



### **3A.**

#### **NON-SEXUALLY TRANSMITTED DISEASES**

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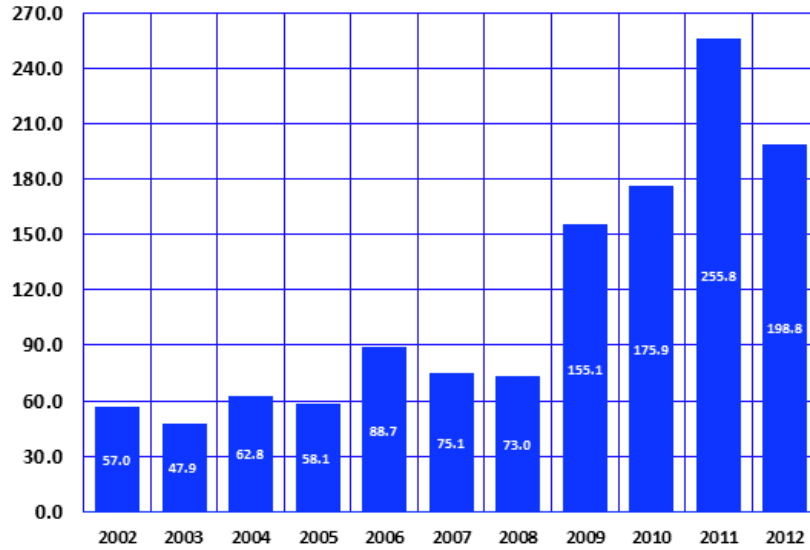
The infectious diseases designated as notifiable vary slightly by state. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. All states generally report the internationally quarantinable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

### 3A. NON-SEXUALLY TRANSMITTED DISEASES

**Figure 3A-1**  
Trends in the Incidence Rates<sup>a</sup> of Valley Fever (Coccidioidomycosis) by Year, Arizona, 2002-2012

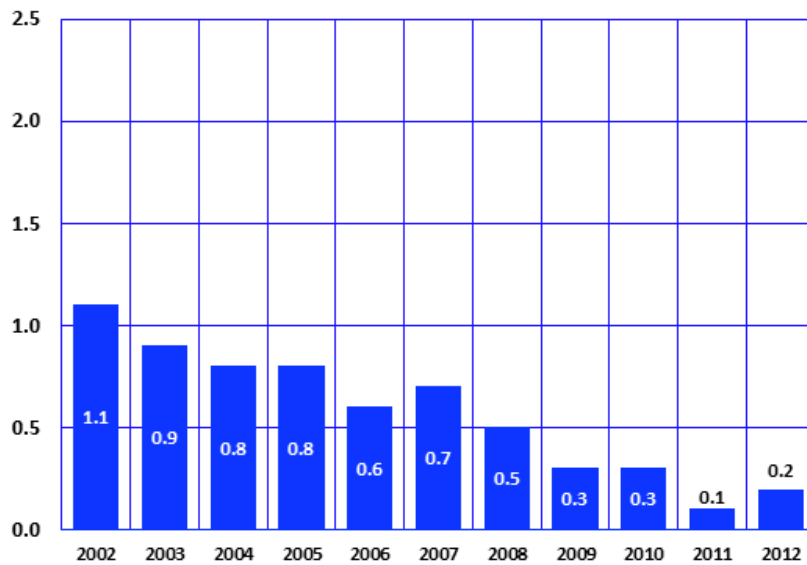


Note: <sup>a</sup> Number of cases per 100,000 population.

*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 2012. The reported incidence of Valley Fever decreased 21.6 percent from 2011 (n = 16,472) to 2012 (n = 12,920). The 2012 incidence rate of 198.8/100,000 (**Figure 3A-1, Table 5F-2**) was 3.5 times greater than the incidence rate of 57.0/100,000 in 2002.

**Figure 3A-2**  
Trends in Case Fatality Rates<sup>a</sup> for Valley Fever (Coccidioidomycosis) by Year, Arizona, 2002-2012



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

The annual mortality rates associated with *Coccidioidomycosis* have steadily declined over the last decade. Twenty-five of the 12,920 Arizonans who had *Valley Fever* in 2012 died from it (**Table 3A-2**) for a case fatality rate of 0.2 deaths per 100 cases (**Figure 3A-2**). The 2012 case mortality rate for *Coccidioidomycosis* was 5.5 times lower in 2012 than in 2002.

