



3A.

NON-SEXUALLY TRANSMITTED DISEASES

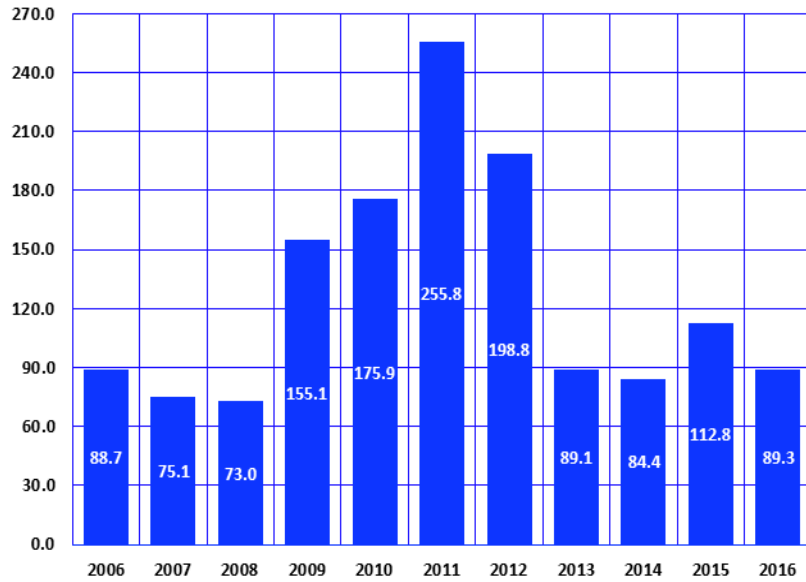
The infectious diseases designated as notifiable vary slightly by state. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. All states generally report the internationally quarantinable 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, 2006-2016

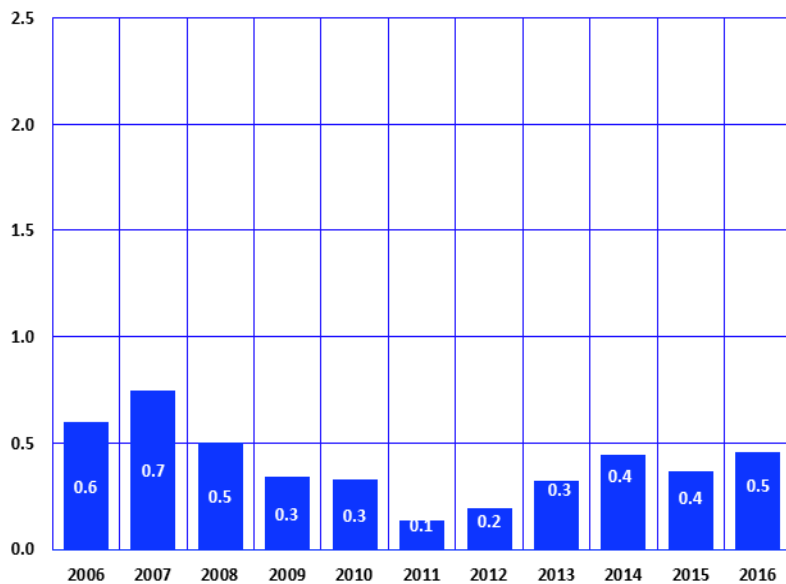


Note: ^a Number of cases per 100,000 population.

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 2016. The reported incidence of Valley Fever decreased 20.0 percent from 2015 (n=7,622) to 2016 (n=6,101). The 2016 incidence rate of 89.3/100,000 (**Figure 3A-1, Table 5F-2**) was less than one percent greater than the incidence rate of 88.7/100,000 in 2006, but was 65.1 percent lower than the 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, 2006-2016



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

Twenty eight of the 6,101 Arizonans who had *Valley Fever* in 2016 died from it (**Table 3A-2**) for a case fatality rate of 0.5 deaths per 100 cases (**Figure 3A-2**). The 2016 case mortality rate for *Coccidioidomycosis* was 23.0 percent lower than in 2006.

