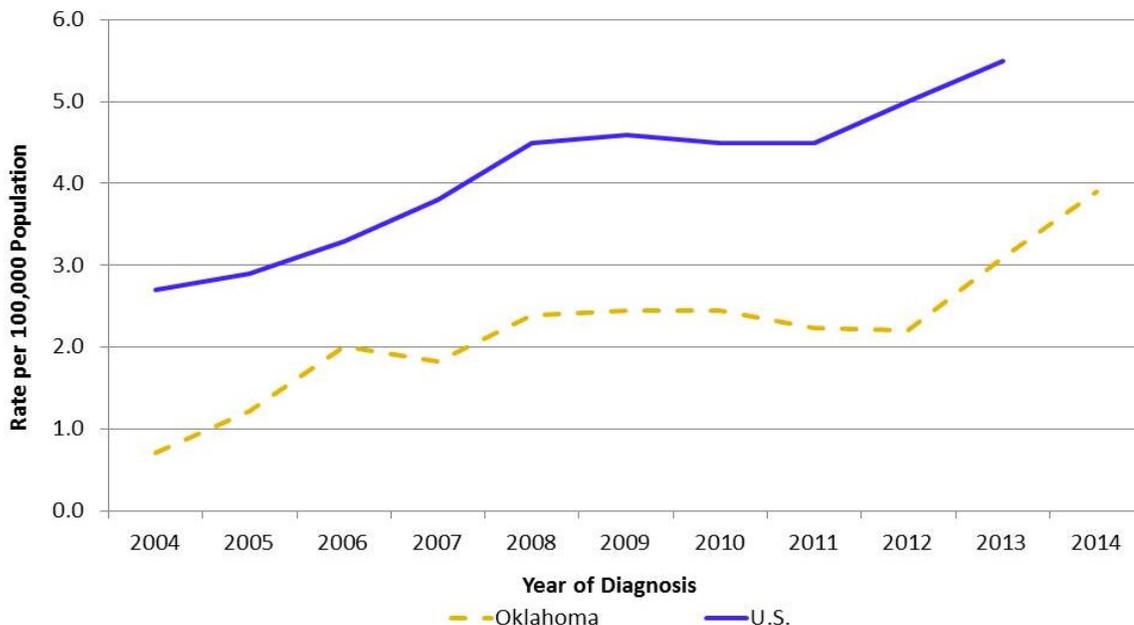


PRIMARY & SECONDARY SYPHILIS

Primary and Secondary Syphilis Rates per 100,000 Population, Oklahoma and U.S. 2004-2014*



*U.S. Data for 2014 not available at the time of this report.

OVERVIEW

Syphilis is a genital, ulcerative sexually transmitted disease caused by the bacterium *Treponema pallidum*. Many signs and symptoms of syphilis are indistinguishable from many other diseases, giving it the nickname “the great imitator”. Syphilis is passed from person to person by direct contact with a syphilis sore or lesion (called a chancre). Typically, syphilis transmission occurs during vaginal, anal, or oral sex. Pregnant females with the disease can also pass it to their unborn children.

In 2014, a total of 151 cases of primary and secondary (P&S) syphilis were reported in Oklahoma, a 28.0% increase in the number of cases from 2013 (118) and a 81.9% increase in the number of cases from 2012 (83). The P&S syphilis rate in 2014 was 3.9 cases per 100,000 in Oklahoma, representing

a 25.8% rate increase from 2013 (3.1 per 100,000) and a 77.3% rate increase from 2012 (2.2 per 100,000).

SYMPTOMS AND COMPLICATIONS

Pregnant females may experience miscarriages, premature births, stillbirths, and death of their newborn babies. Although infected babies may be born without signs or symptoms of the disease, without appropriate treatment babies can die or develop health problems such as cataracts, deafness, or seizures.

Symptoms of syphilis vary among the different stages of the disease process; therefore many people do not have any symptoms for years, but remain at risk for complications that can occur from not receiving treatment.

For More Information Contact:

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PRIMARY & SECONDARY SYPHILIS

The rate of primary and secondary syphilis in Oklahoma increased **25.8%** from 2013 to 2014.