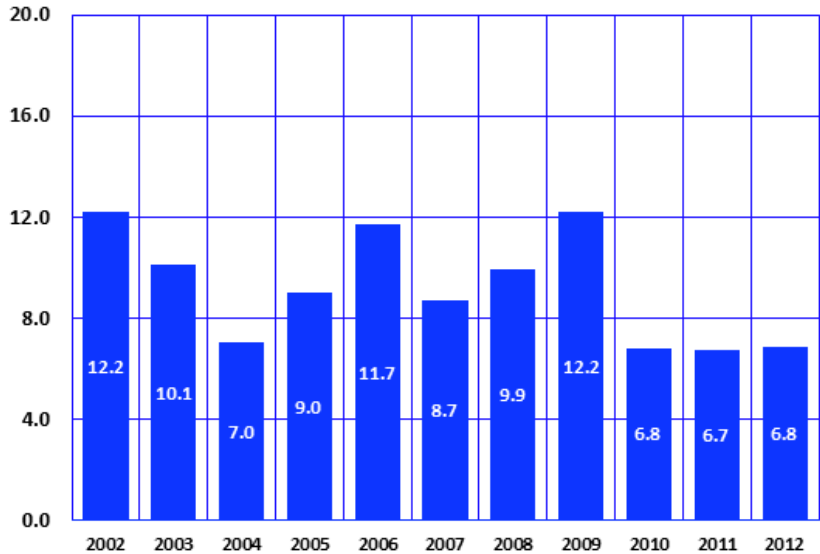
### 3A. NON-SEXUALLY TRANSMITTED DISEASES

**Figure 3A-3**  
Trends in the Incidence Rates<sup>a</sup> of Shigellosis by Year, Arizona, 2002-2012

*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 2002 - 2012, *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 2012 was 444, similar to the number of cases observed in 2011 (n = 434). The incidence rate of *shigellosis* in 2012, 6.8 cases per 100,000, remained consistent with rates observed over the past two years (Figure 3A-3).



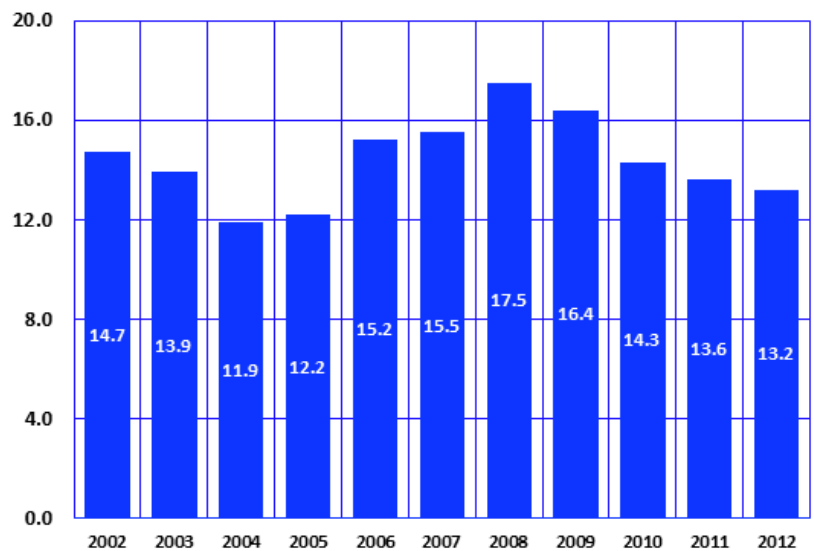
Note: <sup>a</sup> Number of reported cases per 100,000 population.

**Figure 3A-4**  
Trends in the Incidence Rates<sup>a</sup> of Salmonellosis<sup>b</sup> by Year, Arizona, 2002-2012

*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 from 17.5 cases per 100,000 population in 2008 to 13.2/100,000 in 2012 (Figure 3A-4). The risk of *salmonellosis* was substantially higher in Graham (32.2/100,000), Santa Cruz (30.8/100,000), and Navajo (26.9/100,000) counties (Table 5F-2).