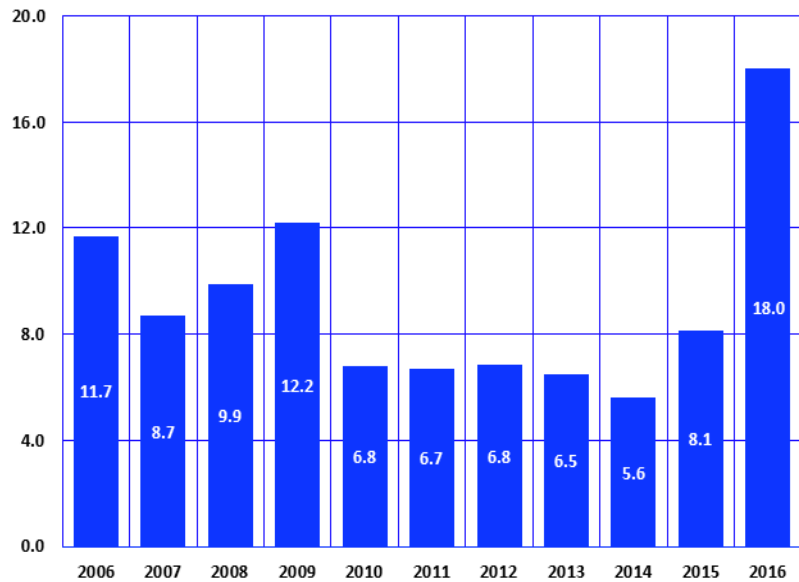
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Figure 3A-3
Trends in the Incidence Rates^a of Shigellosis by Year, Arizona, 2006-2016

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 2006–2016, *shigellosis* was the most common enteric disease to afflict Arizonans after *campylobacteriosis* and *salmonellosis* (**Table 3A-1**).

The number of reported cases of *shigellosis* in 2016 was 1,231, an increase from the number of cases observed in 2015 (549). The incidence rate of *shigellosis* in 2016, 18.0 cases per 100,000, was the highest incidence rate recorded for the first time since 2006 (**Figure 3A-3**).

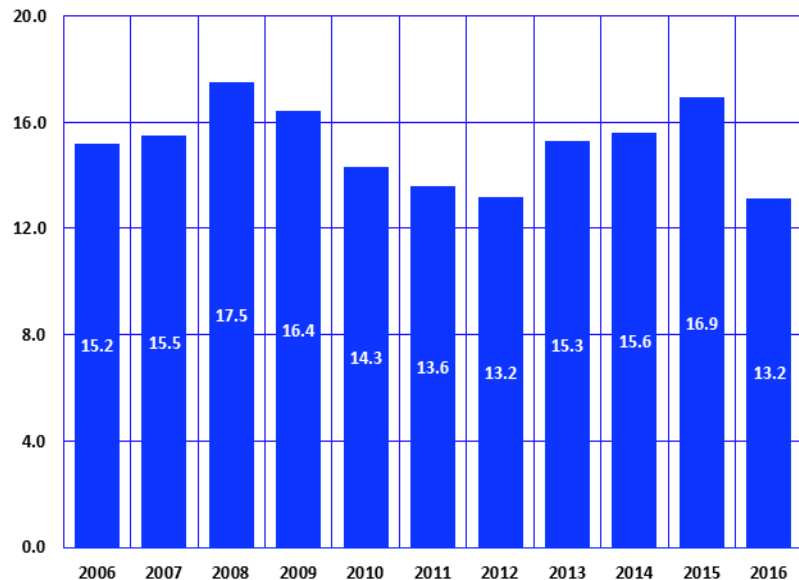


Note: ^a Number of reported cases per 100,000 population.

