rate of chlamydia and gonorrhea infection in youth aged 15 to 19. All reportable STD data is collected confidentially from local health departments that receive the data from providers and laboratories.

The Youth Risk Behavior Survey (YRBS) provides information on behavioral risk. The YRBS is disseminated to a sample of 9th-12th grade public school students in Nebraska every two years. Nebraska has participated in YRBS data collection since 1991. Both data sources are reliable and valid.

Criterion 3: Alignment, use the priority to maximum advantage

Reducing the rates of STDs in Nebraska youth has been identified as a priority at the state and local level. The NDHHS Division of Public Health State receives Personal Responsibility Education Program (PREP) funding and State Sexual Risk Avoidance Education (SRAE) funding. The purpose of PREP funding is to education on abstinence provide contraception to reduce pregnancy and STDs in young people. The purpose of SRAE funding is to provide sexual risk avoidance programming that teaches youth to voluntarily refrain from sexual activity. PREP- and SRAEfunded sites are dispersed throughout the state. The Adolescent Health program targets areas where teen birth and STD rates are high and where disparities in teen birth rates and/or STD rates are documented.

In response to high STD rates in Douglas County, the Women's Fund of Omaha began the Adolescent Health Project to reduce STDs and unintended pregnancy in youth aged 24 and younger. In 2019, Three Rivers Public Health Department completed a Community Health Improvement Plan, with the goal to reduce STI rates and teen pregnancies in youth and young adults. There are currently 10 Title X subrecipients in Nebraska that provide STD testing, treatment, and education on a sliding fee scale. Testing, treatment, and education can also be accessed at Federally Qualified Health Centers, and the Lincoln Lancaster and Douglas County Health Departments.



Criterion 4: Strategies Exist to Address the Problem/An Effective Intervention is Available

Numerous evidence-based and evidence-informed interventions exist to address the rates and behavioral risk factors of STDs in young people. The Office of Adolescent Health (OAH) published a comprehensive list of evidence-based teen pregnancy prevention programs that can be implemented.⁶ The list details curriculum programs that have shown outcomes in reducing recent sexual activity, the number of sexual partners, frequency of sexual activity, contraceptive use and/or consistency, sexual initiation & abstinence, pregnancy or birth, and/or STDs including HIV.

Youth-serving organizations throughout Nebraska have trained facilitators implement evidence-based and evidenceinformed interventions. The Nebraska Adolescent Health program has a network of subrecipients that implement the evidencebased Teen Outreach Program® (TOP®), which is on the OAH list. The TOP® curriculum is medically accurate and uses a comprehensive approach to address sexuality. TOP® has specifically focused on outcomes in pregnancy and birth, but also includes multiple lessons focused on STD prevention and education. The Adolescent Health program has the capacity to partner with entities interested in implementing evidence-based and evidence-informed programs.

The 2020 National Standards for Sex Education (NSES) are designed for adoption by communities, school districts and community organizations. The standards outline core content areas in sexuality education that are evidence-informed, and

developmentally- and age-appropriate for K-12 students.⁷ The NSES can be paired with the Professional Learning Standards for Sex Education (PLSSE), which were created to ensure that educators are equipped with the knowledge and skills needed to effectively teach sex education in the classroom.⁸

Parent-child communication is an effective strategy to delay sexual initiation, increase condom use, and decrease sexual risk behaviors. Pilo Evidence-based and evidence-informed tools and programming have been created to facilitate sexual health conversations between parents/caregivers and their young people. Some examples include the evidence-based Families Talking Together program and the promising, evidence-informed It's That Easy workshops. The Nebraska Adolescent Health program has trained over a dozen facilitators to implement It's That Easy workshops and plan to continue to grow the It's That Easy network.

