

## SYPHILIS

Syphilis is a contagious sexually transmitted disease caused by the spirochete *Treponema pallidum*. The disease, which may be acute or chronic, is characterized clinically by a primary lesion (chancre), a secondary eruption involving skin and mucous membranes, long periods of latency, and late lesions of skin, bone, viscera, the central nervous system, and the cardiovascular system. Fetal infection occurs with high frequency in untreated early infections of pregnant women. Transmission occurs by direct contact with infectious exudates during sexual contact. Transmission may occur through blood transfusion if the donor is in the early stages of the disease. Fetal infection occurs through placental transfer or at delivery.

### Laboratory Criteria for Confirmation:

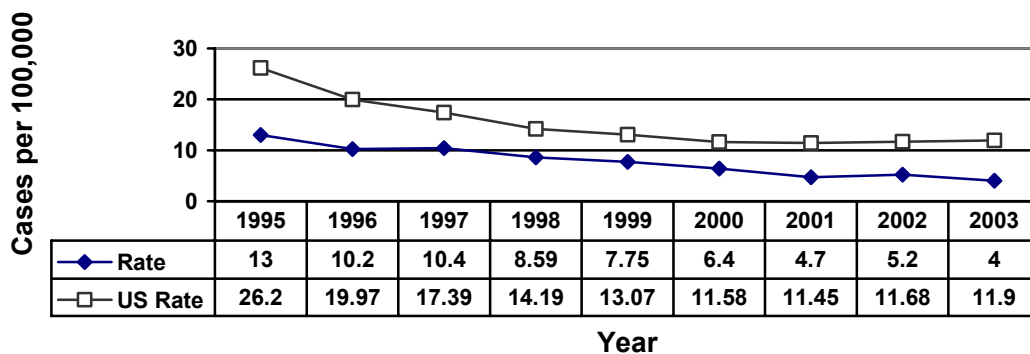
- Laboratory confirmation of *T.pallidum* by darkfield microscopy, by reactive serology, or by clinical manifestations of acquired infection.

### Epidemiology

<b>Kentucky 2003</b>	<b>Rate per 100,000</b>	<b>U.S. Rate (2003) per 100,000*</b>
Cases 160 (Early and Late)	4.0	11.9

<b>Cases by Gender</b>		<b>Cases by Race</b>	<b>Rate per 100,000</b>
Female 81	3.9	African/American (75)	25.3
Male 78	3.9	Hispanics (9)	5.6
		Caucasian (41)	1.1

**Syphilis Incidence, Kentucky  
1995-2003**

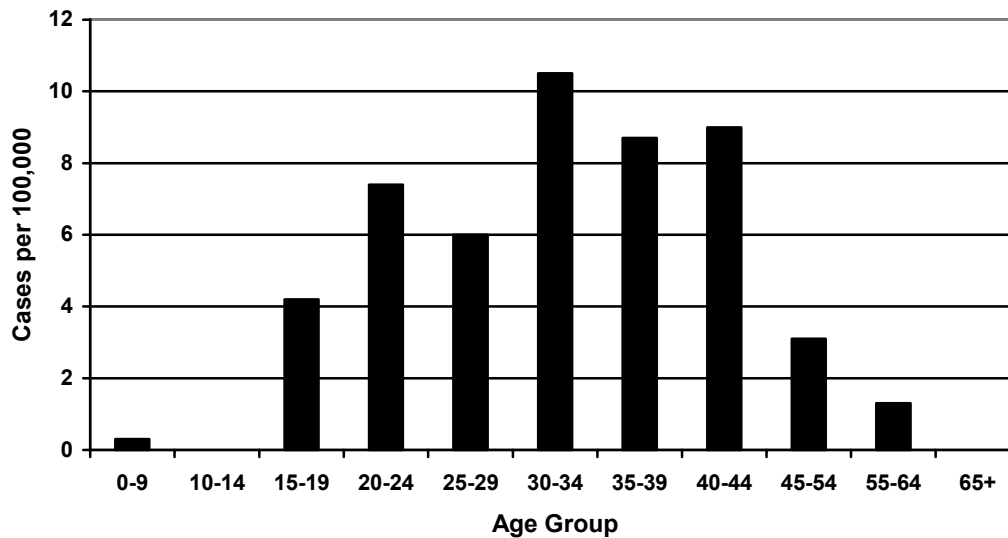


\*from Sexually Transmitted Disease Surveillance 2003. CDC-HHS

Syphilis is defined by distinct stages. Primary, secondary, and early latent syphilis are considered early syphilis, while late latent and late syphilis are defined as syphilis of greater than one year's duration. Congenital syphilis is acquired in utero.

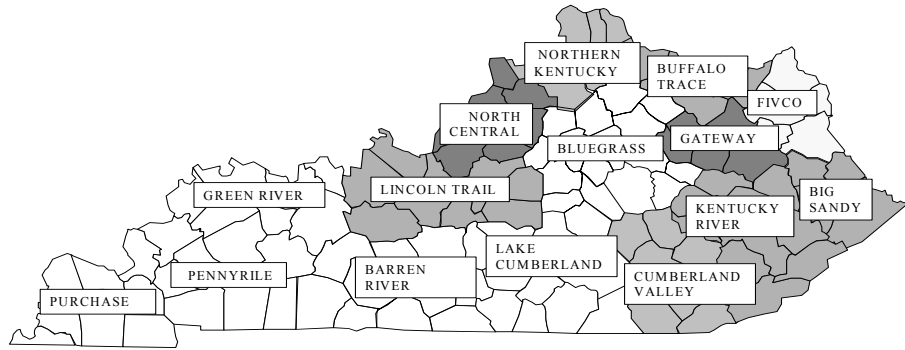
<b>Cases</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Primary	55	44	41	34	36	18	29	8
Secondary	99	91	65	67	49	30	59	25
Early Latent	126	122	101	81	62	38	49	43
<b>Total Early</b>	<b>280</b>	<b>257</b>	<b>207</b>	<b>182</b>	<b>147</b>	<b>86</b>	<b>137</b>	<b>76</b>
Late Latent/late	113	141	127	120	103	104	72	83
Congenital	2	6	4	3	3	1	3	1
<b>Total Cases</b>	<b>395</b>	<b>404</b>	<b>338</b>	<b>305</b>	<b>253</b>	<b>191</b>	<b>212</b>	<b>160</b>

**Syphilis, Age-Specific Incidence, Kentucky  
2003**



**Syphilis by District  
Annual Incidence Rate 2003  
Per 100,000**

0.0-0.9	
1.0-2.9	
3.0-4.9	
>5.0	



District	Rate per 100,000
Purchase	2.1
Pennyryle	1.9
Green River	2.4
Barren River	0.4
Lincoln Trail	3.3
North Central	12.3
Northern Kentucky	0.5
Buffalo Trace	0.0
Gateway	5.2
Fivco	2.9
Big Sandy	0.0
Kentucky River	0.0
Cumberland Valley	0.8
Lake Cumberland	1.0
Bluegrass	2.5

The North Central District reported the highest rate of 12.3 cases per 100,000 and the Gateway District followed with 5.2 cases per 100,000.

Jefferson County, in the North Central District, has the largest urban population in the state. In 2003, Jefferson County reported 14.6 cases of Syphilis per 100,000, a 28.0% decrease in rate from the previous year.

The syphilis (all stages) rate for the entire state of Kentucky has steadily decreased for the last ten years. The U.S. rate for the same time period has also shown a dramatic decline but has leveled off during the past four years.