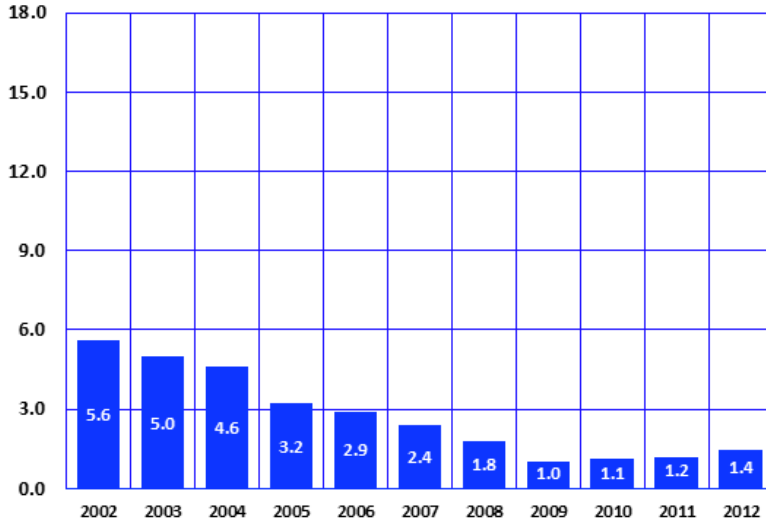
There were no Arizona residents who died from *salmonellosis* in 2012 (Table 3A-2).



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

### 3A. NON-SEXUALLY TRANSMITTED DISEASES

**Figure 3A-5**  
Trends in the Incidence Rates<sup>a</sup> of Hepatitis A by Year,  
Arizona, 2002-2012

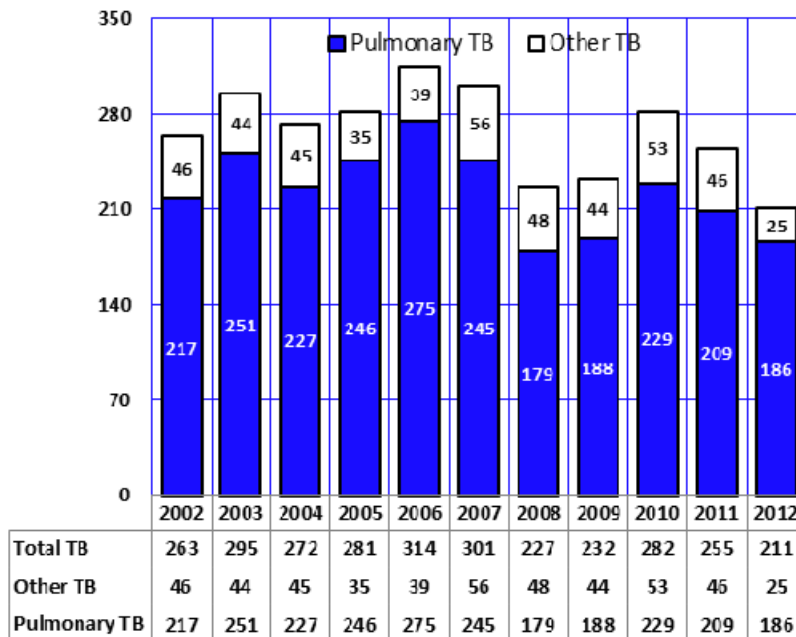


*Hepatitis A* is a liver disease caused by the *hepatitis A* virus. During 1995-1996, highly effective *hepatitis A* vaccines became available in the United States. Routine childhood vaccination for *hepatitis A* was recommended in 1999. The expansion of recommendations for routine *hepatitis A* vaccination 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 75.0 percent from 5.6/100,000 in 2002 to 1.4/100,000 in 2012 (**Figure 3A-5**).

Note: <sup>a</sup> 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, 2002-2012



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 209 reported cases in 2011 to 186 reported cases in 2012. The number of reported cases of tuberculosis other than pulmonary decreased from 46 reported in 2011 to 25 in 2012 (**Figure 3A-6, Table 3A-1**). The incidence rate of *total* tuberculosis decreased from 4.0/100,000 in 2011 to 3.2/100,000 in 2012 (**Table 5F-2**).

*Pulmonary tuberculosis* accounted for 88.2 percent of all tuberculosis infections in 2012 (**Table 3A-1**). Five Arizonans who had *tuberculosis* died from it in 2012 (**Table 3A-2**).

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