



3A.

NON-SEXUALLY TRANSMITTED DISEASES

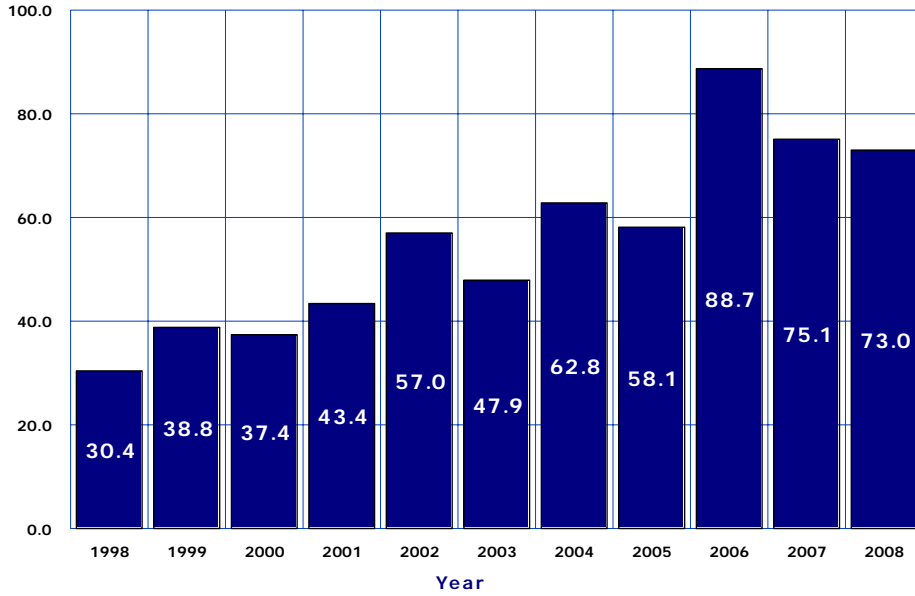
The infectious diseases designated as notifiable vary slightly by state. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. All states generally report the internationally quarantinable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

3A. NON-SEXUALLY TRANSMITTED DISEASES

Figure 3A-1
Trends in the Incidence Rates of Valley Fever (Coccidioidomycosis) by Year, Arizona, 1998-2008

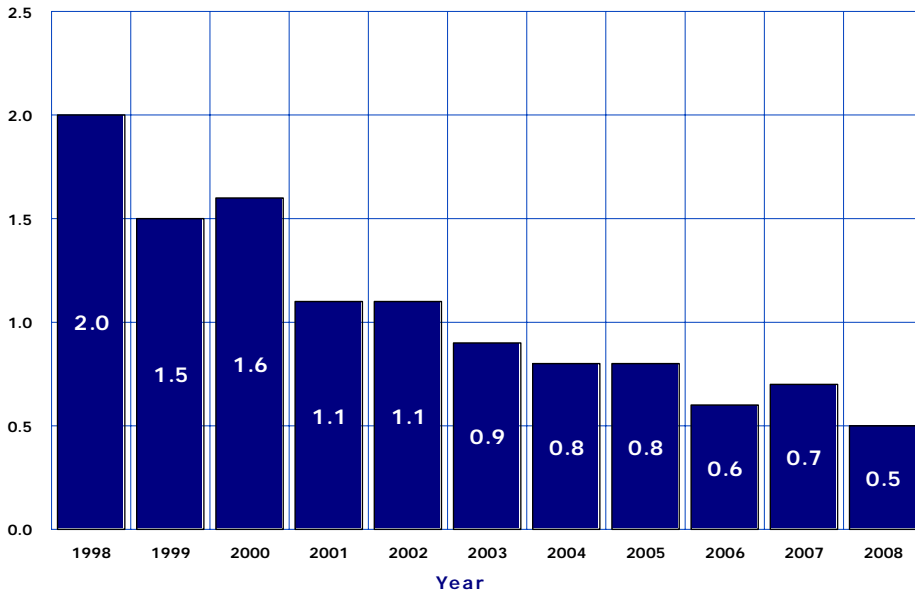


Number of cases per 100,000 population.

