



### **3B.**

#### **SEXUALLY TRANSMITTED DISEASES**

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Every state requires physicians to report cases of, and/or laboratories to report test results indicative of specific diseases. The legal authority for deciding which conditions (and which accompanying case data) are reportable in a given jurisdiction can vary by state, but is usually the state and/or local health department. All states require that certain sexually transmitted diseases (STDs) be reported by physicians and other health care providers when they suspect that a case has occurred or they have laboratory confirmation.

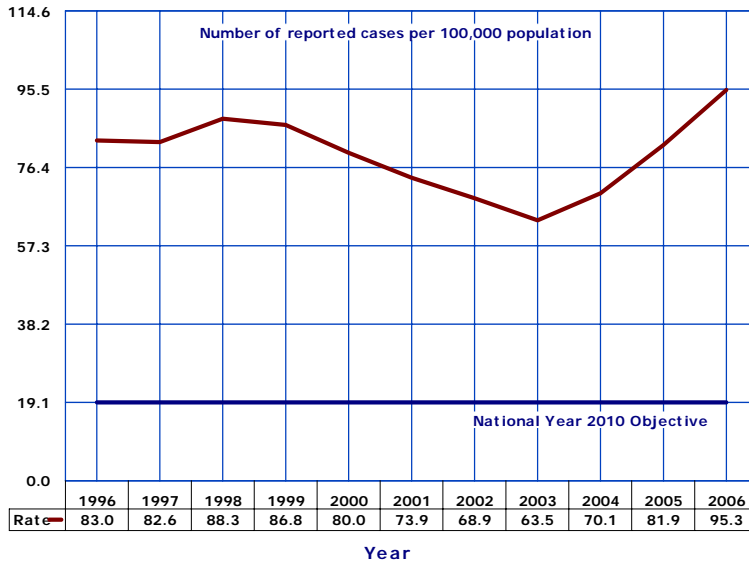
It is important to note, that disease reporting is likely incomplete, and completeness may vary depending on the disease. Moreover, changes in methods for public health surveillance, or implementation of new diagnostic tests can cause changes in disease reporting that are independent of the true incidence of disease.\*

The four sexually transmitted diseases for which reporting is required by administrative rule in Arizona are, *gonorrhea*, *syphilis*, *chlamydia* and *genital herpes*.

\*Centers for Disease Control and Prevention. Summary of notifiable diseases – United States, 2005. Published March 30, 2007, for 2005; 54 (No. 53). Available online at <http://www.cdc.gov/mmwr/PDF/wk/mm5453.pdf>

### 3B. SEXUALLY TRANSMITTED DISEASES

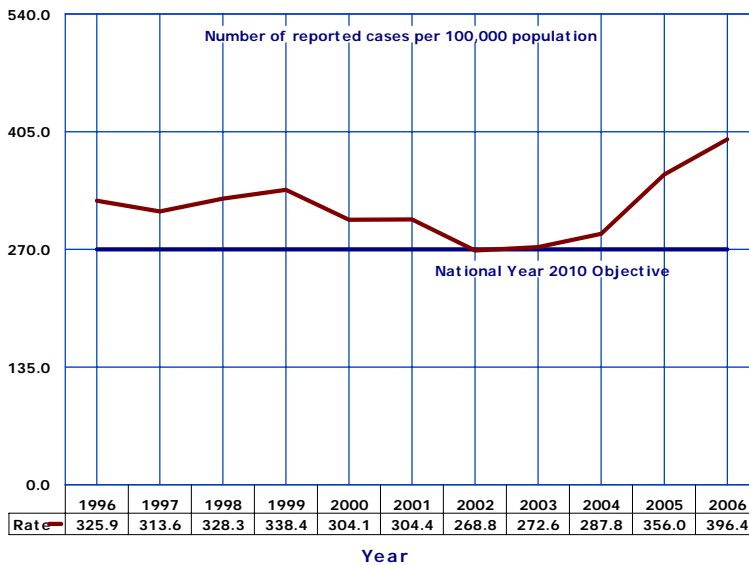
**Figure 3B-1**  
Trends in the Incidence Rates of Gonorrhea  
by Year, Arizona, 1996-2006



*Neisseria gonorrhoeae* infection is the second most commonly reported notifiable disease in the United States. In Arizona, the incidence rates of *gonorrhea* steadily declined each year after 1998 up to and including 2003 (**Figure 3B-1**). The 50.1 percent increase in the incidence rate of gonorrhea from 63.5 cases per 100,000 population in 2003 to 95.3/100,000 in 2006 likely resulted from a combination of factors, such as changes in surveillance, increases in the number of tests performed, and actual increases in disease occurrence. (**Figure 3B-1**).

