

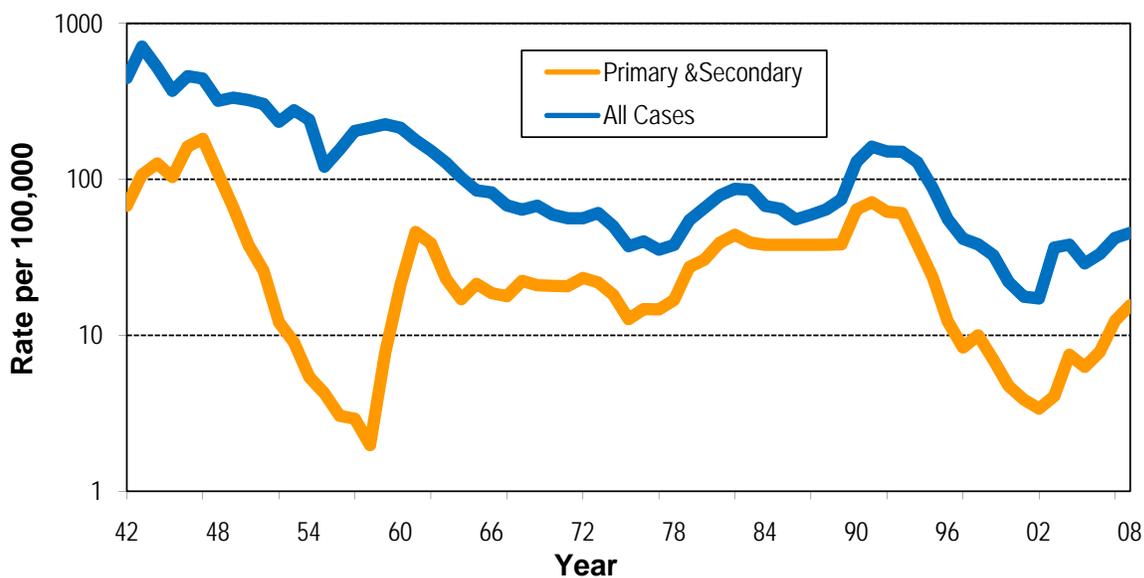
Syphilis (Primary & Secondary)

Syphilis is a Class B Disease and must be reported to the state within one business day.

Syphilis is an acute and chronic disease caused by the *Treponema pallidum* bacteria. The primary modes of transmission are sexual activity and transplacental infection of the fetus during the pregnancy of an infected woman. The reservoir for *T. pallidum* is humans.

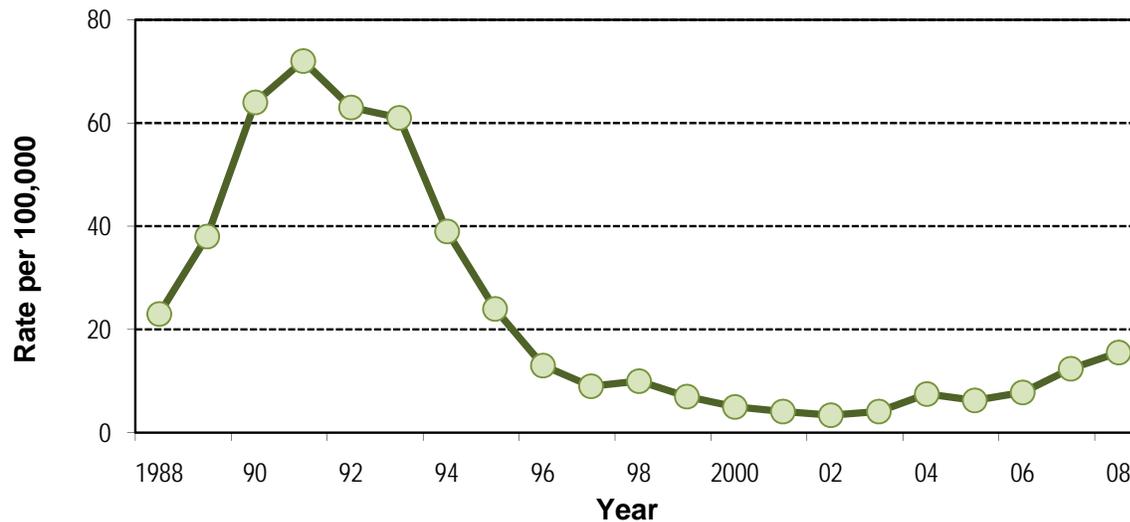
With the advent of penicillin, contact investigation, preventive treatment of contacts and educational interventions, cases of syphilis steadily declined in the period between 1940 and the 1980s. However, due to a combination of budget cuts and reallocation of resources to other programs, syphilis incidence steadily increased during the 1980s showing a sharp increase in the early 1990s (Figure 1).