Figure 3A-4
Trends in the Incidence Rates^a of Salmonellosis^b by Year, Arizona, 2006-2016

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

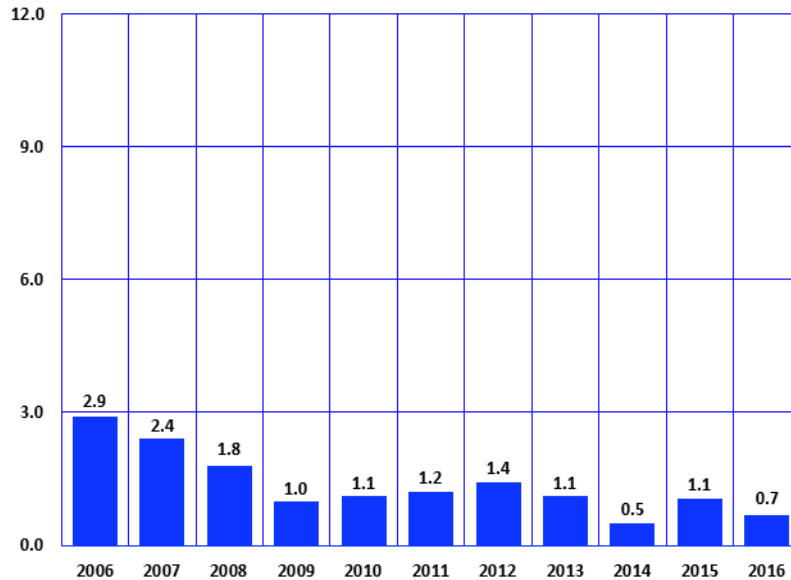
The incidence rate of *salmonellosis* decreased 22.2 percent from 16.9/100,000 in 2015 to 13.2/100,000 in 2016 (**Figure 3A-4**). The risk of *salmonellosis* was substantially higher in Santa Cruz (31.6/100,000), Graham (31.3/100,000), and Gila (25.8/100,000) counties (**Table 5F-2**).



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, 2006-2016

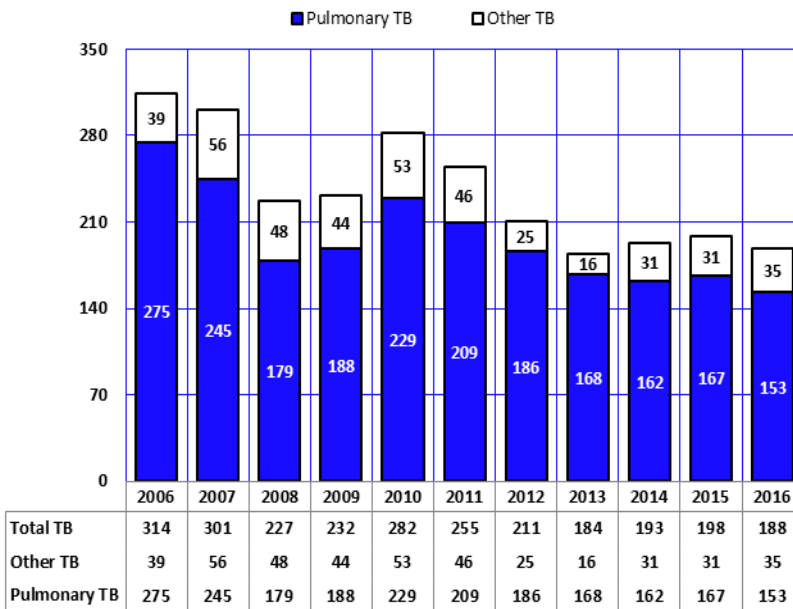


Note: ^a Number of reported cases per 100,000 population.

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 by 76.8 percent from 2.9/100,000 in 2006 to 0.7/100,000 in 2016 (**Figure 3A-5**).

Figure 3A-6
Trends in the Incidence of Pulmonary Tuberculosis and Total Tuberculosis^a
by Year, Arizona, 2006-2016



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 167 reported cases in 2015 to 153 cases in 2016. The number of reported cases of tuberculosis other than pulmonary which remained stable since 2014 at 31 cases, increased in 2016 to 35 cases (**Figure 3A-6, Table 3A-1**). The incidence rate of *total* tuberculosis decreased slightly to 2.8/100,000 between 2015 and 2016 (**Table 5F-2**).

Pulmonary tuberculosis accounted for 81.4 percent of all tuberculosis infections in 2016 (**Table 3A-1**). Seven Arizonans who had *tuberculosis* died from it in 2016 (**Table 3A-2**).