

Bacterial Sexually Transmitted Diseases in New Mexico

Sexually transmitted diseases (STDs) are the most commonly reported category of infectious diseases in New Mexico and consistently comprise the largest proportion of all infectious diseases reported to the New Mexico Department of Health (NMDOH)¹. The factors influencing the continued epidemic of STDs in New Mexico, and worldwide, are complex due to its origins in human sexual behavior and persistent social problems.

STD prevention requires individual, medical and community-based interventions. It also requires understanding the epidemiology of STDs in New Mexico so that the groups experiencing the greatest burden of disease can be targeted for clinical and preventive services. This report focuses on the epidemiology of the three most prevalent bacterial STDs in New Mexico: chlamydia, gonorrhea and syphilis.

Epidemiology

Chlamydia is the most commonly reported bacterial STD in New Mexico and in the United States. In New Mexico, between 9,000 and 10,000 cases of chlamydia have been reported each year since 2004. In 2008, New Mexico ranked 7th among all states in reported chlamydia rates at 470 cases per 100,000 population.

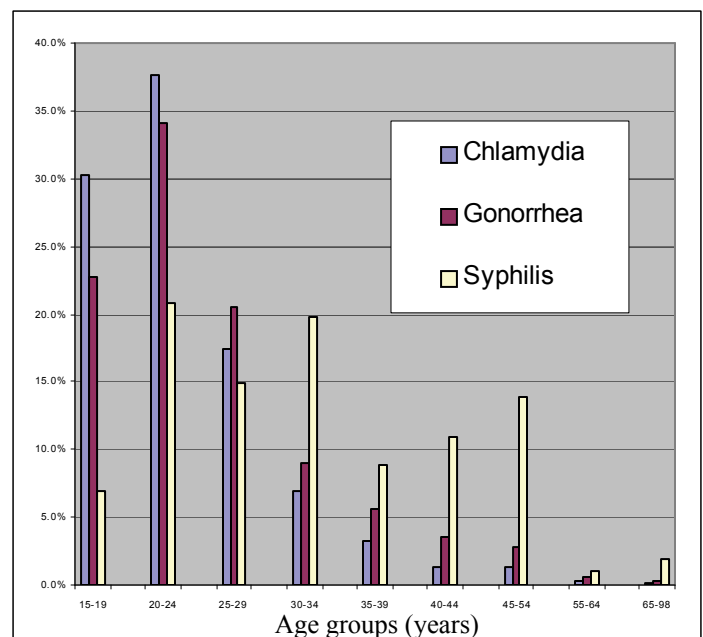
After a peak of nearly 1800 reported cases of gonorrhea in 2007, there has been a 40% decline in gonorrhea cases and rates in New Mexico from 2007 to 2009. Gonorrhea rates in 2009 fell to 54.5 cases per 100,000 population. Data from the first half of 2010 indicate gonorrhea infections appear to be leveling out at between 900 and 1,000 cases per year, similar to levels found in the 1990s.

Both chlamydia and gonorrhea are most common in the 20 to 24 year old age group, followed by teens aged 15 to 19 (Figure 1). Among adolescents and young adults in New Mexico, females have higher

Linda Gorgos, MD, Dan Burke, MPH, David Selvage, MHS, PA-C, Public Health Division; Chad Smelser, MD Epidemiology and Response Division, New Mexico Department of Health

rates of chlamydia and gonorrhea infection than males. Only 13% and 22% of reported chlamydia and gonorrhea infections, respectively, were in people aged 30 years and older in 2009. These patterns are similar to those seen on a national level.

Figure 1. Percentage of selected STDs by Age Group, New Mexico, 2009



Syphilis is a less common, but serious, infection with approximately 100 cases of primary, secondary, and early latent syphilis (defined as “early” syphilis) reported each year in New Mexico since 2007. Cases of early syphilis began rising in 2000, peaking at 169 cases in 2006. Following intensive efforts at screening and case finding, especially in the Four Corners area, early syphilis cases had fallen to 101 cases in 2009. The age distribution for syphilis is very different from that of gonorrhea or chlamydia. Only 44%

of early infections in 2009 occurred in people under age 30, and 28% were in people aged 40 years and older. In New Mexico, syphilis affects mostly men. Eighty-three percent of reported early syphilis cases in 2009 occurred in men, rising to 97% in the first 6 months of 2010. This likely reflects a high incidence of syphilis in men who have sex with men (MSM).