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 2008. The incidence rate of Valley Fever decreased for the second consecutive year from 88.7 cases per 100,000 population in 2006 to 73.0/100,000 in 2008 (**Figure 3A-1**, **Table 5F-2**). This incidence rate was 2.4 times greater than the incidence rate of 30.4/100,000 in 1998.

Figure 3A-2
Trends in Case Fatality Rates for Valley Fever (Coccidioidomycosis) by Year, Arizona, 1998-2008



Number of deaths per 100 reported cases

Despite the increase in the incidence rates after 1997, the annual mortality rates steadily declined. Twenty-four from among 4,768 Arizonans who had *Valley Fever* in 2008, died from it (**Table 3A-2**) for a case fatality rate of 0.5 deaths per 100 cases, a decrease from 0.7/100 in 2007 (**Figure 3A-2**).

3A. NON-SEXUALLY TRANSMITTED DISEASES

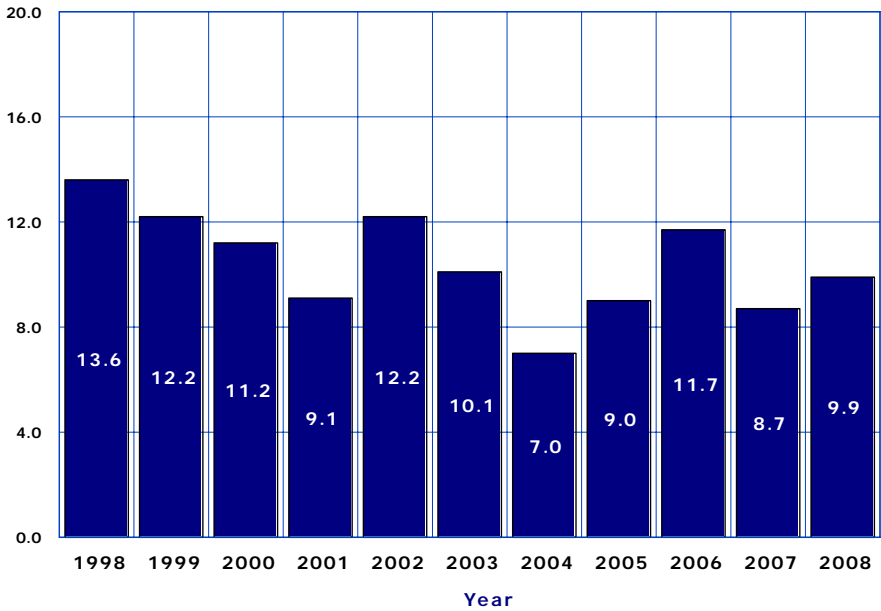
Shigellosis is an infectious disease caused by a group of bacteria called *Shigella* that can cause diarrhea in humans. In addition to spread from one person to another, *Shigellae* can be transmitted through contaminated foods, sexual contact, and water used for drinking or recreational purposes.

Shigellosis was the second most common enteric disease to afflict Arizonans in 1998 and 1999. In 2000 - 2008, *shigellosis* was the third most common enteric disease to afflict Arizonans after *salmonellosis* and *campylobacteriosis* (Table 3A-1).

The number of reported cases of *shigellosis* increased from 557 in 2007 to 650 in 2008. The incidence rate of *shigellosis* increased to 9.9 cases per 100,000 in 2008 (Figure 3A-3). The risk of this disease was much higher in Santa Cruz County (31.7/100,000; Table 5F-2).

Since 2005, no Arizona resident died from *shigellosis* (Table 3A-2).

Figure 3A-3
Trends in the Incidence Rates of Shigellosis by Year, Arizona, 1998-2008



Number of reported cases per 100,000 population.

