

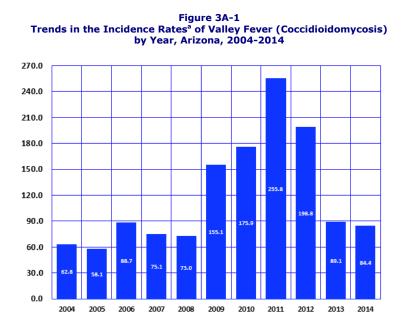
## 3A.

## **NON-SEXUALLY TRANSMITTED DISEASES**

The infectious diseases designated as notifiable vary slightly by state. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. All states generally report the internationally quarantinable diseases (i.e., cholera or plague) in compliance with the World Health Organization's International Health Regulations.

Data on morbidity, levels of disease, and disability in the Arizona population are obtained for certain infectious diseases that must be reported by law. The Bureau of Epidemiology and Disease Control Services conducts surveillance and monitoring of these reportable diseases and it provided data for the respective sections of this chapter and sections 5F, 6A, and 6B.

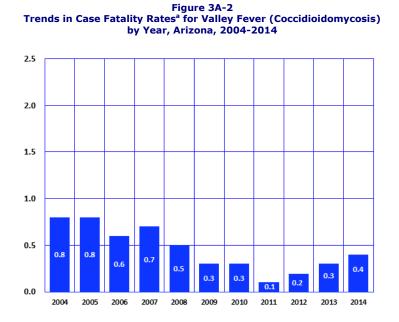
This section provides some illustrative findings from the tabulated data. It is not intended to be an exhaustive analysis of the incidence of infectious diseases in the State. There is more information available online on the website of the Office of Infectious Disease Services at: <u>http://azdhs.gov/phs/oids/index.htm</u>.



*Coccidioidomycosis* or *Valley Fever* is a fungal infection caused by inhalation of airborne spores that are present in the soil of southwestern United States, California, and parts of Central and South America. Most infections are asymptomatic or selflimited in patients with healthy immune systems. In rare instances, severe lung disease or disseminated infection can develop in patients.

Valley Fever imposed the greatest burden on morbidity among all nonsexuallv transmitted, notifiable diseases in Arizona in 2014. The reported incidence of Valley Fever decreased 4.0 percent from 2013 (n = 5,861) to 2014 (n=5,624). The 2014 incidence rate of 84.4/100,000 (Figure 3A-1, Table 5F-2) was 34.5 percent greater than the incidence rate of 62.8/100,000 in 2004, but was 67.0 percent lower than the incidence rate of 255.8/100,000 in 2011.

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



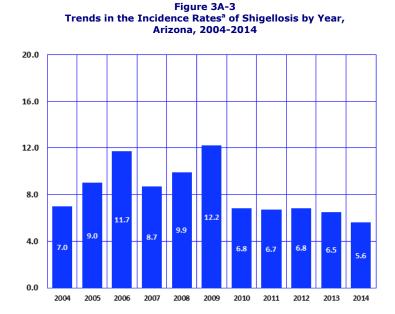
Twenty five of the 5,624 Arizonans who had *Valley Fever* in 2014 died from it (**Table 3A-2**) for a case fatality rate of 0.4 deaths per 100 cases (**Figure 3A-2**). The 2014 case mortality rate for Coccidioidomycosis was 50.0 percent lower in 2014 than in 2004.

Note: <sup>a</sup> Number of deaths per 100 reported cases.

*Shigellosis* is an infectious disease caused by a group of bacteria called *Shigella* that can cause diarrhea in humans. To spread from one person to another, *Shigellae* can be transmitted through contaminated foods, sexual contact, and water used for drinking or recreational purposes.

From 2004 – 2014, *shigellosis* was the third most common enteric disease to afflict Arizonans after *campylobacteriosis* and *salmonellosis* (**Table 3A-1**).

The number of reported cases of *shigellosis* in 2014 was 376, a slight decrease from the number of cases observed in 2013 (n = 428). The incidence rate of *shigellosis* in 2014, 5.6 cases per 100,000, was the lowest incidence rate recorded in the past decade. (**Figure 3A-3**).



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

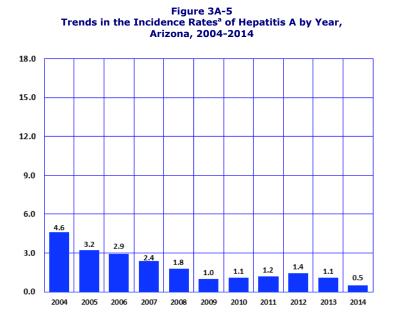
20.0 16.0 12.0 8.0 4.0 0.0 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Figure 3A-4 Trends in the Incidence Rates<sup>a</sup> of Salmonellosis<sup>b</sup> by Year, Arizona, 2004-2014

*Salmonellosis* is a bacterial infection. Most of those who are infected with *Salmonella* develop diarrhea, fever, and abdominal cramps.

The incidence rate of salmonellosis increased 2.0 percent from 15.3/100,000 in 2013 to 15.6/100,000 in 2014 (**Figure 3A-4**). The risk of salmonellosis was substantially higher in Graham (36.5/100,000), Santa Cruz (34.3/100,000), and Navajo (33.9/100,000) counties (**Table 5F-2**).

Notes: <sup>a</sup> Number of reported cases per 100,000 population; <sup>b</sup> Excluding S. Typhi and S. Paratyphi.



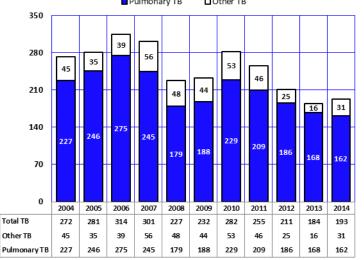
Hepatitis A is a liver disease caused by the *hepatitis* A virus. During 1995-1996, highly effective hepatitis A vaccines became available in the United States. Routine childhood vaccination for hepatitis A was recommended in 1999. expansion The of recommendations for routine hepatitis A vaccination to include all children in the United States aged 12-23 months is likely to reduce hepatitis rates further.

In Arizona, the incidence rate of *hepatitis* A decreased by 89.1 percent from 4.6/100,000 in 2004 to 0.5/100,000 in 2014 (**Figure 3A-5**).

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



Figure 3A-6



Note: a Number of reported cases by year.

Tuberculosis (TB) is an infectious disease that usually attacks the lungs, but can attack almost any part of the body. Tuberculosis is spread from person to person through the air.

The number of reported cases of *pulmonary tuberculosis* decreased from 168 reported cases in 2013 to 162 cases in 2014. The number of reported cases of tuberculosis other than pulmonary increased from 16 in 2013 to 31 in 2014 (**Figure 3A-6, Table 3A-1**). The incidence rate of *total* tuberculosis increased 2.8/100,000 in 2013 to 2.9/100,000 in 2014 (**Table 5F-2**).

Pulmonary tuberculosis accounted for 83.9 percent of all tuberculosis infections in 2014 (**Table 3A-1**). Eight Arizonans who had tuberculosis died from it in 2014 (**Table 3A-2**).