As in the rest of the United States, surveillance data in New Mexico show higher rates of STDs among some racial and ethnic groups compared to Whites (Figure 2). Racial disparities are evident with Native Americans having rates of chlamydia and syphilis in New Mexico that are 4 to 5 times higher than those reported among Whites. African Americans have the highest reported rates of gonorrhea (165 cases per 100,000 versus 27 per 100,000 among Whites) and the second highest rate of chlamydia (565 cases per 100,000 versus 167 per 100,000 among Whites). Rates of chlamydia and gonorrhea in Hispanics are 2 to 2.5 times higher than rates among Whites. Asians have the low

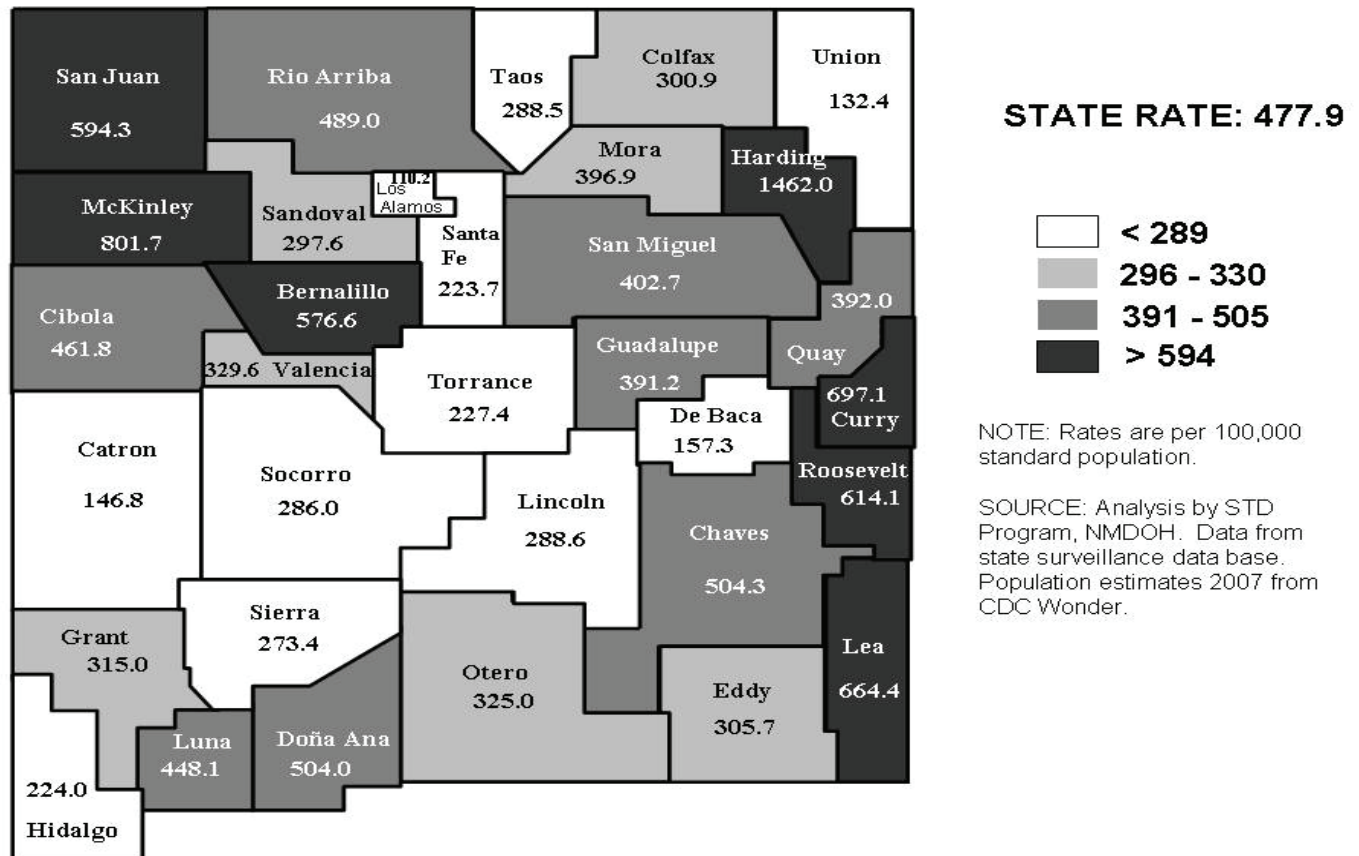
est reported STD rates of all racial/ethnic groups in New Mexico.

Regional Highlights

All three bacterial STDs are concentrated in three areas of New Mexico: the Bernalillo County/Albuquerque metro area, the northwestern counties and the southeastern counties. Chlamydia rates by county reflect the pattern observed for the 3 reportable bacterial STDs discussed in this report (Figure 3). The southern border area with Mexico also has somewhat elevated rates.