Figure 1. Primary, secondary and all syphilis incidence rates - Louisiana, 1940-2008

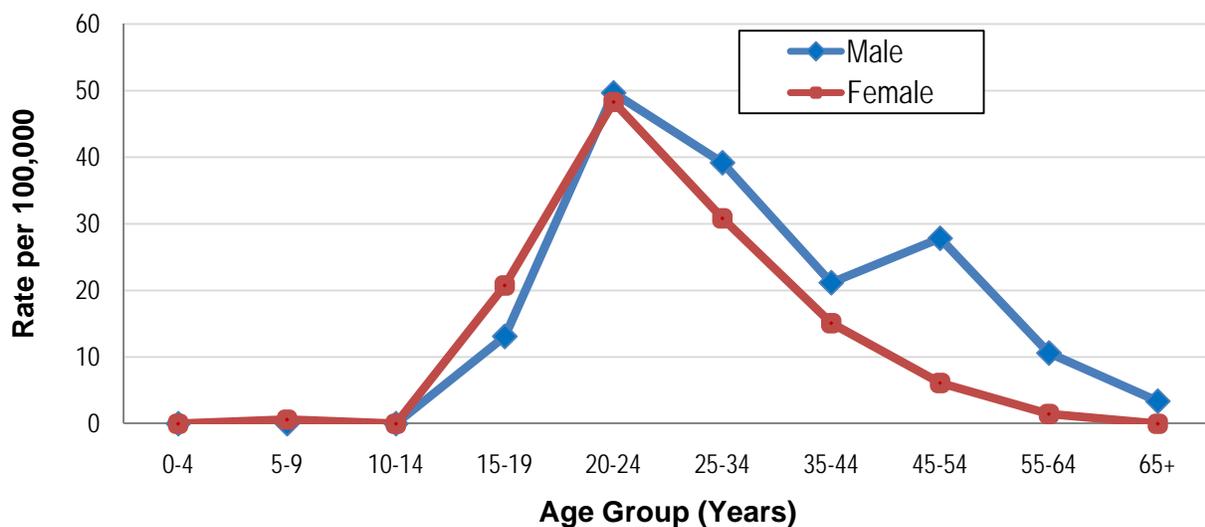


A few years of neglect caused a huge regression in the control of the spread of syphilis. Rates of primary and secondary syphilis (reflecting the intensity of recent transmission) in the early 1990s reverted to those of the late 1940s, wiping out fifty years of progress. This is a reminder that public health programs should not be neglected.

After peaking in the early 1990s, the incidence of cases of primary and secondary syphilis started to decline in 1994. Rates declined steeply during the late 1990s. The decline slowed during 2000 and 2001, and was followed by a resurgence in 2003 (Figure 2).

Figure 2. Primary/secondary syphilis incidence rates - Louisiana, 1988-2008**Age and Gender**

Age and gender distributions in Louisiana are typical of syphilis, with rates peaking in the late teens and twenties for both genders. After the peak, female rates continue to decline with age while male rates peak for a second time in the 45 to 54 year-old age group. The trend of male rates being higher in the 45 to 54 year-old age group than in the 35 to 44 year-old age group is a trend that first became apparent in 2007. Also of note, rates in females increase at a younger age than rates in males (Figure 3).

