

Syphilis

Agent: *Treponema pallidum* (bacteria)

Mode of Transmission: Through sexual intercourse, from mother to child through the placenta (or during birth) and via blood transfusion from an infected donor in the early stage of disease.

Signs/Symptoms: The primary stage is characterized by a painless sore (called a chancre). The secondary stage includes a skin rash and lesions of the mucous membranes. A latent period follows with no clinical symptoms. If left untreated, late syphilis occurs. The central nervous system, skin, bones and heart may become sufficiently damaged, causing disability or death.

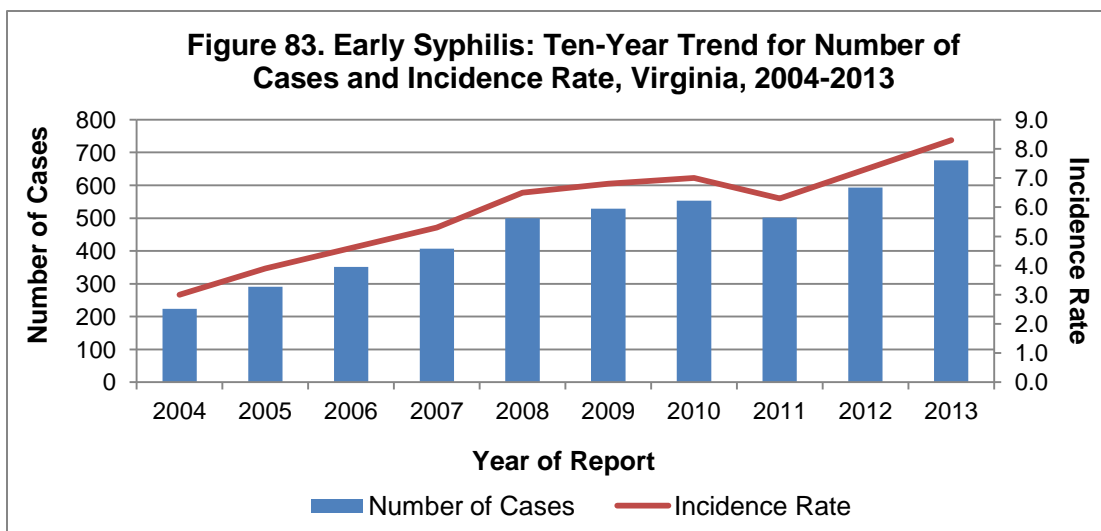
Prevention: Preventive measures include safe sexual practices, screening of all women during early pregnancy to prevent infection of infants and treatment of infected partners.

Other Important Information: Nationwide, the rate of primary and secondary syphilis is on the rise for two populations: men who have sex with men (MSM) and persons of black race.

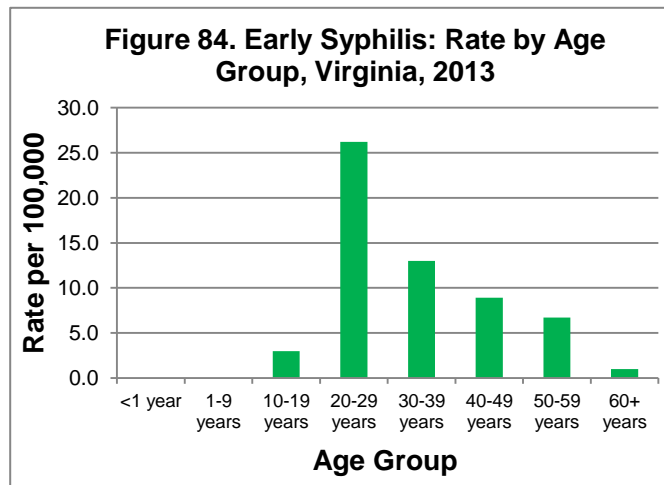
Early Syphilis: 2013 Data Summary	
Number of Cases:	676
5-Year Average Number of Cases:	535.4
% Change from 5-Year Average:	+26%
Incidence Rate per 100,000:	8.3

Early Syphilis

Primary, secondary and early latent (cases diagnosed without signs/symptoms within one year from infection) syphilis are included when the term “early syphilis” is used. There was a considerable increase in early syphilis cases (14%) from the previous year, with 676 cases reported in Virginia during 2013 (Figure 83). Over the past 10 years, the incidence of early syphilis has been on the rise despite a modest drop in 2011. Incidence has almost quadrupled in Virginia from a low of 2.1 per 100,000 in 2003 to 8.3 per 100,000 in 2013. Virginia follows a national trend in early syphilis with a growing gender gap; infections are declining among women and increasing among men.



As in previous years, the highest incidence rate in 2013 occurred in the 20-29 year age group (26.2 per 100,000), followed by the 30-39 year age group (13.0 per 100,000) (Figure 84). No cases were reported in children less than 10 years of age. The incidence rate in the black population (22.0 per 100,000) was over five times the rate in the white population (4.1 per 100,000) and over twice the rate in the “other” race population (10.1 per 100,000). The rising incidence of early syphilis among MSM continues to widen the gender divide. The rate in males was 11 times that in females (15.4 and 1.4 per 100,000, respectively). The



The eastern region continued to lead the state with the highest incidence, while the central region followed closely (12.3 and 11.0 per 100,000, respectively). Since 2006, these two regions have consistently had higher incidence rates of early syphilis than any other Virginia region. Incidence by locality can be seen in the map below.

Congenital Syphilis

Congenital syphilis is a condition affecting an infant whose mother had untreated syphilis or inadequately treated syphilis at delivery. Diagnosis is based on serologic testing of the mother’s serum because the serologic tests performed on the infected infant’s serum can be nonreactive if the antibody level is low or if the mother was infected late in pregnancy. Two cases of congenital syphilis were reported in Virginia in 2013. Not since 2009 has there been more than one case; however, two cases are consistent with the 1.6 cases per year average in Virginia over the preceding 5 years. Nationally, 322 cases of congenital syphilis were reported during 2012, the most recent year for which data are available. The Centers for Disease Control and Prevention considers each case of congenital syphilis in the United States to be a sentinel event representing a public health failure.

Latent Syphilis

Latent syphilis is diagnosed when there is no evidence that infection was acquired within the preceding 12 months. In 2013, 330 cases of latent syphilis were reported in Virginia, which is a 4% increase from the 317 cases reported in 2012. Incidence in the black population was more than 10 times the incidence in the white population (10.4 and 1.0 per 100,000, respectively). While the gender gap is not as considerable as with early syphilis, latent syphilis was diagnosed more frequently in males than in females (4.8 and 3.2 per 100,000, respectively). The highest incidence rate was reported in the 40-49 year age group (7.5 per 100,000). Incidence rates were highest in the northern and central regions, at 5.5 and 5.0 per 100,000, respectively.

Syphilis, Early Stage, Incidence Rate by Locality Virginia, 2013

