



### **3B.**

#### **SEXUALLY TRANSMITTED DISEASES**

---

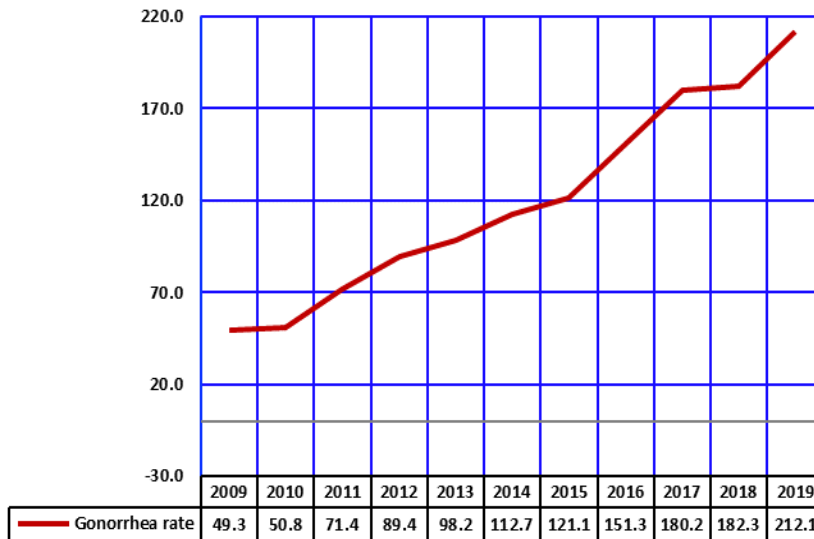
All states require that certain sexually transmitted diseases (STDs) be reported by physicians and other health care providers when they suspect that a case has occurred or they have laboratory confirmation.

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.\* In this section, STD rates were calculated using denominators from the CDC for years prior 2018. In the current report, the Arizona Department of Health Services denominators were used to compute the STD rates.

\*Centers for Disease Control and Prevention. Summary of notifiable diseases – United States, 2008. Published June 25, 2010, for 2008; Vol. 57 (No. 54). Available online at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5754a1.htm>

### 3B. SEXUALLY TRANSMITTED DISEASES

**Figure 3B-1**  
Trends in the Incidence Rates<sup>a</sup> of Gonorrhea by Year, Arizona, 2009-2019

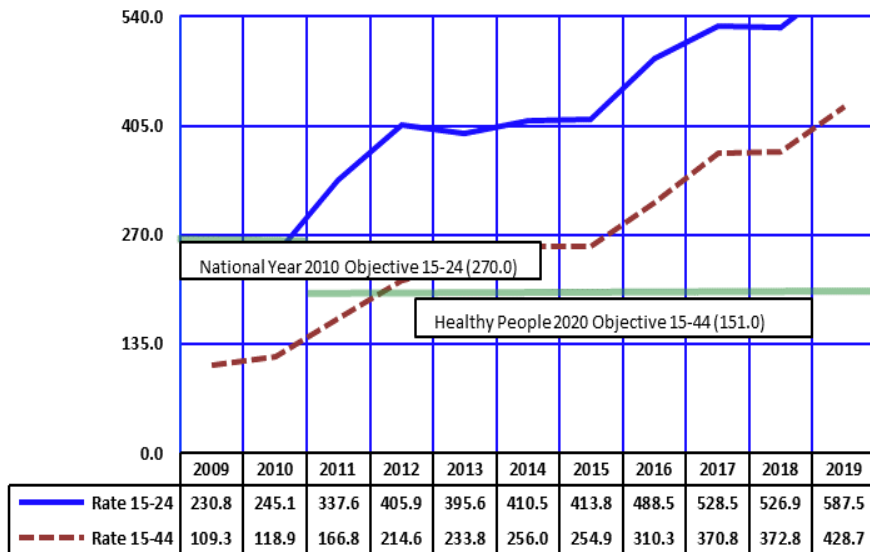


*Neisseria gonorrhoeae* infection is the second most commonly reported notifiable disease in the United States. (Figure 3B-1). The consistent steady increase in the incidence rate of gonorrhea since 2009 likely resulted from a combination of factors, such as changes in surveillance, increases in the number of tests performed, and actual increases in disease occurrence (Figure 3B-1).

The *Healthy People 2010* objective HP25-2 defines the target rate for gonorrhea as equal to or lower than 19.1 cases per 100,000 population. However, the *Healthy People 2020* target is for ages 15-44 and is set at 151.0/100,000 females and 147.0/100,000 males (Table 6A-2).

