



3A.

NON-SEXUALLY TRANSMITTED DISEASES

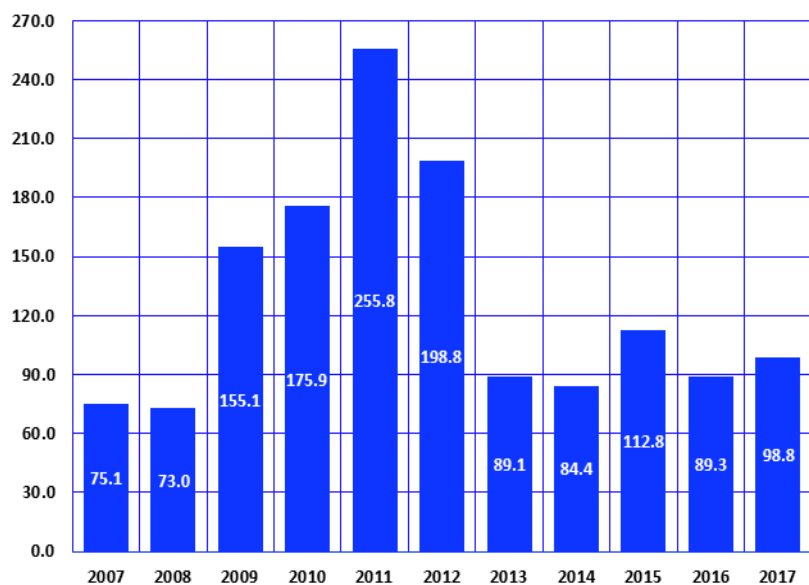
The infectious diseases designated as notifiable vary slightly by state. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. All states generally report the internationally quarantinable 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: <http://azdhs.gov/phs/oids/index.htm>.

3A. NON-SEXUALLY TRANSMITTED DISEASES

Figure 3A-1
Trends in the Incidence Rates^a of Valley Fever (Coccidioidomycosis) by Year, Arizona, 2007-2017

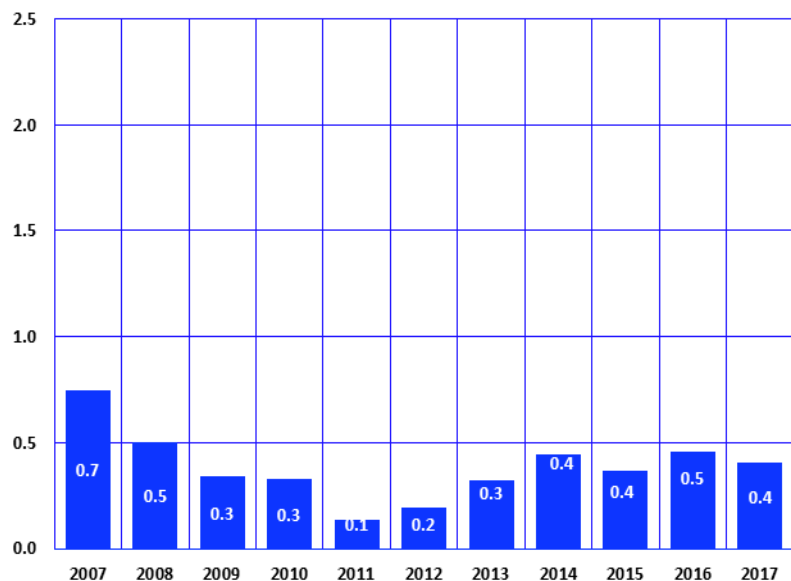


Note: ^a Number of cases per 100,000 population.

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 non-sexually transmitted, notifiable diseases in Arizona in 2017. The reported incidence of Valley Fever increased 12.9 percent from 2016 (n=6,101) to 2017 (n=6,885). The 2017 incidence rate of 98.8/100,000 (**Figure 3A-1, Table 5F-2**) was 10.7 percent greater than the incidence rate of 89.3/100,000 in 2016, but was 61.4 percent lower than the unprecedented incidence rate of 255.8/100,000 in 2011.

Figure 3A-2
Trends in Case Fatality Rates^a for Valley Fever (Coccidioidomycosis) by Year, Arizona, 2007-2017



Note: ^a Number of deaths per 100 reported cases.

