

**3A.** 

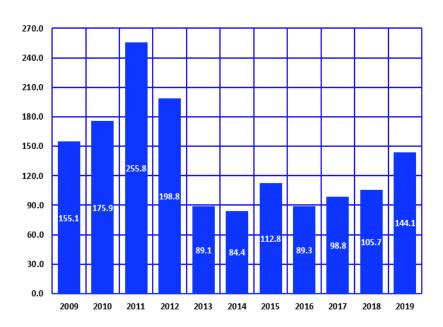
## **NON-SEXUALLY TRANSMITTED DISEASES**

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: <a href="http://azdhs.gov/phs/oids/index.htm">http://azdhs.gov/phs/oids/index.htm</a>.

Figure 3A-1
Trends in the Incidence Rates<sup>a</sup> of Valley Fever (Coccidioidomycosis)
by Year, Arizona, 2009-2019

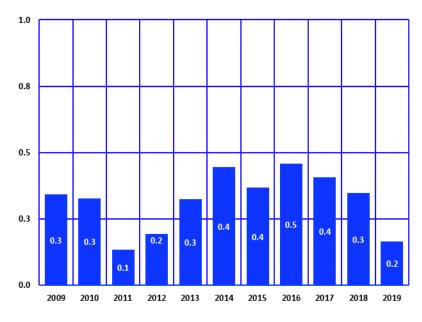


Coccidioidomycosis or Valley Fever is a fungal infection caused by inhalation of airborne spores that are present in the soil of southwestern United States, California, and parts of Central and South America. Most infections are asymptomatic or self-limited in patients with healthy immune systems. In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

Valley Fever imposed the greatest burden on morbidity among all nonsexually transmitted, notifiable diseases in Arizona in 2019. The reported incidence of Valley Fever increased 38.5 percent from 2018 (n=7,478) to 2019 (n=10,358). The 2019 incidence rate of 144.1/100,000 (Figure 3A-1, Table 5F-2) was 36.3 percent greater than the incidence rate of 105.7/100,000 in 2018, but was 43.7 percent lower than the unprecedented incidence rate of 255.8/100,000 in 2011.

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

Figure 3A-2
Trends in Case Fatality Rates for Valley Fever (Coccidioidomycosis)
by Year, Arizona, 2009-2019



Seventeen of the 10,358 Arizonans who had *Valley Fever* in 2019 died from it (**Table 3A-2**) for a case fatality rate of 0.2 deaths per 100 cases (**Figure 3A-2**). The 2019 case mortality rate for Coccidioidomycosis was 52.0 percent lower than in 2009.

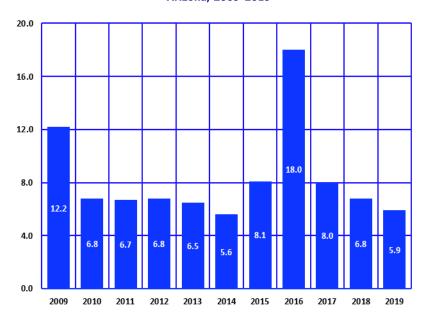
Note: a Number of deaths per 100 reported cases.

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 2009–2019, *shigellosis* was the most common enteric disease to afflict Arizonans after *campylobacteriosis* and *salmonellosis* (**Table 3A-1**).

The number of reported cases of shigellosis has decreased by 52 cases from 478 in 2018 to 426 in 2019. Compared to 2018, the incidence rate of shigellosis was 13.2 percent lower at approximately 6 reported cases/100,000 population in 2019 (**Figure 3A-3**).

Figure 3A-3
Trends in the Incidence Rates of Shigellosis by Year,
Arizona, 2009-2019



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

Figure 3A-4

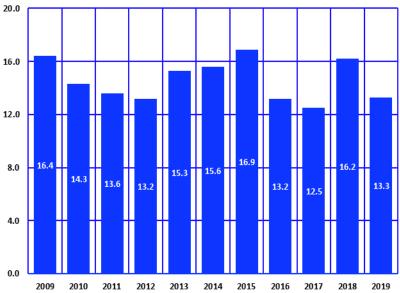
Trends in the Incidence Rates of Salmonellosis by Year,
Arizona, 2009-2019

Salmonellosis is a bacterial infection.

The incidence rate of salmonellosis decreased 17.9 percent from 16.2/100,000 in 2018 to 13.3/100,000 in 2019 (**Figure 3A-4**). The risk of salmonellosis was substantially higher in Graham (46.8/100,000), Santa Cruz (37.6/100,000), Apache (27.9/100,000), and Navajo (25.7/100,000) than the remaining counties (**Table 5F-2**).

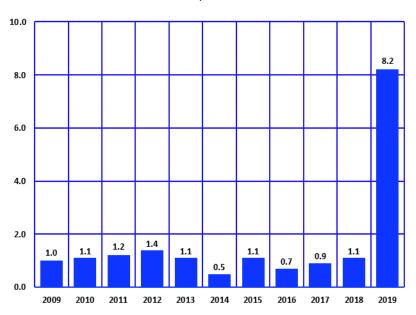
Most of those who are infected with Salmonella develop diarrhea, fever, and

abdominal cramps.



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

Figure 3A-5
Trends in the Incidence Rates of Hepatitis A by Year,
Arizona, 2009-2019

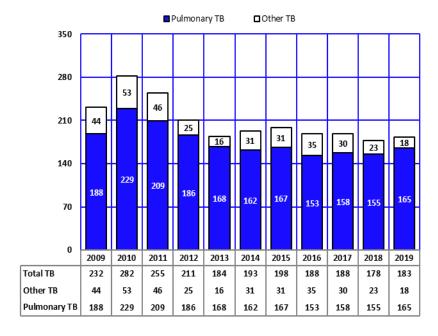


Hepatitis A is a liver disease caused by the *hepatitis A* virus. During 1995-1996, highly effective hepatitis A vaccines became available in the United States. Routine childhood vaccination for hepatitis A was recommended in 1999. The expansion of routine recommendations for hepatitis A vaccination 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* was 8.2/100,000 in 2019, the highest rate recorded in the 2009-2019 period. The 2019 incidence rate was approximately 8 times higher than the 2018 rate (1.1/100,000; **Figure 3A-5**).

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

Figure 3A-6
Trends in the Incidence of Pulmonary Tuberculosis and Total Tuberculosis<sup>a</sup>
by Year, Arizona, 2009-2019



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.

Tuberculosis (TB) is an infectious

The number of reported cases of pulmonary tuberculosis increased from 155 cases in 2018 to 165 reported cases in 2019. The number of reported cases of tuberculosis other than pulmonary decreased from 23 in 2018 to 18 in 2019 cases (**Figure 3A-6**, **Table 3A-1**). The incidence rate of total tuberculosis remained unchanged from 2018 to 2019 at 2.5/100,000 (**Table 5F-2**).

Pulmonary tuberculosis accounted for 90.2 percent of all tuberculosis infections in 2019 (**Table 3A-1**). Ten Arizonans who had tuberculosis died from it in 2019, the same number of casualties as in 2018 (**Table 3A-2**).

Note: a Number of reported cases by year.