McKinley County had the highest rates for chlamydia and syphilis in 2009, while San Juan County had the highest rate for gonorrhea. Bernalillo County had the second highest rates for gonorrhea and syphilis in 2009, and because of its population size, Bernalillo County always has the highest number of cases in the state. The eastern counties of Curry, Lea, Chaves, and Roosevelt have high reported rates for both chlamydia and gonorrhea. While syphilis is completely absent from 2/3 of New Mexico counties in a given year,

Figure 3. Chlamydia Rates by County, New Mexico, 2009



syphilis is not consistently absent. Lea County, for example, had no cases in 2008 but four cases in 2009.

Recommendations

All providers in the state should be aware of the most current STD diagnostic and treatment guidelines. These can be accessed at <http://www.cdc.gov/std/treatment/>. As this report details, a focused approach to STD screening, diagnostic testing and treatment in New Mexico requires an understanding of STD epidemiology in the state.

The following items are important recommendations based on the current STD epidemiology in New Mexico and evidence-based best practices:

- Focus chlamydia screening on women ≤ 25 years of age. This group experiences the highest concentration of cases and is at the highest risk of poor reproductive health outcomes. Routine screening of asymptomatic older men and women, particularly those over age 30 who lack risk factors, is not warranted based on the epidemiology of disease in New Mexico.
- Screen all sexually active women ≤ 25 years of age for chlamydia annually. Though screening rates in the U.S. have improved since 2000, a discrepancy exists between the percentage of women ≤ 25 years of age receiving annual Pap testing (74%) and the percentage screened for chlamydia (44%)².
- Perform diagnostic testing for chlamydia and gonorrhea on sexually active men and women who present with signs or symptoms suggestive of an STD, such as cervicitis, pelvic inflammatory disease, urethritis, epididymitis, proctitis or a penile or vaginal discharge.
- Ask patients about the type of sex they have (oral, vaginal, anal) in order to target testing. STDs can infect and be transmitted from multiple anatomic sites. This is of particular importance for men who have sex with men (MSM), in whom gonorrhea and chlamydia infections may be isolated to the rectal or pharyngeal space and be missed by urine based screening alone. The highly sensitive nucleic acid amplification test (NAAT) for chlamydia and gonor-

rhea can be used to test for pharyngeal, rectal, cervical and urethral infections.

- Due to increasing antimicrobial drug resistance, treatment recommendations for gonorrhea are changing in 2010. New recommendations are to treat uncomplicated gonorrhea of the urethra, cervix or rectum with ceftriaxone 250mg IM x 1, or cefixime 400mg one tab PO x 1 (cefpodoxime 400mg one tab PO x 1 is an acceptable oral alternative). Treat patients with gonorrhea presumptively for concurrent chlamydia infection unless chlamydia has been ruled-out with a highly sensitive NAAT.
- Treat gonorrhea of the pharynx with ceftriaxone 250mg IM x 1. Oral agents are NOT recommended for the treatment of pharyngeal gonorrhea due to low cure rates of this infection with oral agents.
- Utilize Expedited Partner Treatment (EPT). EPT is legal in New Mexico, and is an accepted method for treating male and female sex partners of known chlamydia, gonorrhea and trichomoniasis cases without having to perform a prior medical evaluation. There are, however, certain exceptions. Pregnant female partners of known STD cases should always be evaluated before STD treatment. Partners of MSM should always be evaluated before treatment because of their increased risk of concurrent HIV and syphilis. Partners of patients diagnosed with syphilis should always be evaluated and tested for syphilis and HIV before receiving treatment. In general, it is best for female partners to have a medical evaluation as a part of STD treatment. For detailed EPT guidelines, please visit the EPT website at <http://nmhealth.org/IDB/ept.shtml>

¹ Reportable STDs in New Mexico include: chancroid, *Chlamydia trachomatis* infections, gonorrhea, HIV, HPV, and syphilis. HPV, in the form of all positive and negative Papanicolaou, cervical pathology and HPV test results, has been reportable to the New Mexico HPV Pap Registry since 2006.

² Centers for Disease Control and Prevention, Chlamydia Screening Among Sexually Active Young Female Enrollee of Health Plans-United States, 2000-2007, MMWR 2009; 58 (14): 362-365

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C. Mack Sewell, Dr.P.H., M.S.
State Epidemiologist

Michael G. Landen, M.D., M.P.H.
Deputy State Epidemiologist & Editor

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1190 St. Francis Dr.

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Figure 2. Chlamydia and Gonorrhea Rates by Race/Ethnicity New Mexico, 2009