Twenty eight of the 6,885 Arizonans who had *Valley Fever* in 2017 died from it (**Table 3A-2**) for a case fatality rate of 0.4 deaths per 100 cases (**Figure 3A-2**). The 2017 case mortality rate for *Coccidioidomycosis* was 45.4 percent lower than in 2007.

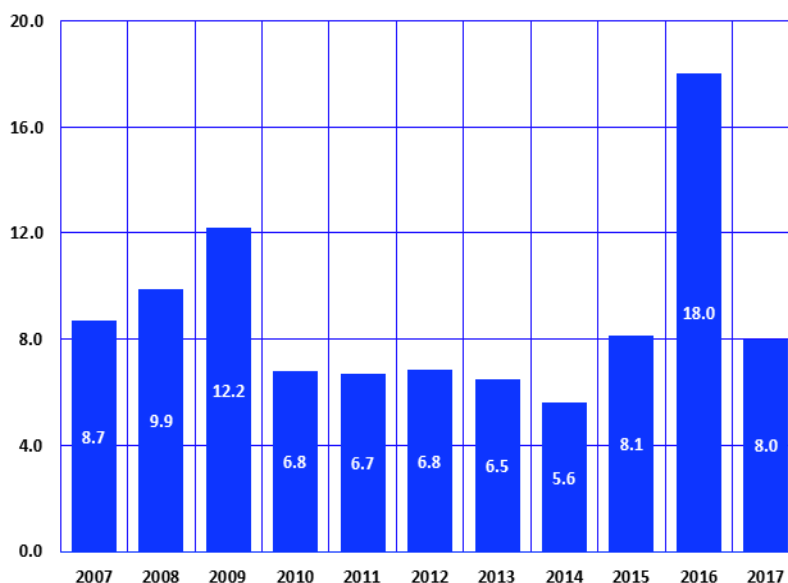
3A. NON-SEXUALLY TRANSMITTED DISEASES

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 2007–2017, *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 676 cases from 1,231 in 2016 to 555 in 2017. Compared to 2016, The incidence rate of *shigellosis* was 55.6 percent lower at 8 reported cases/100,000 population in 2017 (**Figure 3A-3**).

Figure 3A-3
Trends in the Incidence Rates^a of Shigellosis by Year, Arizona, 2007-2017

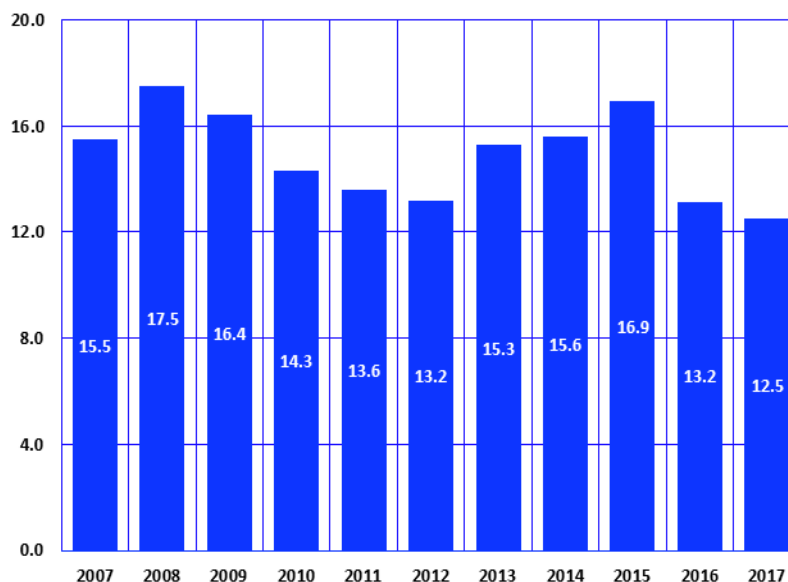


Note: ^a Number of reported cases per 100,000 population.

