



3A.

NON-SEXUALLY TRANSMITTED DISEASES

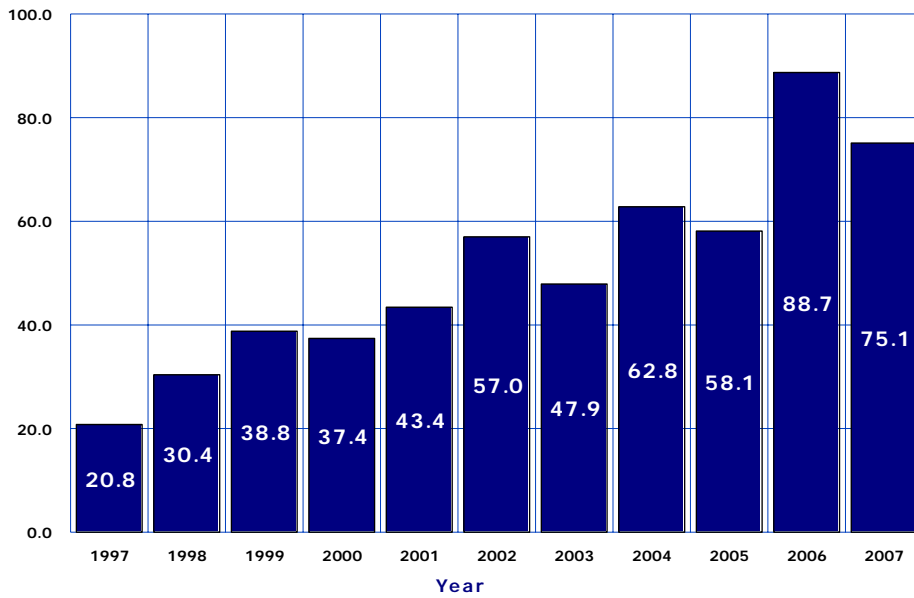
The infectious diseases designated as notifiable vary slightly by state. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. All states generally report the internationally quarantinable 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, 1997-2007

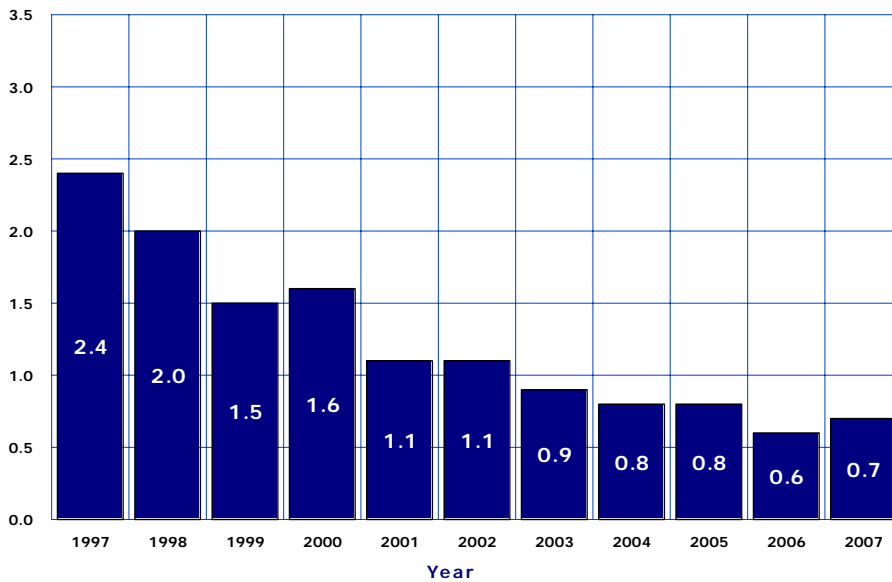


Number of cases per 100,000 population.

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 2007. The number of reported cases of *Valley Fever* increased by 57.5 percent from 3,515 in 2005 to 5,535 in 2006 (**Table 3A-1**). It was the highest number of cases ever reported in the State. In 2007, the number of reported cases of *Valley Fever* decreased by 12.7 percent to 4,832. The incidence rate of *Valley Fever* decreased from 88.7 cases per 100,000 population in 2006 to 75.1/100,000 in 2007 (**Figure 3A-1**, **Table 5F-2**). This incidence rate was 3.6 times greater than the incidence rate of 20.8/100,000 in 1997.

Figure 3A-2
Trends in Case Fatality Rates for Valley Fever (Coccidioidomycosis) by Year, Arizona, 1997-2007



Number of deaths per 100 reported cases

The mortality rates for *Valley Fever* reached their latest peak in 1996 (**Figure 3A-2**). Despite the increase in the incidence rates after 1997, the annual mortality rates steadily declined. Thirty-six from among 4,832 Arizonans who had *Valley Fever* in 2007, died from it (**Table 3A-2**) for a case fatality rate of 0.7 deaths per 100 cases, a slight increase from 0.6/100 in 2006.