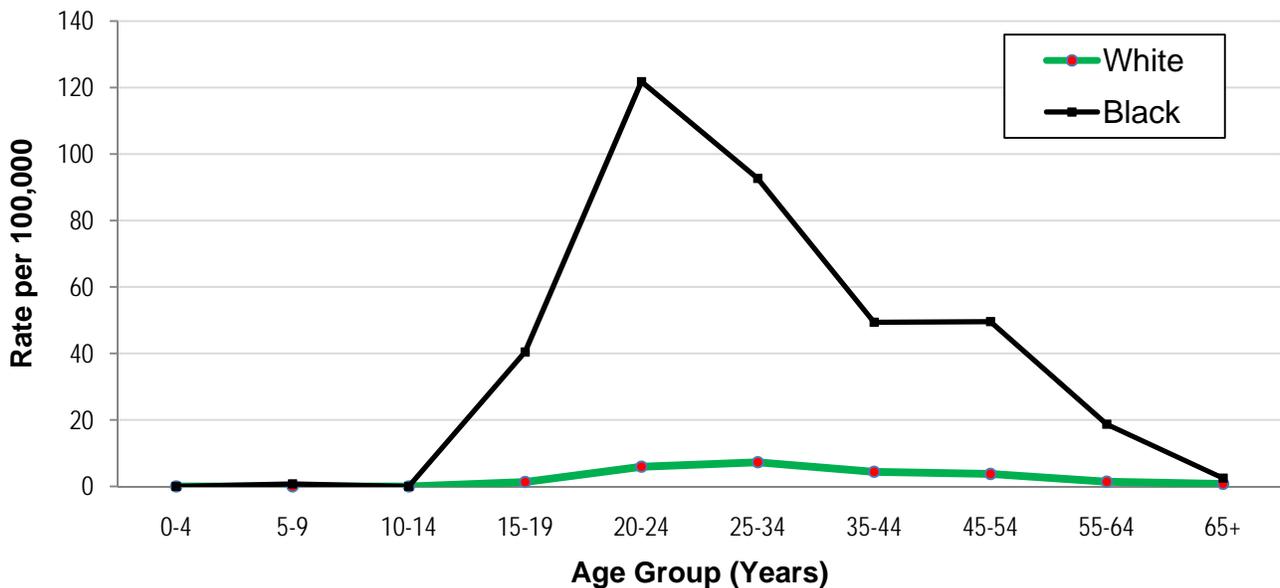
Figure 3. Primary/secondary syphilis, average incidence rates by gender and age Louisiana, 2008

Among the primary and secondary cases, females are almost all heterosexual (99%). The great majority of male cases are also heterosexual (79%), with the remaining male cases being among homosexual or bisexual men. (Orleans parish has a higher proportion of homosexual or bisexual men than other parishes.)

Race

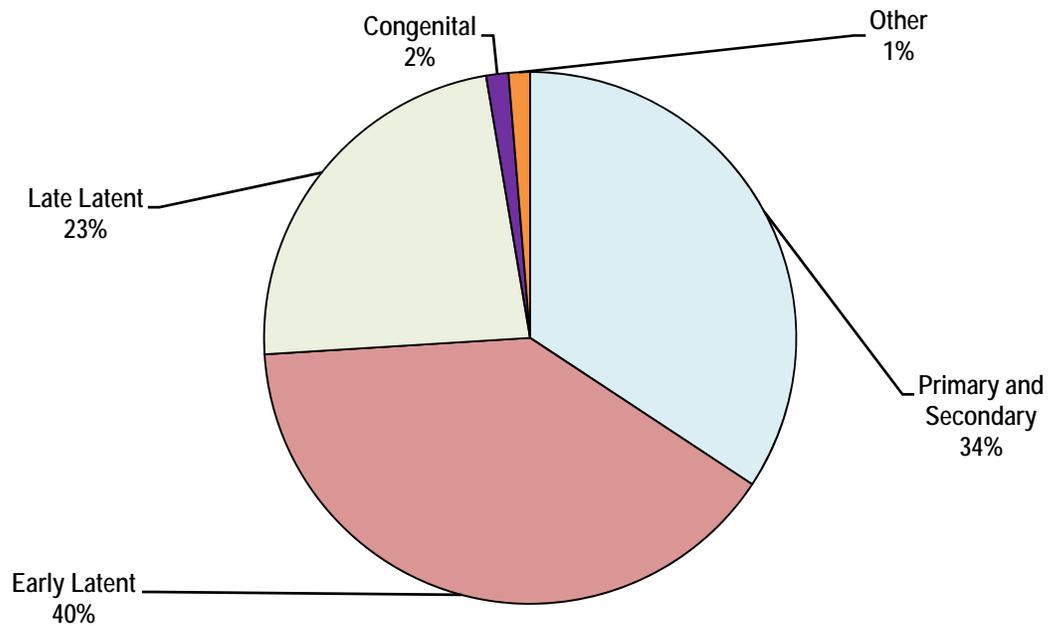
Case distribution is disproportionate between races, with twenty to twenty-four year old African-Americans having an incidence rate of one hundred and twenty-two per 100,000, a rate over twenty times higher than that among Whites in the same age group (Figure 4).

**Figure 4. Primary/secondary syphilis average incidence rates by race and age
Louisiana, 2008**



Clinical Presentation

The distribution of syphilis by clinical presentations is as follows: primary and secondary 34.28%; early latent 39.73%; late latent 23.34%; congenital 1.35%; other classification 1.30%. In 2008, there were 2,001 cases of syphilis (all clinical presentations) reported in the state of Louisiana.

Figure 5: Distribution of Syphilis Types – Louisiana, 2008

Geographic Distribution

The following state map shows a highly clustered distribution of syphilis with high case rates in a few parishes. Case numbers for parishes with an incidence rate greater than one case per 100,000 population are shown (Figure 5).