Figure 3A-4
Trends in the Incidence Rates^a of Salmonellosis^b by Year, Arizona, 2007-2017

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

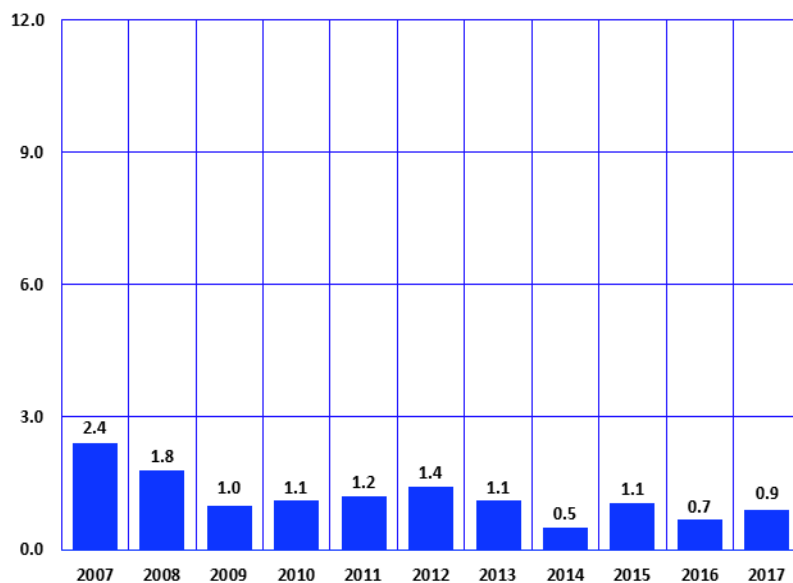
The incidence rate of *salmonellosis* decreased 5.0 percent from 13.2/100,000 in 2016 to 12.5/100,000 in 2017 (**Figure 3A-4**). The risk of *salmonellosis* was substantially higher in Apache (37.1/100,000), Graham (34.0/100,000), Navajo (24.3/100,000) and La Paz (23.2/100,000) counties (**Table 5F-2**).



Notes: ^a Number of reported cases per 100,000 population; ^b Excluding *S. Typhi* and *S. Paratyphi*.

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Figure 3A-5
Trends in the Incidence Rates^a of Hepatitis A by Year,
Arizona, 2007-2017

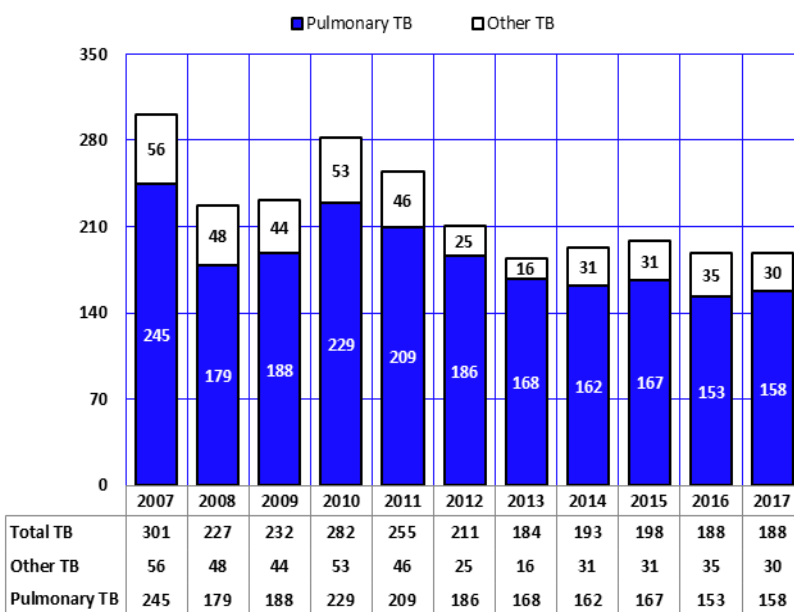


Note: ^a Number of reported cases per 100,000 population.

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 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 62.5 percent from 2.4/100,000 in 2007 to 0.9/100,000 in 2017 (**Figure 3A-5**).

Figure 3A-6
Trends in the Incidence of Pulmonary Tuberculosis and Total Tuberculosis^a
by Year, Arizona, 2007-2017



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* slightly increased from 153 reported cases in 2016 to 158 cases in 2017. The number of reported cases of tuberculosis other than pulmonary decreased in 2017 to 30 cases (**Figure 3A-6, Table 3A-1**). The incidence rate of *total* tuberculosis decreased slightly from 2.8/100,000 in 2016 to 2.7/100,000 in 2017 (**Table 5F-2**).

Pulmonary tuberculosis accounted for 84.0 percent of all tuberculosis infections in 2017 (**Table 3A-1**). Ten Arizonans who had *tuberculosis* died from it in 2017(**Table 3A-2**).