Age groups 25-29 years and 35-39 years had the **largest** rate increases from 2013 to 2014.

P&S syphilis are the earliest and most infectious stages of syphilis. The primary stage of syphilis is generally characterized by the appearance of a single chancre which typically appears within 2-6 weeks after exposure, but may take up to 3 months to appear. The sore appears at the location where syphilis entered the body and is usually firm, round, and painless. These sores typically disappear within a few weeks and heal without treatment. However, even when the chancre heals, the infection will still progress to the secondary stage if left untreated.

Secondary syphilis typically begins with a rash that can develop anywhere on the body. This rash usually does not cause itching and can appear at the same time the chancre is healing or several weeks after the chancre has healed. This rash typically looks like rough, red or reddish brown spots on the palms of the hands and/or the bottoms of the feet, but can look different when on other parts of the body. The rash can also look like rashes caused by other diseases. Additional symptoms include flu-like symptoms, such as fever, chills, and fatigue; broad-based papules (lumps or warts) in warm, moist sites; and mucous patches or snail-track ulcers (sores) in the mouth, appearing 3-6 weeks after the chancre develops. Like primary syphilis, the symptoms will go away with or without treatment, but the infection will still progress to later stages of syphilis.

BY SEX

Males accounted for 90.1% (136) of the P&S syphilis cases in Oklahoma while 9.9% (15) were female. The rate among males (7.1 per 100,000) was 8.9 times higher than the rate for females (0.8 per 100,000). Males

experienced a 29.1% rate increase from 2013 (105 cases; 5.5 per 100,000), while the rate among females increased 14.3% from 2013 (13 cases; 0.7 per 100,000).

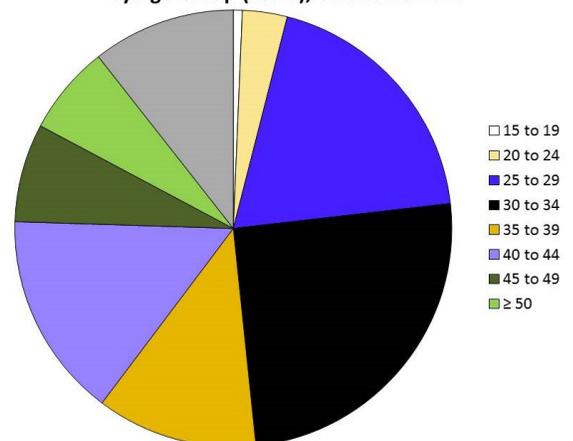
BY AGE

Age groups ordered by P&S Syphilis Rate in 2014:

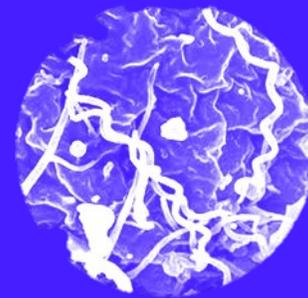
- 25 to 29 years – 14.3 per 100,000
- 20 to 24 years – 10.0 per 100,000
- 35 to 39 years – 9.7 per 100,000
- 30 to 34 years – 6.7 per 100,000
- 40 to 44 years – 4.7 per 100,000
- 45 to 49 years – 4.4 per 100,000
- 15 to 19 years – 1.9 per 100,000
- 50 years and older – 1.2 per 100,000
- 10 to 14 years – 0.4 per 100,000

Age group 25 to 29 years had the highest rate and number of P&S cases in 2014 (38 cases; 14.3 per 100,000). This age group also had the highest rate increase from the previous year, which was almost 3.8 times higher than the rate in 2013 (3.8 per 100,000). Age group 20 to 24 years had the second greatest number of cases and second highest rate (29 cases; 10.0 per 100,000).