Criterion 5: Severity of Consequences

Untreated STDs can lead pelvic inflammatory disease, ectopic pregnancy, infertility, and long-term pelvic/abdominal pain. Untreated chlamydia can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease (PID). Symptomatic PID occurs in about 10 to 15 percent of women with chlamydia.3 untreated However, chlamydia also cause subclinical can inflammation of the upper genital tract ("subclinical PID"). Both acute and subclinical PID can cause permanent damage to the fallopian tubes, uterus, and surrounding tissues. The damage can lead to chronic pelvic pain, tubal factor infertility, and potentially fatal ectopic pregnancy.

Some STDs, such as chlamydia and gonorrhea, can be cured with medication. There are limited treatment options for gonorrhea due to antibiotic resistance.¹² When taken properly, medication can stop the infection and decrease chances of fertility complications. It is vital that youth have access to treatment, considering persons infected with Chlamydia or Gonorrhea are more likely to become infected with HIV, if exposed.^{3,13}

If this issue is selected as one of the Title V MCH priority needs in 2020, what do you expect this issue to look like five years from now? What kind of progress can you expect for the next five years?

Title V investment in sexual health and STD education in general will lead to an overall

decrease in STD infections and thus, positively affect the chlamydia and gonorrhea rates. Disparities in the incidence and prevalence of the infections among racial and ethnic minority groups of young people will be positively affected by the support of wide-spread, multitiered systemic changes in health education and delivery of health care to young people. These changes include evaluation of policies, practices and capacities of all youth-serving professionals to ensure that their approaches practices are medically-accurate, developmentally appropriate, inclusive, and youth-friendly. All communities should have trusted adults that are approachable and sources of accurate information to provide clear communication and guidance about sexual health and STDs.

https://siecus.org/wpcontent/uploads/2019/04/PLSSE-FINAL.pdf

¹ STDs in adolescents and young adults. (2019, July 30). Retrieved March 23, 2020, from https://www.cdc.gov/std/stats18/adolescents.htm

² The impact of STDs in different populations. (2010, August 4). Retrieved March 23, 2020, from https://ncsddc.org/resource/the-impact-of-stds-in-different-populations/

³ Centers for Disease Control and Prevention. (2016, October 4). *Chlamydia - CDC Fact Sheet (Detailed)*. Retrieved March 16, 2020, from https://www.cdc.gov/std/chlamydia/stdfact-chlamydia-detailed.htm

⁴ STDs in racial and ethnic minorities. (2019, July 30). Retrieved March 23, 2020, from https://www.cdc.gov/std/stats17/minorities.htm

⁵ Nebraska Department of Health and Human Services Office of Infectious Disease Prevention. STD program sexually transmitted disease surveillance system. ⁶Office of Adolescent Health. (2017, July). Evidencebased teen pregnancy prevention programs at a glance.

⁷ Future of Sex Education. (2020). National sex education standards: Core content and skills, K-12 (second edition). Retrieved March 23, 2020, from https://advocatesforyouth.org/wp-content/uploads/2020/03/NSES-2020-web.pdf

⁸ Sex Education Collaborative. (2018, November). Professional learning standards for sex education. Retrieved March 23, 2020, from

⁹ Family & Youth Services Bureau. (2016, May). *Parent-child communication*. Retrieved March 23, 2020, from https://teenpregnancy.acf.hhs.gov/sites/default/files/resource-files/Parent Child Communication.pdf

¹⁰ Kitchen, E. & Huberman, B. (2011, June). Parent-child communication programs. Advocates for Youth. Retrieved March 23, 2020, from https://advocatesforyouth.org/resources/fact-sheets/parent-child-communication-programs/

¹¹ Advocates for Youth. 3Rs Resources. https://3rs.org/3rs-curriculum/about-3rs/3rs-resources/

¹² Centers for Disease Control and Prevention. (2019, November 5). *Antibiotic* – Resistant Gonorrhea: An Overview. Retrieved March 23, 2020, from https://www.cdc.gov/std/gonorrhea/arg/basic.htm

¹³ Centers for Disease Control and Prevention. (2019, November 5. *Gonorrhea – CDC Fact Sheet (Detailed Version)*. Retrieved April 9, 2020, from https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea-detailed.htm