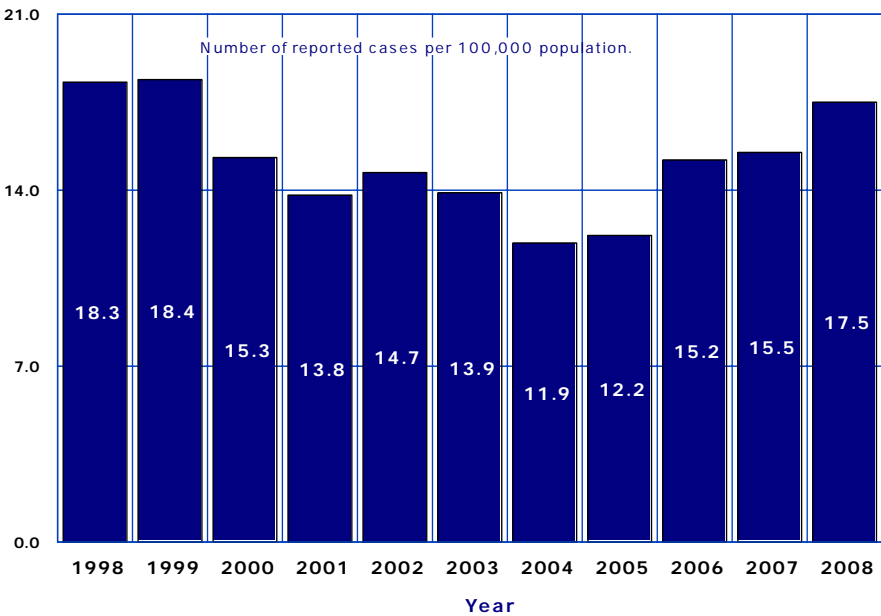
Salmonellosis is a bacterial infection. Most of those who are infected with *Salmonella* develop diarrhea, fever and abdominal cramps. Every year, approximately 40,000 cases of *Salmonellosis* are reported in the United States.

From 1998 to 2002, *salmonellosis* (excluding *S. Typhi* and *S. Paratyphi*) was the most common enteric disease in Arizona. In 2003 - 2005, *campylobacteriosis* was the most common, followed by *salmonellosis* (Table 3A-1). In 2006-2008, *salmonellosis* once again was the most common enteric disease in the State.

The incidence rate of *salmonellosis* increased for the 4th consecutive year from 11.9 cases per 100,000 population in 2004, to 17.5/100,000 in 2008 (Figure 3A-4). The risk of *salmonellosis* was substantially higher in Apache (52.5/100,000), Graham (49.2/100,000), and Santa Cruz (40.2/100,000) counties (Table 5F-2).

Two Arizonans who had *salmonellosis* died from it in 2008 (Table 3A-2).

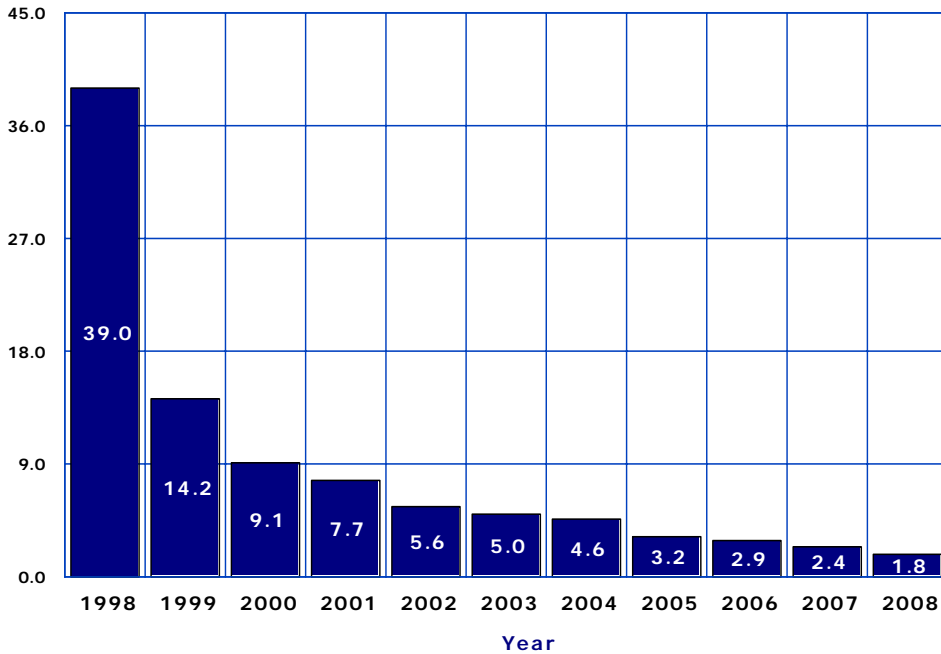
Figure 3A-4
Trends in the Incidence Rates of Salmonellosis* by Year, Arizona, 1998-2008



