

Syphilis

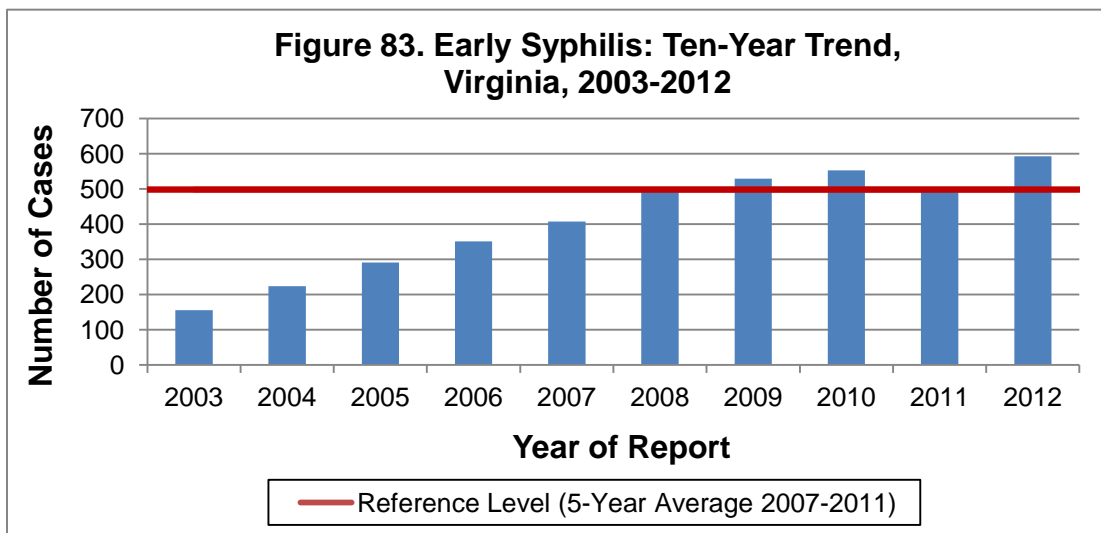
Agent: *Treponema pallidum* (bacteria)

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

Signs/Symptoms: The primary stage is characterized by a chancre. The secondary stage includes a skin rash and lesions of the mucous membranes. A latent period follows with no clinical symptoms. In late syphilis, the central nervous system may become sufficiently damaged, causing death.

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

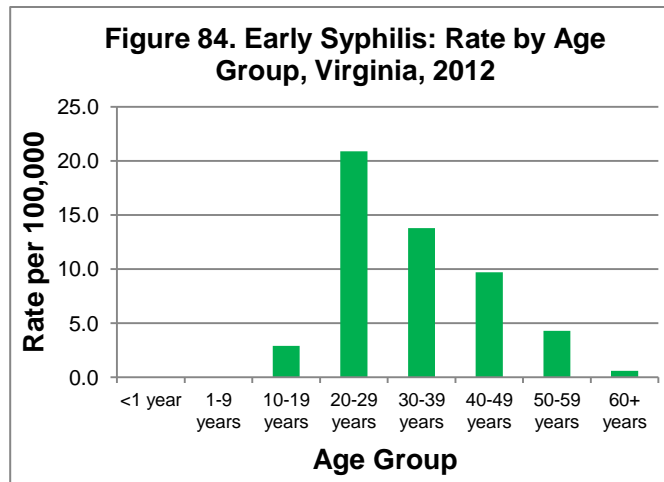
Other Important Information: Nationwide, the rate of primary and secondary syphilis is on the rise for two populations: men who have sex with men (MSM) and persons of black race.



Early Syphilis

Early syphilis includes the primary and secondary stages and early latent syphilis (cases diagnosed without signs and symptoms within one year from the time of infection). There were 593 cases of early syphilis reported in Virginia during 2012, representing an 18% increase from the previous year (Figure 83). Despite a slight decrease in 2011, the number of early syphilis cases has consistently increased over the past 10 years. Incidence tripled in Virginia from a low of 2.1 per 100,000 in 2003 to 7.3 per 100,000 in 2012. Nationally, the overall upward trend masks a growing gender gap; infections are declining among women and increasing among men.

In 2012, the highest incidence rate occurred in the 20-29 year age group (20.9 per 100,000), followed by the 30-39 year age group (13.8 per 100,000) (Figure 84). No cases were reported in children less than 10 years of age. The rate in the black population (20.0 per 100,000) was nearly six times the rate in the white population (3.5 per 100,000), and over twice the rate in the “other” race population (9.3 per 100,000). The rate in males was nearly nine times the rate in females (13.4 and 1.5 per 100,000, respectively). The male to female ratio has risen from approximately 1:1 to nearly 9:1 over the past ten years, which is



indicative of rising syphilis incidence among MSM. The eastern region leads the state in rate of infection, followed closely by the central region (11.1 and 10.8, respectively). Since 2006, these two regions have consistently had higher incidence rates of early syphilis than the other regions.

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 mother’s serologic test result is of low titer or if the mother was infected late in pregnancy. One case of congenital syphilis was reported in Virginia in 2012. This is similar to the average of 1.6 cases per year over the preceding 5 years, when between one and three cases were reported annually.

Latent Syphilis

Latent syphilis occurs when the disease goes untreated. It is diagnosed when there is no evidence that infection was acquired within the preceding 12 months. In 2012, 317 cases of latent syphilis were reported in Virginia, which is a 42% increase from the 224 cases reported in 2011. Incidence in the black population was eleven times the incidence in the white population (11.1 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 (4.7 and 3.2 per 100,000, respectively). The highest incidence rate was reported in the 50-59 year age group (7.0 per 100,000). Incidence rates were highest in the eastern and northern regions, at 5.7 and 4.6 per 100,000, respectively.