Syphilis

Agent: Treponema pallidum (bacteria)

<u>Mode of Transmission</u>: 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.

<u>Signs/Symptoms</u>: The primary stage is characterized by a painless sore (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 latent syphilis occurs. The central nervous system, skin, bones and heart may become sufficiently damaged, causing disability or death.

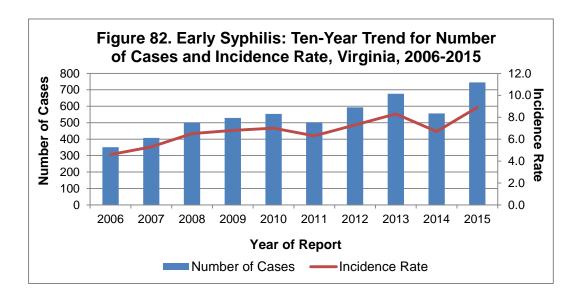
<u>Prevention</u>: Preventive measures include safe sexual practices, screening of all women during early pregnancy to prevent infection of infants, and treatment of infected partners.

Other Important Information: In 2015, there was a 29% increase in reported early syphilis in Virginia compared to the five-year average. Nationwide, early syphilis is on the rise, particularly among men who have sex with men (MSM).

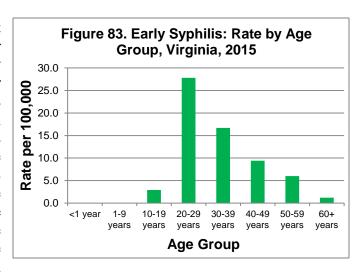
Early Syphilis: 2015 Data Summary	
Number of Cases:	745
5-Year Average Number of Cases:	576
% Change from 5-Year Average:	+29%
Incidence Rate per 100,000:	8.9

Early Syphilis

"Early syphilis" refers to the symptomatic primary and secondary stages of syphilis, as well as asymptomatic early latent syphilis. In 2015, 745 early syphilis cases were reported in Virginia. This is a 29% increase from the five-year average of 576 cases (Figure 82). In Virginia and nationwide, early syphilis is most frequently diagnosed in MSM.



As in previous years, the highest incidence rate occurred in the 20-29 year age group (27.8 per 100,000), followed by the 30-39 year age group (16.7 per 100,000) (Figure 83). No early syphilis cases were reported in children less than ten years of age. Information on race was provided for 98% of reported cases. The incidence rate in black individuals (24.8 per 100,000) was more than five times the incidence rate observed in white individuals (4.5 per 100,000) and more than four times the incidence rate observed in the "other" race population



(5.6 per 100,000). The incidence rate among males is twelve times that of females (16.8 and 1.4 per 100,000, respectively). The highest incidence of early syphilis occurred in the eastern region (15.8 cases per 100,000), followed by the central region (13.2 cases per 100,000), northern region (6.3 cases per 100,000), southwest region (5.0 cases per 100,000) and northwest region (3.6 cases per 100,000). For incidence rates by locality, please see 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 and treatment; an infant who shows no clinical symptoms of congenital syphilis whose mother was not sufficiently treated in the CDC-designated timeline is counted as a case. Three cases of congenital syphilis were reported in Virginia in 2015. There were three cases of congenital syphilis reported in 2014 and two in 2013, before which there had not been more than one case reported per year since 2009. In the U.S., 458 cases of congenital syphilis were reported during 2014 compared to 348 cases reported in 2013. 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.

Late Latent Syphilis

Late latent syphilis is diagnosed when the patient has no symptoms of primary or secondary syphilis and no evidence that infection was acquired within the preceding 12 months. In 2015, 275 cases of late latent syphilis were reported in Virginia, an 11% decrease from 2014. Of all men diagnosed with syphilis in 2015, 21% were diagnosed in the late latent stage, compared to 60% of women with syphilis.

Syphilis, Early Stage, Incidence Rate by Locality Virginia, 2015

