3B.

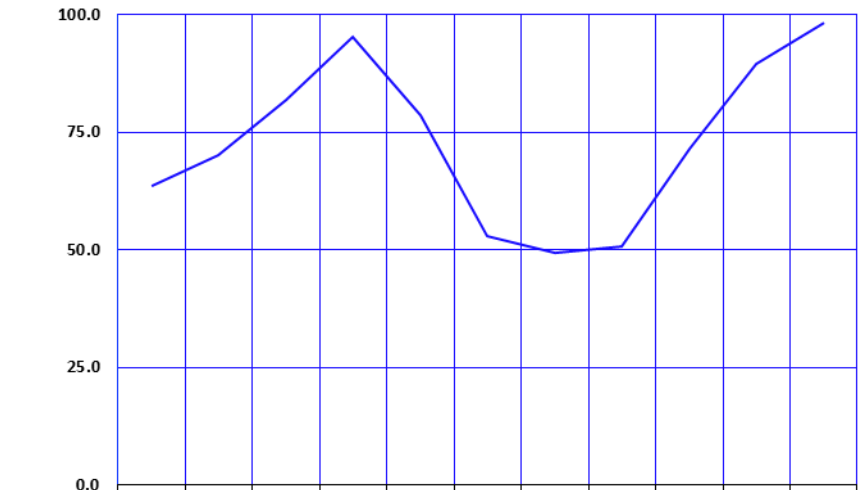
SEXUALLY TRANSMITTED DISEASES

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, rates for STDs were calculated using denominators based on 2013 estimates taken from the CDC.

*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

Figure 3B-1
Trends in the Incidence Rates[a] of Gonorrhea by Year, Arizona, 2003-2013



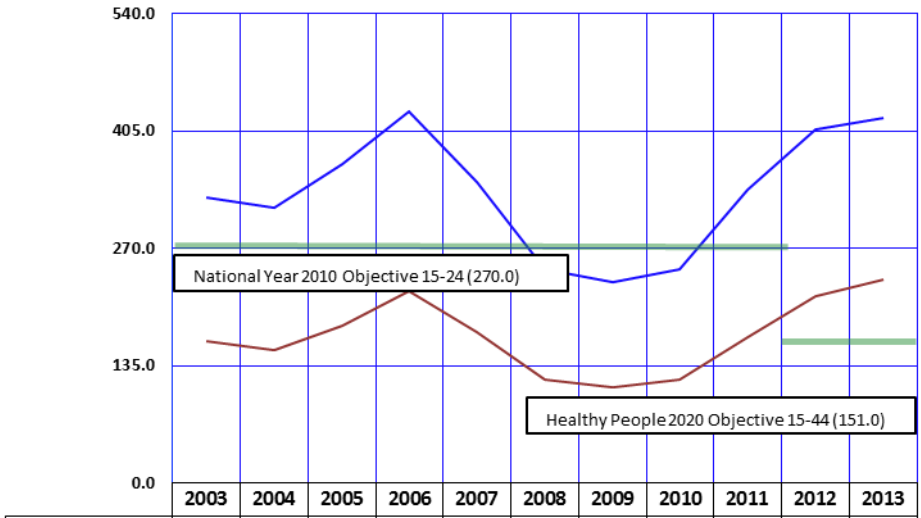
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Rate	63.5	70.1	81.9	95.3	78.7	52.8	49.3	50.8	71.4	89.4	98.2

Note: [a] Number of reported cases per 100,000 population.

Neisseria gonorrhoeae infection is the second most commonly reported notifiable disease in the United States. (**Figure 3B-1**). The 99.2 percent increase in the incidence rate of gonorrhea from 49.3 cases per 100,000 population in 2009 to 98.2/100,000 in 2013 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 and was specific to ages 15-24. However, the *Healthy People 2020* target is for ages 15-44 and is set at 151.0/100,000.

Figure 3B-2
Trends in the Incidence Rates[a] of Gonorrhea among Females 15-24 and 15-44 Years, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Rate 15-24	328.2	316.8	366.4	427.1	346.5	245.7	230.8	245.1	337.6	405.9	420.4
Rate 15-44	162.7	153.4	180.3	220.8	173.3	118.7	109.3	118.9	166.8	214.6	233.8