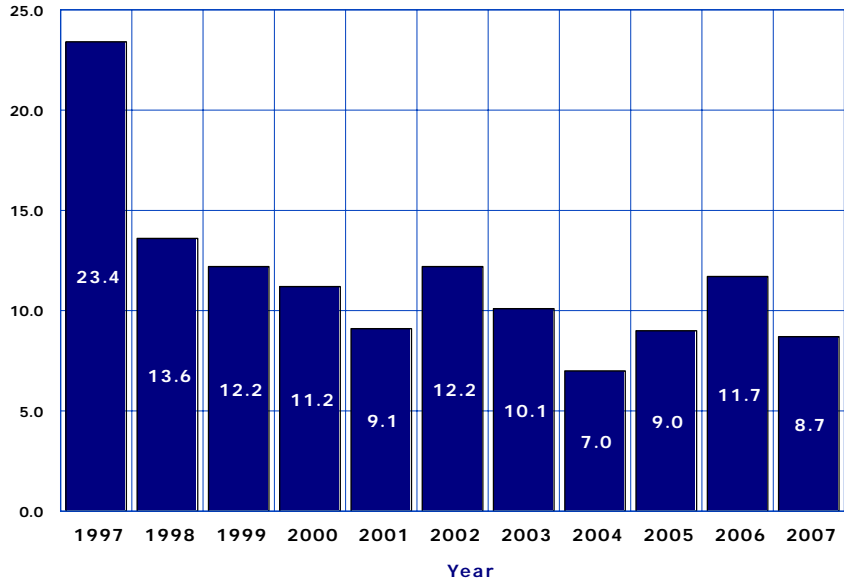
3A. NON-SEXUALLY TRANSMITTED DISEASES

Figure 3A-3
Trends in the Incidence Rates of Shigellosis by Year, Arizona, 1997-2007

Shigellosis is an infectious disease caused by a group of bacteria called *Shigella* that can cause diarrhea in humans. The spread of *Shigella* from an infected person to others persons can be stopped by frequent handwashing with soap.

Shigellosis was the most common enteric disease to afflict Arizonans in 1997. In 2000 - 2007, *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 decreased from 409 in 2004 to 729 in 2006 and 557 in 2007. The incidence rate of *shigellosis* decreased to 8.7 cases per 100,000 in 2007 (Figure 3A-3). The risk of this disease was much higher in Santa Cruz (47.3/100,000), Graham (35.8/100,000) and Gila (25.1/100,000) counties (Table 5F-2).



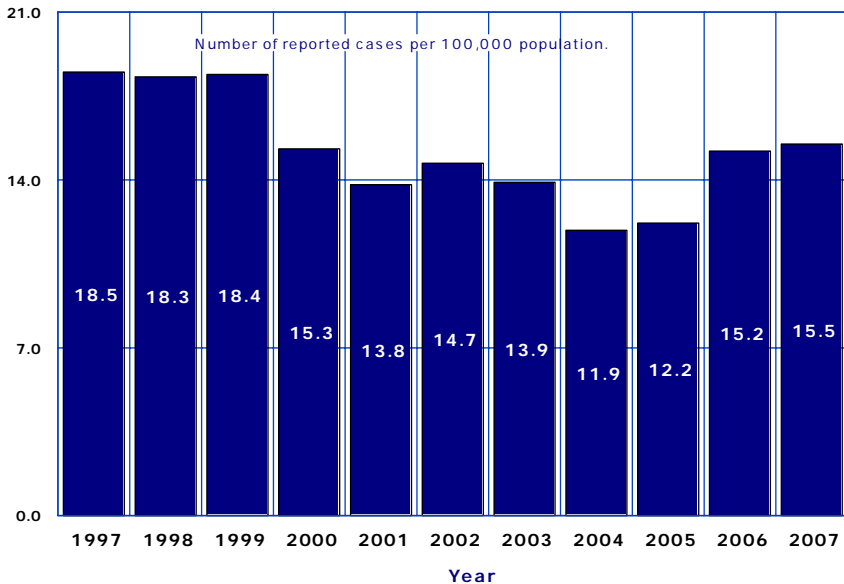
Number of reported cases per 100,000 population.

Figure 3A-4
Trends in the Incidence Rates of Salmonellosis* by Year, Arizona, 1997-2007

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 2006-2007, *salmonellosis* once again was the most common enteric disease in the State.

