

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.

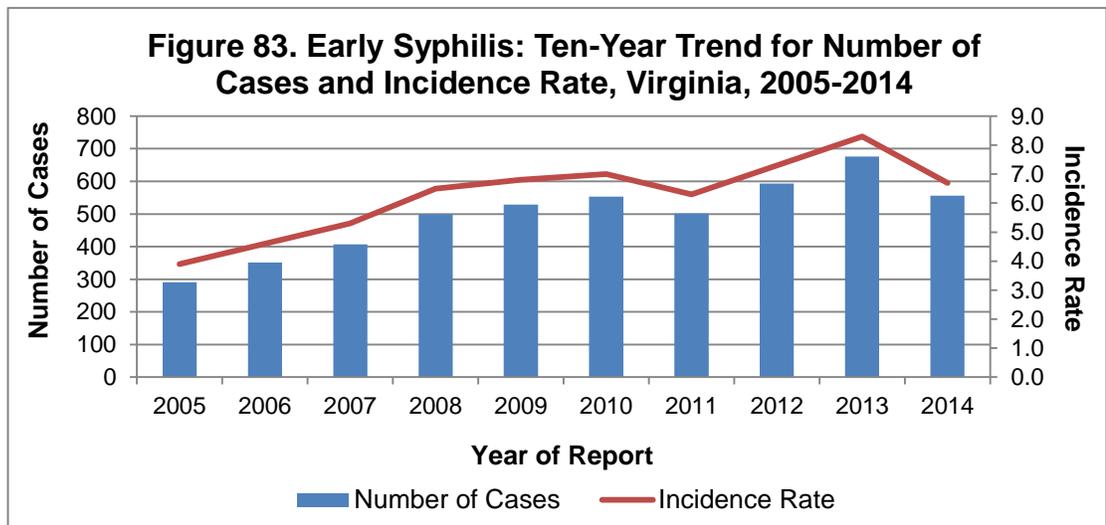
Prevention: Preventive measures include safe sexual practices, screening of all women during early pregnancy to prevent infection of infants, and treatment of infected partners.

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

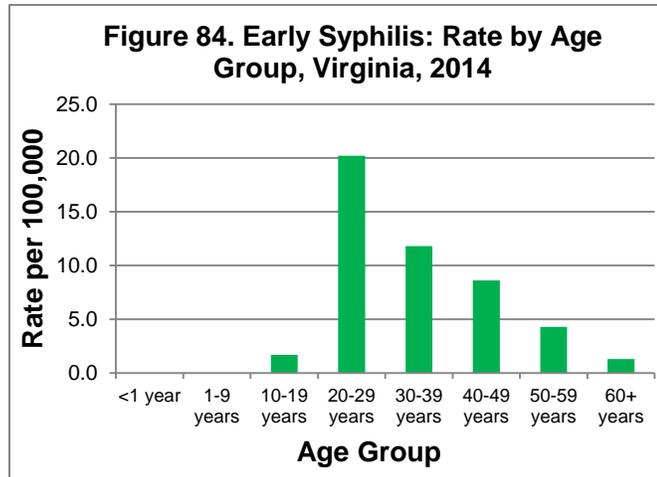
Early Syphilis: 2014 Data Summary	
Number of Cases:	556
5-Year Average Number of Cases:	570.6
% Change from 5-Year Average:	-3%
Incidence Rate per 100,000:	6.7

Early Syphilis

“Early syphilis” refers to primary, secondary and early latent (cases diagnosed without signs/symptoms within one year from infection) syphilis. In 2014, 556 early syphilis cases were reported in Virginia. This represents an 18% decrease from the spike of 676 cases reported in 2013 (Figure 83). Despite this decrease, the five-year incidence rate (6.7 per 100,000) remains higher than the 2005 early syphilis rate (3.9 per 100,000). In Virginia and nationwide, there is a growing gender gap in early syphilis diagnoses; infections are declining among women and increasing among men.



As in previous years, the highest incidence rate in 2014 occurred in the 20-29 year age group (20.2 per 100,000), followed by the 30-39 year age group (11.8 per 100,000) (Figure 84). No early syphilis cases were reported in children less than 10 years of age. The incidence rate in the black population (17.3 per 100,000) was more than four times the incidence rate observed in the white population (3.9 per 100,000) and more than three times the incidence rate observed in the



“other” race population (5.0 per 100,000). The rising incidence of early syphilis among MSM continues to widen the gender divide. The incidence rate among males was nearly nine times the incidence rate among females (12.2 and 1.4 per 100,000, respectively). Although the eastern region has historically maintained the highest incidence of early syphilis, it experienced a decrease from 2013 to 2014 (12.3 and 9.5 per 100,000) and was surpassed by the central region (10.1 per 100,000 in 2014). This is primarily due to 31% and 51% respective decreases from the previous year in reported cases of early syphilis in Norfolk and Newport News, two historically high morbidity areas in the eastern region. The northwest, northern, and southwest regions had incidence rates of 2.7, 5.3 and 5.8 per 100,000. Incidence by locality can be seen in the map below.

Congenital Syphilis

Congenital syphilis is a condition affecting an infant whose mother had untreated or inadequately treated syphilis at delivery. Diagnosis is based on maternal serologic testing because the serologic tests performed on the infected infant can be nonreactive if the antibody level is low or if the mother was infected late in pregnancy. Three cases of congenital syphilis were reported in Virginia in 2014. Two cases were reported in Virginia in 2013, before which there had not been more than one case reported per year since 2009. In the U.S., 348 cases of congenital syphilis were reported during 2013, the most recent year for which national data are available. The Centers for Disease Control and Prevention considers each case of congenital syphilis in the U.S. 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 2014, 310 cases of latent syphilis were reported in Virginia, a 6% decrease from 2013. Nearly 48% of latent syphilis cases diagnosed in 2014 occurred in black individuals, and nearly twice as many males were infected as females.