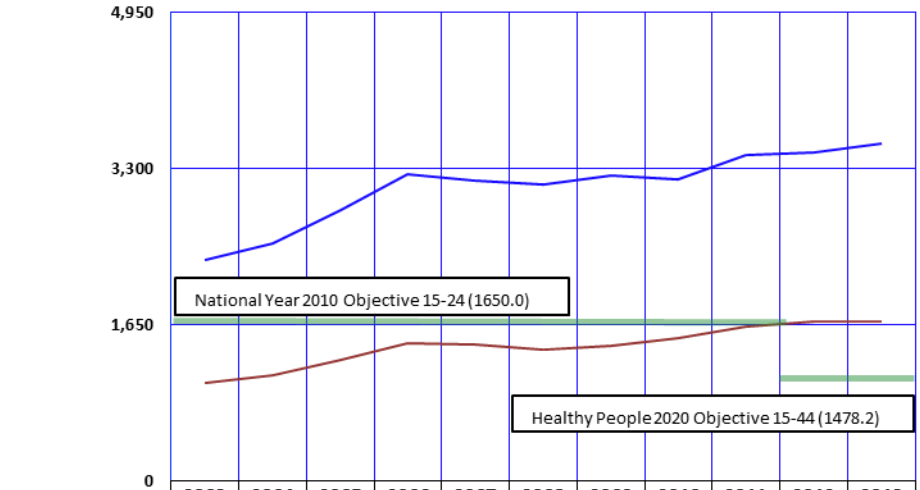
Notes: [a] Number of reported cases per 100,000 females; There was a change in target rate and age range For Healthy People 2020 objective.
In National Year 2010 objective was for females ages 15-24. In Healthy People 2020 objective is for females ages 15-44.

The 2013 incidence rate for gonorrhea was 233.8 per 100,000 for Arizona females age 15-44 years, meaning Arizona's incidence rate was higher than the *Healthy People 2020* objective, and increased 8.4 percent from 2012. Generally, the trend in gonorrhea incidence rates are similar for women age 15-24 and age 15-44, although the overall incidence rate is consistently higher for women age 15-24.

Chlamydia trachomatis is the most prevalent bacterial sexually transmitted disease in the United States (1,422,976 cases in 2012), 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 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 2013 was 1,683 per 100,000 for females age 15-44 years (**Table 6A-2**).

Figure 3B-3
Trends in the Incidence Rates[a] of Chlamydia among Females 15-24 and 15-44 Years, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Rate 15-24	2,329	2,513	2,862	3,236	3,166	3,126	3,221	3,180	3,437	3,473	3,565
Rate 15-44	1,038	1,121	1,277	1,451	1,436	1,392	1,434	1,510	1,628	1,688	1,683

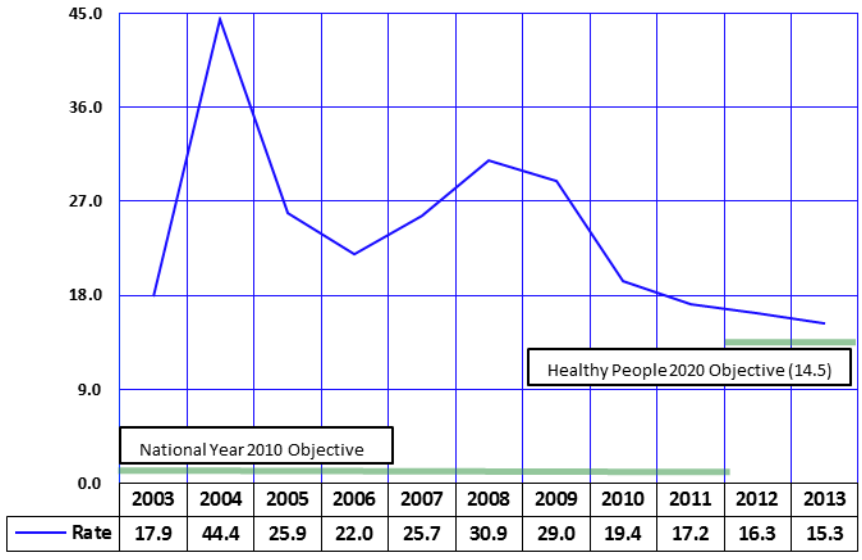
Notes: [a] Number of reported cases per 100,000 females; There was a change in target rate and age range for Healthy People 2020 objective. In National Year 2010 objective was for females ages 15-24. In Healthy People 2020 objective is for females ages 15-44.

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.

The *Healthy People 2020* goal for congenital syphilis is 14.5/100,000. In Arizona, the incidence rate of CS decreased for a fifth consecutive year from 30.9/100,000 in 2008 to 15.3/100,000 in 2013 (**Figure 3B-4**, **Table 6A-2**).

Figure 3B-4
Trends in the Incidence Rates[a] of Congenital Syphilis by Year, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Rate	17.9	44.4	25.9	22.0	25.7	30.9	29.0	19.4	17.2	16.3	15.3

Note: [a] Number of reported cases per 100,000 births.