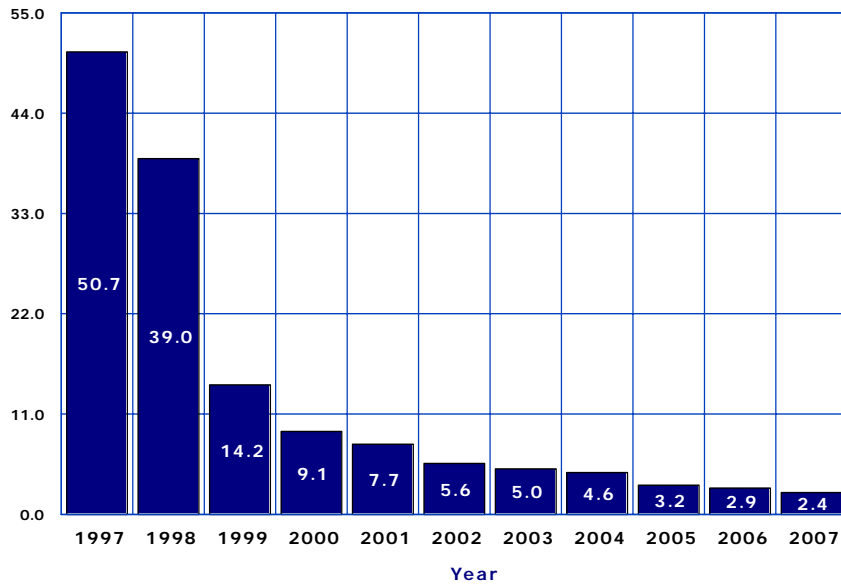
The incidence rate of *salmonellosis* slightly increased from 15.2 cases per 100,000 population in 2006, to 15.5/100,000 in 2007 (Figure 3A-4). The risk of *salmonellosis* was substantially higher in Graham (44.1 /100,000), Gila (26.9/100,000), and Cochise (26.1/100,000) counties (Table 5F-2).



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

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Figure 3A-5
Trends in the Incidence Rates of Hepatitis A by Year, Arizona, 1997-2007



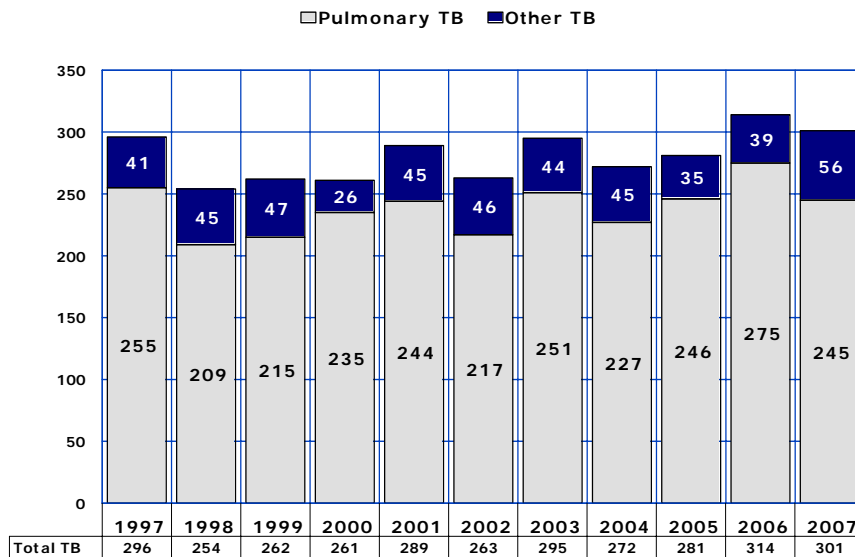
Number of reported cases per 100,000 population.

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 states where *hepatitis A* incidence rates were consistently elevated.

In Arizona, the incidence rate of *hepatitis A* decreased by 95.3 percent from a recent high of 50.7/100,000 in 1997 to 2.4/100,000 in 2007 (**Figure 3A-5**).

In 2007, the incidence rate of 24.2 cases of hepatitis A per 100,000 residents of Greenlee County was 10 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, 1997-2007



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. The number of reported cases of tuberculosis other than pulmonary increased by 43.6 percent from 39 reported in 2006 to 56 in 2007 (**Figure 3A-6, Table 3A-1**). The incidence rate of *total tuberculosis* decreased by 6 percent from 5 cases per 100,000 population in 2006 to a rate of 4.7/100,000 in 2007 (**Table 5F-2**). The risk of the disease was 2.9 times higher in La Paz County (13.8 cases per 100,000 population).

Pulmonary tuberculosis accounted for 81.4 percent of all tuberculosis infections in 2001 (**Table 3A-1**). Twelve Arizonans who had *tuberculosis* died from it in 2007 (**Table 3A-2**).