Primary and Secondary Syphilis by Age Group (Years), Oklahoma 2014



PRIMARY & SECONDARY SYPHILIS



Representing 15.2% of P&S cases, age group 35 to 39 years had the third most cases and third highest rate (23 cases; 9.7 per 100,000). Additionally, this group experienced the second highest rate increase from 2013, with an increase from 3.4 per 100,000 to 9.7 per 100,000. Age group 30 to 34 years had the fourth most cases and fourth highest rate (18 cases; 6.7 per 100,000). On the other hand, age group 40 to 44 years (11 cases; 4.7 per 100,000) experienced the largest decrease in rate from 2013 (17 cases; 7.2 per 100,000). There were 10 cases (4.4 per 100,000) in the 45 to 49 years age group and 16 cases (1.2 per 100,000) in the greater than 50 years age group. Teenagers, aged 15 to 19 years, had 5 cases at 1.9 per 100,000 and age group 10 to 14 years had 1 case at 0.4 per 100,000.

rate (4.1 per 100,000). Hispanics accounted for 7.9% (12) of cases with a rate of 3.1 per 100,000. All other racial and ethnic groups accounted for 4.6% (7) of the P&S syphilis cases in 2014.

BY MODE OF TRANSMISSION.....

The majority, or 68.9% (104), of Oklahoma's P&S syphilis cases reported MSM¹ as one of their risk factors: this included reports of MSM only (95; 62.9%) or male bisexual² contact (9; 6.0%). Heterosexual contact was the second highest risk reported and made up 27.2% (41) of the cases in 2014 (14 females and 27 males). No risk was reported for 4.0% (6) of the cases (1 female and 5 males).

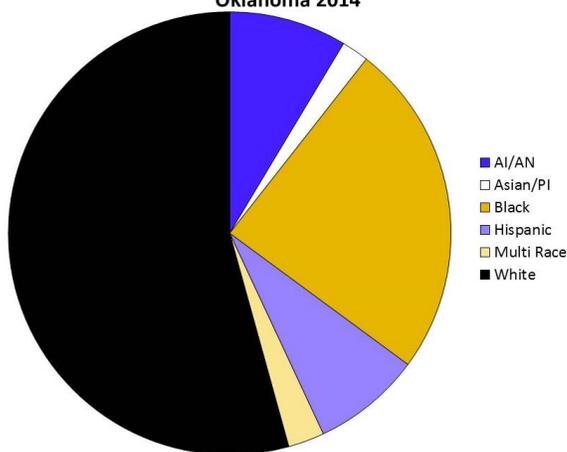
BY GEOGRAPHY.....

Okmulgee County, representing 1.0% of Oklahoma's total population, had the highest rate of P&S syphilis cases in 2014 (4 cases; 10.2 per 100,000 population); over 2.6 times the state rate. Oklahoma County, with 77 cases, had the most cases and second highest rate, reflecting a 9.8% rate increase from 2013 (10.0 per 100,000 compared to 9.1 per 100,000). Tulsa County had the second highest number of cases (22) at a rate of 3.5 per 100,000 (the same number of cases and rate as 2013).

Okmulgee County had the **highest** rate of P&S syphilis in 2014.

68.9% of P&S Cases reported MSM as one of their risk factors.

Primary and Secondary Syphilis by Race/Ethnicity, Oklahoma 2014



BY RACE/ETHNICITY.....

Although Whites accounted for 54.3% (82) of Oklahoma's P&S syphilis cases in 2014, Blacks (37; 24.5%) had a rate 4.0 times higher than that of Whites (12.9 per 100,000 compared to 3.2 per 100,000). American Indians/Alaska Natives accounted for 8.6% (13) of cases and had the second highest

Over half (91; 60.3%) of the 2014 P&S syphilis cases were diagnosed in the Oklahoma City MSA, at a rate of 6.8 per 100,000. Meanwhile, the Tulsa MSA accounted for 17.2% (26) of the cases, with a rate of 2.7 per 100,000. The Lawton MSA had the highest rate among the MSAs at 7.2 per 100,000 and accounted for 6.0% (9) of the cases. There were 25 cases (16.6%) diagnosed in counties that were not part of one of these three MSAs.

¹Men who have sex with men; ²Men who have sex with men and women



Oklahoma State Department of Health