

## Syphilis

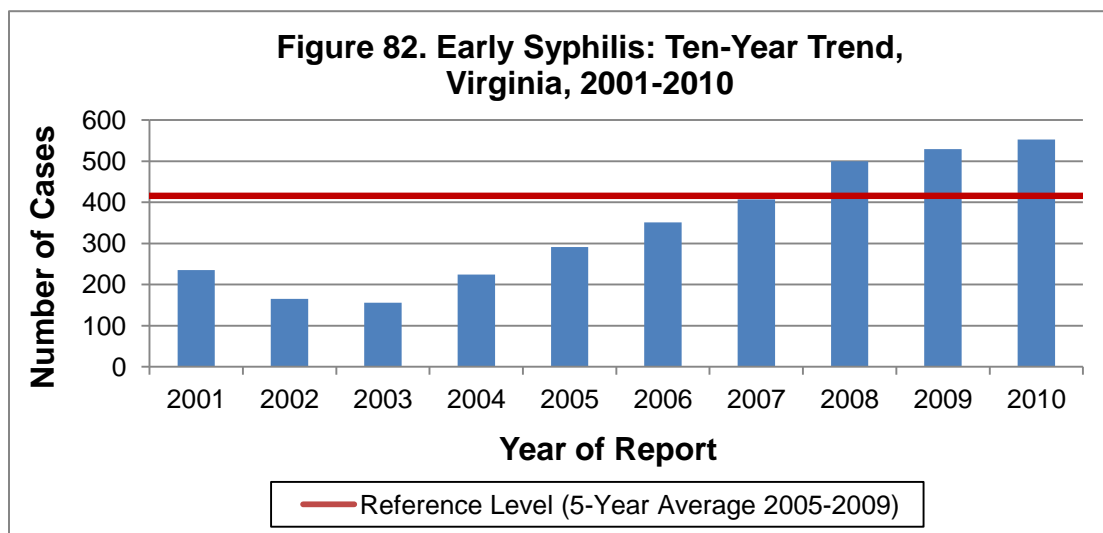
Agent: *Treponema pallidum* (bacteria)

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.

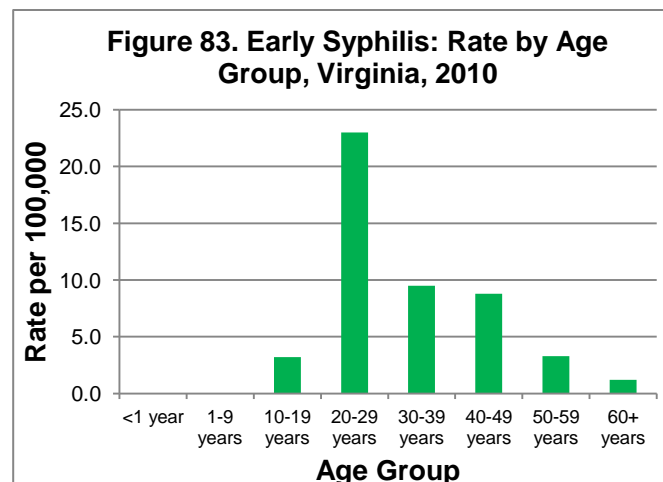
Other Important Information: Nationwide, the rate of primary and secondary syphilis is on the rise for two populations: men who have sex with men (MSM) and persons of black race.



### 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). Mirroring national trends, early syphilis continues to rise in Virginia. There were 553 cases of early syphilis reported in Virginia during 2010 (Figure 82). This is a 33% increase from the five-year average of 415.6 cases per year. Since 2003, incidence has more than tripled in Virginia from 2.1 to 7.0 per 100,000.

The highest incidence occurred in the 20-29 year age group (24.2 per 100,000), followed by the 30-39 year age group (9.4 per 100,000) (Figure 83). The rate in the black population (21.3 per 100,000) was nearly seven times the



rate in the white population (3.1 per 100,000), and more than two times the rate in the “other” race population (8.7 per 100,000). The rate in males was more than eight times the rate in females (12.6 and 1.5 per 100,000, respectively). The male to female ratio has risen from approximately 1:1 to 8:1 over the past ten years, which is indicative of rising syphilis incidence among MSM.

### **Congenital Syphilis**

Congenital syphilis is a condition affecting an infant whose mother had untreated syphilis or inadequately treated syphilis at delivery, regardless of signs in the infant, or an infant or child who has a reactive treponemal test for syphilis. One case of congenital syphilis was reported in Virginia in 2010. This is lower than the average of 2.8 cases per year over the preceding 5 years, when from one to five cases were seen each year.

### **Late Syphilis**

Late syphilis is diagnosed in those patients who have no evidence of having acquired the disease within the preceding 12 months, and whose age and titer do not meet the criteria specified for latent syphilis of unknown duration. Late syphilis occurs when the disease goes untreated. In 2010, 245 cases of late syphilis were reported in Virginia, which was 11% less than the 221 cases reported in 2009. Incidence in the black population was 12 times the incidence in the white population (8.6 and 0.7 per 100,000, respectively), and the rate in males was nearly double that in females (4.1 and 2.2 per 100,000, respectively). The highest incidence rate was reported in the 40-49 year age group (6.4 per 100,000). Incidence rates were highest in the central and northern regions, at 4.2 and 4.1 per 100,000, respectively.