The *Healthy People 2010* objective 25-2 defines the target rate for gonorrhea as equal to or lower than 19.1 cases per 100,000 population. The Arizona, incidence rate requires an 80 percent reduction by the year 2010 to meet this health objective (**Table 6A-2**).

**Figure 3B-2**  
Trends in the Incidence Rates of Gonorrhea  
Among Females Aged 15-24 Years  
Arizona, 1996-2006



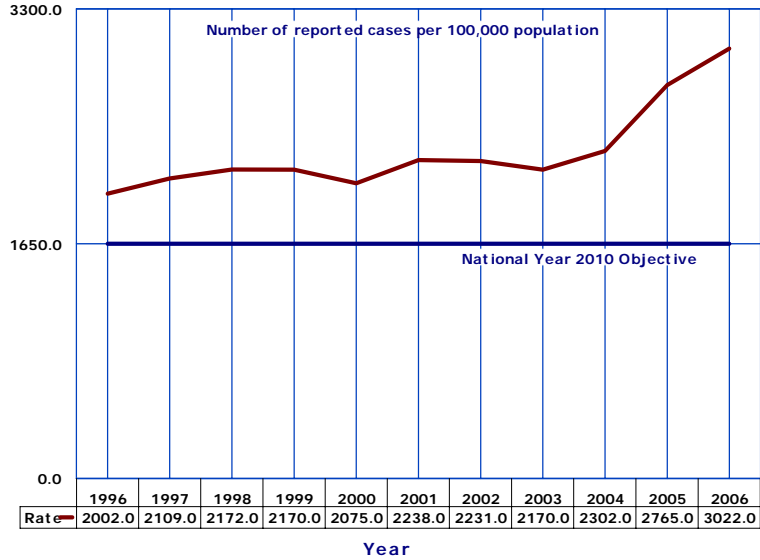
Another *Healthy People 2010* objective is focused on reducing gonorrhea infections to 270 cases per 100,000 females aged 15 to 24 years. In Arizona, following a 20.6 percent decrease in the incidence rate from 338.4 cases per 100,000 females 15-24 years old in 1999, the 2002 rate of 268.8/100,000 was slightly lower than the *Healthy People 2010* target rate (**Figure 3B-2, Table 6A-2**). The four consecutive annual increases in the incidence of gonorrhea after 2002 resulted in the 2006 incidence rate of 396.4/100,000, which exceeded by the *Healthy People 2010* target rate 46.8 percent.

### 3B. SEXUALLY TRANSMITTED DISEASES

**Figure 3B-3**  
Trends in the Incidence Rates of Chlamydia  
Among Females Aged 15-24 Years  
Arizona, 1996-2006

*Chlamydia trachomatis* is the most prevalent bacterial sexually transmitted disease in the United States, with the highest rates reported among adolescents and young adults (Table 3B-4). Recent availability of sensitive tests for *chlamydia* using DNA amplification technology undoubtedly contributed to the increase in the number of reported cases in Arizona (Figure 3B-3, Table 3B-1).

The incidence rate of *chlamydia* among Arizona females aged 15 to 24 years increased by 39.3 percent from 2170 cases per 100,000 in 2003 to 3022/100,000 in 2006. This latest annual incidence rate exceeded by 83.2 percent the *Health People 2010* target rate of 1,650 cases of *chlamydia* per 100,000 females 15-25 years old (Table 6A-2).



**Figure 3B-4**  
Trends in the Incidence Rates of Congenital Syphilis  
by Year, Arizona, 1996-2006

*Congenital syphilis* (CS) is an infection caused by the spirochete *Treponema pallidum*, which can be passed from the mother to child during fetal development or birth. Not all infants born to infected women will be infected.

In 1988, CDC implemented a new CS case definition. It no longer relies on documentation of infection in the infant; rather, it presumes that an infant is infected if it cannot be proven that an infected mother was adequately treated for syphilis before or during pregnancy.

In Arizona, the incidence rate of CS decreased by 25.9 percent from 27.8 cases per 100,000 births in 2004 to 20.6/100,000 in 2006. However, the 2006 rate was 20.6 times greater than the (quite unrealistic) *Healthy People 2010* target rate of 1 (one) case of *congenital syphilis* per 100,000 births (Table 6A-2).