Note: <sup>a</sup> Number of reported cases per 100,000 population.

**Figure 3B-2**  
Trends in the Incidence Rates<sup>a</sup> of Gonorrhea among Females aged 15-24 and 15-44 Years, Arizona, 2009-2019



The 2019 incidence rate for gonorrhea was 428.7 per 100,000 for Arizona females aged 15-44 years, meaning Arizona's incidence rate was higher than the *Healthy People 2020* objective. Generally, the trends in gonorrhea incidence rates are similar for women in the age groups 15-24 and 15-44, although the overall incidence rate is consistently higher for women aged 15-24.

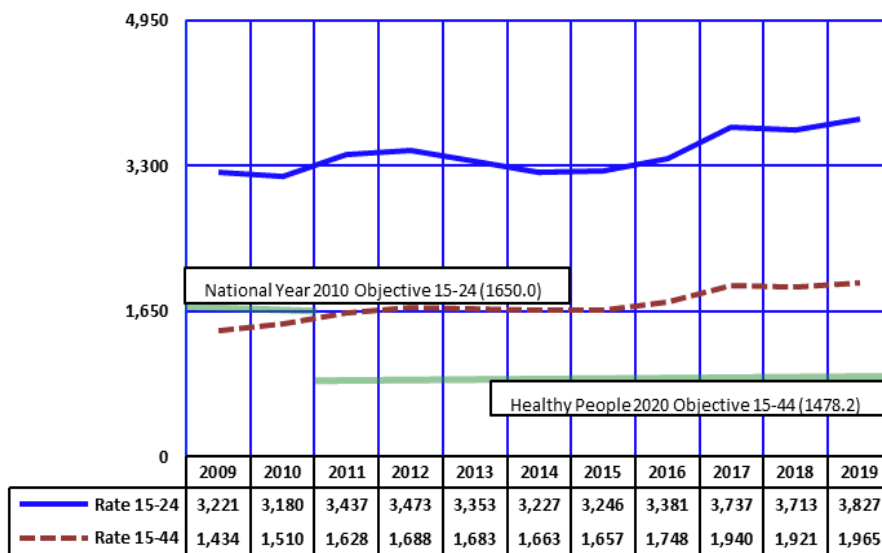
Notes: <sup>a</sup> Number of reported cases per 100,000 females; There was a change in target rate and age range for Healthy People 2020 objective. In National Year 2010 objective was for females aged 15 and 24 years. In Healthy People 2020 objective is for females aged 15 and 44 years.

### 3B. SEXUALLY TRANSMITTED DISEASES

*Chlamydia trachomatis* is the most prevalent bacterial sexually transmitted disease in the United States (1,758,668 cases in 2018\*) 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 over the last decade (**Figure 3B-3**, **Table 3B-1**).

The incident rate of chlamydia was previously reported for females aged 15-24 years, however based on changes in *Healthy People 2020*, it would be reported for females 15-44 years. The *Healthy People 2020* goal for chlamydia is set at 1,478.2 per 100,000 females. The incidence rate for Arizona in 2019 was 1,965 per 100,000 females age 15-44 years (**Table 6A-2**).

**Figure 3B-3**  
Trends in the Incidence Rates<sup>a</sup> of Chlamydia among Females 15-24 and 15-44 Years, Arizona, 2009-2019



\*Most recent publication <http://www.cdc.gov/std/stats18/chlamydia.htm>

Notes: <sup>a</sup> Number of reported cases per 100,000 females; There was a change in target rate and age range for Healthy People 2020 objective. In National Year 2010 objective was for females aged 15-24 years. In Healthy People 2020 objective is for females aged 15-44 years.

Congenital syphilis 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 Congenital syphilis 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.

The *Healthy People 2020* goal for congenital syphilis is 14.5 cases per 100,000, which has been surpassed by Arizona in each year from 2009 to 2019, with sole exception of 2014. The Arizona incidence rates of congenital syphilis were for the most part below 20 cases per 100,000 infants, with exception to years prior 2010 and after 2016. In 2017, a sharp increase in the incidence was recorded (36.7/100,000), in 2018, the rate more than doubled at 75.7/100,000 and in 2019, the rate was the highest recorded during the 11-year period. (**Figure 3B-4**, **Table 6A-2**).

**Figure 3B-4**  
Trends in the Incidence Rates<sup>a</sup> of Congenital Syphilis by Year, Arizona, 2009-2019

