

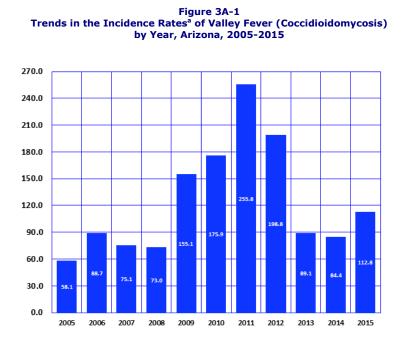
## 3A.

## **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>.

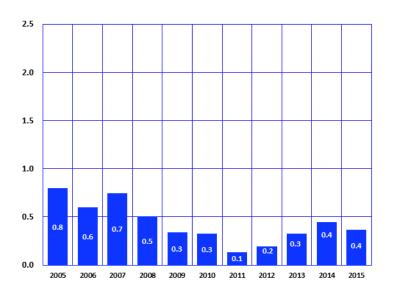


*Coccidioidomycosis* or *Valley Fever* is a fungal infection caused by inhalation of airborne spores that are present in the soil of southwestern United States, California, and parts of Central and South America. Most infections are asymptomatic or selflimited in patients with healthy immune systems.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

Valley Fever imposed the greatest burden on morbidity among all nontransmitted, sexually notifiable diseases in Arizona in 2015. The reported incidence of Valley Fever increased 35.5 percent from 2014 (n=5,624) to 2015 (n=7,622). The 2015 incidence rate of 112.8/100,000 (Figure 3A-1, Table 5F-2) was 94.1 percent greater than the incidence rate of 58.1/100,000 in 2005, but was 55.9 percent lower than the incidence rate of 255.8/100,000 in 2011.

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

Figure 3A-2 Trends in Case Fatality Rates<sup>a</sup> for Valley Fever (Coccidioidomycosis) by Year, Arizona, 2005-2015



Twenty eight of the 7,622 Arizonans who had *Valley Fever* in 2015 died from it (**Table 3A-2**) for a case fatality rate of 0.4 deaths per 100 cases (**Figure 3A-2**). The 2015 case mortality rate for Coccidioidomycosis was 53.9 percent lower than in 2005.

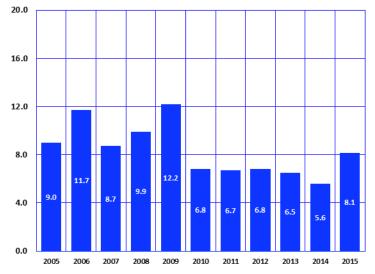
Note: <sup>a</sup> Number of deaths per 100 reported cases.

*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 2005 – 2015, *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 2015 was 549, an increase from the number of cases observed in 2014 (n = 376). The incidence rate of *shigellosis* in 2015, 8.1 cases per 100,000, was among the highest incidence rate recorded for the first time since 2009 (**Figure 3A-3**).





Note: \* Number of reported cases per 100,000 population.

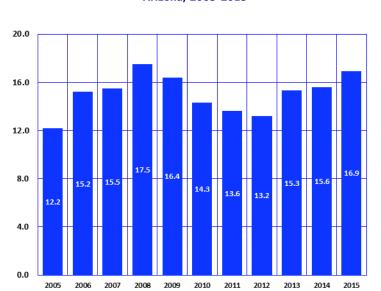
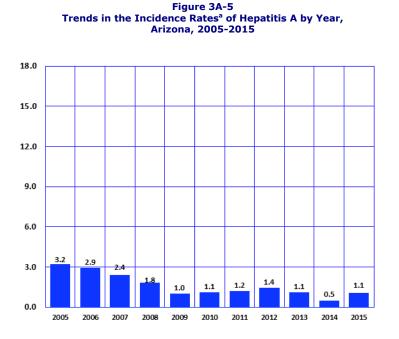


Figure 3A-4 Trends in the Incidence Rates<sup>a</sup> of Salmonellosis<sup>b</sup> by Year, Arizona, 2005-2015

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

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 8.4 percent from 15.6/100,000 in 2014 to 16.9/100,000 in 2015 (**Figure 3A-4**). The risk of salmonellosis was substantially higher in Navajo (49.2/100,000) Graham (41.6/100,000), and La Paz (33.0/100,000) counties (**Table 5F-2**).



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 66.7 percent from 3.2/100,000 in 2005 to 1.1/100,000 in 2015 (**Figure 3A-5**).

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

Pulmonary TB □ Other TB 350 39 280 56 35 53 46 210 44 48 25 31 31 140 229 200 188 179 6 62 167 70 0 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Total TB 281 314 301 227 232 282 255 211 184 193 198 Other TB 35 39 56 48 44 53 46 25 16 31 31

Figure 3A-6 Trends in the Incidence of Pulmonary Tuberculosis and Total Tuberculosis<sup>a</sup> by Year, Arizona, 2005-2015

Note: <sup>a</sup> Number of reported cases by year.

188

229

209

186

168

162

167

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* increased from 162 reported cases in 2014 to 167 cases in 2015. The number of reported cases of tuberculosis other than pulmonary remained stable at 31 since 2014 (**Figure 3A-6, Table 3A-1**). The incidence rate of *total* tuberculosis remained unchanged at 2.9/100,000 between 2014 and 2015 (**Table 5F-2**).

Pulmonary tuberculosis accounted for 84.3 percent of all tuberculosis infections in 2015 (**Table 3A-1**). Ten Arizonans who had tuberculosis died from it in 2015 (**Table 3A-2**).

Pulmonary TB

246

275

245

179