*Excluding *S. Typhi* and *S. Paratyphi*.

3A. NON-SEXUALLY TRANSMITTED DISEASES

Figure 3A-5
Trends in the Incidence Rates of Hepatitis A by Year, Arizona, 1998-2008



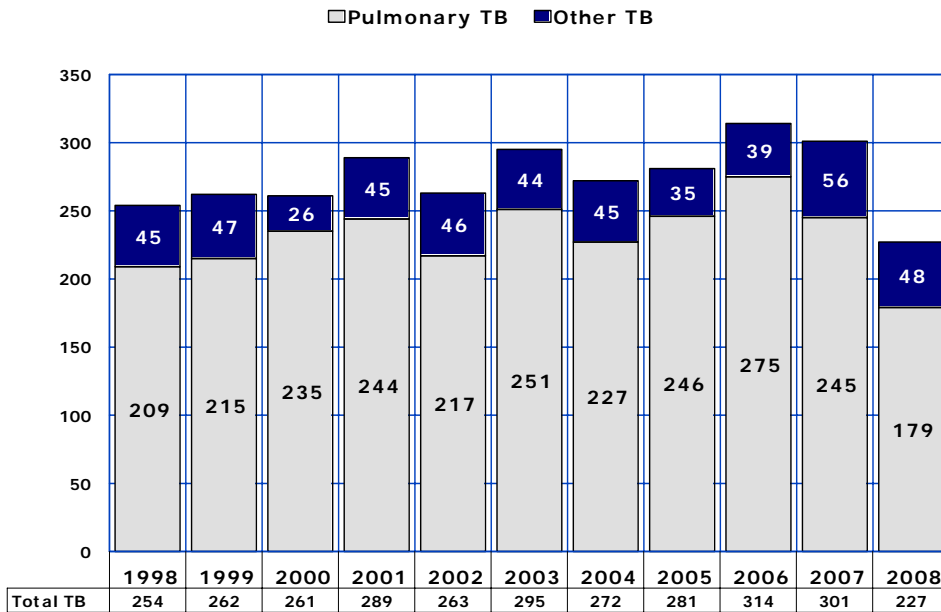
Number of reported cases per 100,000 population.

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. In 2006, 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 95.4 percent from a recent high of 39.0/100,000 in 1998 to 1.8/100,000 in 2008 (Figure 3A-5).

In 2008, the incidence rate of 9.3 cases of hepatitis A per 100,000 residents of La Paz County was 5.2 times greater than the state rate (Table 5F-2).

Figure 3A-6
Trends in the Incidence of Pulmonary Tuberculosis and Total Tuberculosis by Year, Arizona, 1998-2008



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 275 in 2006 to 245 in 2007, and 179 in 2008. The number of reported cases of tuberculosis other than pulmonary decreased by 14.3 percent from 56 reported in 2007 to 48 in 2008 (Figure 3A-6, Table 3A-1). The incidence rate of *total tuberculosis* decreased for the second consecutive year from 5 cases per 100,000 population in 2006 to a rate of 3.5/100,000 in 2008 (Table 5F-2). The risk of the disease was 4.3 times higher in La Paz County (15.2 cases per 100,000 population).

Pulmonary tuberculosis accounted for 78.9 percent of all tuberculosis infections in 2008 (Table 3A-1). Thirteen Arizonans who had *tuberculosis* died from it in 2008 (Table 3A-2).