

Sexually Transmitted Diseases in Texas, 2006

Syphilis

Syphilis is a sexually transmitted disease caused by the spirochete *Treponema pallidum*. Primary and secondary (P&S) syphilis, the acute form of the disease, is characterized by primary lesions (an ulcer or chancre at the site of infection) followed by secondary infection (manifestations that include rash, mucocutaneous lesions, and adenopathy). Untreated P&S syphilis progresses into a chronic disease with long periods of latency. Statewide, 1,066 cases of P&S syphilis were reported in 2006, a 21% increase from 879 cases reported in 2005 and the sixth straight year of rising case reports (Figure 1). The largest P&S syphilis increases in Texas were seen in Harris, Tarrant, Bexar and Angelina Counties in 2006. Ellis and Ector Counties also experienced syphilis spikes that were smaller in scale but drew attention because these areas typically report very little syphilis.

The overall state rate for P&S syphilis in 2006 was 4.5 cases per 100,000 population. Men accounted for 75% of reported cases, up from 72% in 2005 – not a positive sign given recent increases in syphilis among men who have sex with men (MSM). The age distribution of P&S syphilis cases was divided fairly evenly across the three age groups of most common occurrence; 15 to 24 (29%), 25 to 34 (30%), and 35 to 44 (23%) years of age. African Americans continued to account for the largest proportion (52%) of P&S syphilis cases reported in Texas in 2006; the rate of P&S syphilis among African Americans was 21.0 cases per 100,000 population. Although the P&S syphilis rate among African Americans has decreased by over 60% since 1995, it remained disproportionately high compared with rates for Hispanics (3.1 per 100,000) and Whites (2.0 per 100,000) in 2006 (Figure 2). Among African American women, those aged 15 to 24 had the highest rate at 36.4 cases per 100,000 population. The highest rate for African American men was found among an older age group, those aged 25 to 34, at 68.3 cases per 100,000.

Latent syphilis is defined as those periods after infection with *Treponema pallidum* when patients present no symptoms of disease. Patients who have latent syphilis and who acquired syphilis within the preceding year are classified as having early latent syphilis; untreated cases of more than one year's duration are classified as late latent. Tertiary syphilis is the symptomatic late-stage of the disease that may include neurologic and cardiovascular sequelae. The late latent and tertiary stages of syphilis were contracted many years prior to the cases being diagnosed and reported, and syphilis is not as likely to be transmitted in the late stages, thus, there are limited public health implications to these diagnoses.

Like P&S syphilis, the decreases in early latent syphilis seen in the 1990s have been replaced with increases in recent years. The total number of early latent syphilis cases in 2006 was 1,334, up 16% from 1,148 cases in 2005. The overall rate of early latent syphilis in 2006 was 5.7 cases per 100,000 population. The incidence rate for early latent syphilis among African Americans was 24.0 cases per 100,000, compared to 4.6 among Hispanics and 2.3 among Whites.

Congenital syphilis, one of the most serious forms of the disease, can cause abortion, stillbirth, premature delivery, or may lead to other severe complications in the newborn. In 2006, 84 cases of congenital syphilis were reported, up from the 63 cases reported in 2005. Harris County continues to report the most congenital syphilis with 27 cases in 2006, followed by Bexar, Dallas and Tarrant Counties with less than 10 cases each. Statewide, 44% of congenital cases were among Hispanics, 39% among African Americans, and 13% among Whites. Based on 2004 live birth numbers (more recent data was unavailable), the estimated rate of congenital syphilis in 2006 was 22.0 cases per 100,000 live births, up from 16.5 per 100,000 in 2005.

The term 'total syphilis' refers to all reported syphilis cases regardless of the stage of the

disease. Included in this total are congenital, P&S, early latent, late latent, and tertiary syphilis.

In 2006, 4,961 cases of total syphilis were reported, up 13% from 4,374 cases reported in 2005, for a statewide rate of 21.1 cases per 100,000 population.

Chlamydia

The microorganism *Chlamydia trachomatis* is the most common cause of sexually transmitted infections. Reports of chlamydia in 2006 totaled 75,319, up from 71,621 cases in 2005 (Figure 3). Of the total chlamydia cases reported, 80% were among women. Because of the increased risk of severe outcomes among women, including the potential for pelvic inflammatory disease, ectopic pregnancy and the possibility of infecting a newborn child, chlamydia screening programs almost always focus on women and thus, men are less likely to be tested and diagnosed. Women are frequently screened for chlamydia during clinical exams for family planning, prenatal care, and routine Pap smear testing. Because this infection is often asymptomatic, chlamydia case reports are largely dependant upon the volume of screenings being conducted, more so than gonorrhea, for example. Given that men are rarely screened for chlamydia, the incidence of the disease among men is difficult to gauge.

The 2006 chlamydia case rate for women was 512 cases per 100,000 population; with African American women having the highest rate (1,180 per 100,000), followed by Hispanic and White women (603 and 201 per 100,000, respectively). Men showed a similar racial/ethnic distribution to women but with far lower rates. Over 72% of all reported chlamydia patients (over 50,000 cases) were 15 to 24 years of age. The chlamydia rate among women aged 15 to 24 was 2,609 cases per 100,000 population.

Gonorrhea

The bacteria *Neisseria gonorrhoeae* causes gonorrhea, the second most frequently reported sexually transmitted disease in Texas. Left untreated, gonorrhea may lead to sterility in men

and pelvic inflammatory disease, ectopic pregnancy, and sterility in women. The number of gonorrhea case reports increased from 26,016 in 2005 to 30,270 in 2006 (Figure 4). The Texas gonorrhea rate was 129 cases per 100,000 population in 2006, up from 113 per 100,000 in 2005. The rate among women in 2006 (132 per 100,000) was only slightly higher than the rate for men (125 per 100,000).

The gonorrhea rate for African Americans (595 cases per 100,000) was over eight times higher than the rate for Hispanics (72 per 100,000) and over 14 times higher than the rate for Whites (41 per 100,000). African American men had the highest rate of all race/ethnicity-sex groups at 653 cases per 100,000 population. Gonorrhea cases among African Americans aged 15 to 24 accounted for the greatest share of African American cases (63% of those reported); they also represented 33% of all cases reported regardless of race/ethnicity or age.

Among age groups, the highest rates were among those aged 15 to 24 (511 per 100,000) followed by those aged 25 to 34 (214 per 100,000). Women aged 15 to 24 comprised 71% of all female cases; young men in this age group accounted for 50% of all male gonorrhea cases.

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