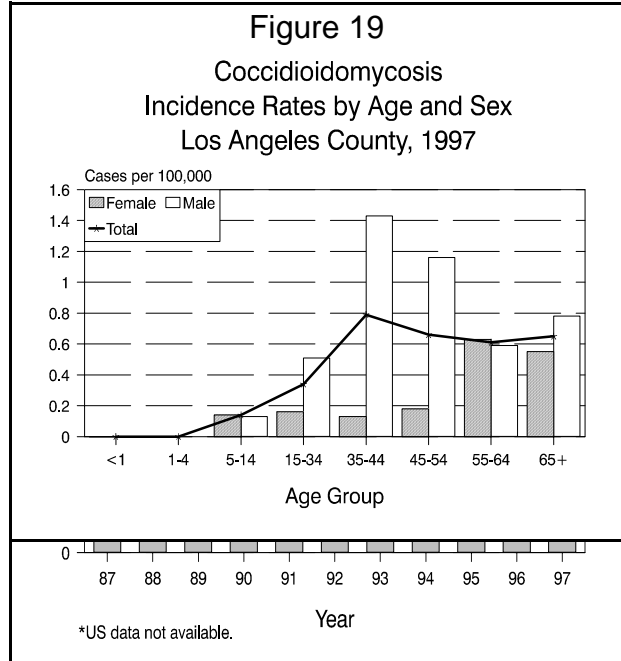


# COCCIDIOIDOMYCOSIS

CRUDE DATA	
Number of Cases	40
Annual Incidence <sup>a</sup>	
LA County	0.44
California <sup>b</sup>	2.15
United States	N/A
Age at Onset	
Mean	44
Median	43
Range	10-77 yrs
Case Fatality	
LA County	12.5%
United States	N/A

<sup>a</sup>Cases per 100,000 population.

<sup>b</sup>California Department of Health Services Surveillance and Statistics Section.



## ETIOLOGY

*Coccidioides immitis*, a dimorphic fungus found in the soil.

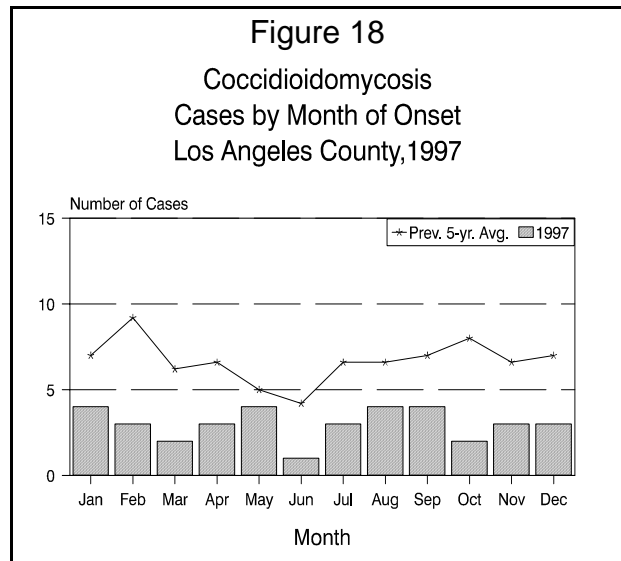
## DISEASE ABSTRACT

The coccidioidomycosis incidence rate for 1997 has declined since 1993 (Figure 17) and is lower than the five-year average.

## STRATIFIED DATA

**Trends:** The incidence of coccidioidomycosis declined from 0.87 cases per 100,000 population in 1995 and 0.77 in 1996 to 0.44 in 1997. This is far below the past 10-year average incidence of 0.71.

**Seasonality:** None observed (Figure 18).



**Age:** The highest incidence rate was observed in the 35-44 age group (0.79 cases per 100,000

population), followed by the 45-54 (0.66), 65 years and older (0.65), and 55-64 (.61) age groups (Figure 19). There were no cases under the age of 10.

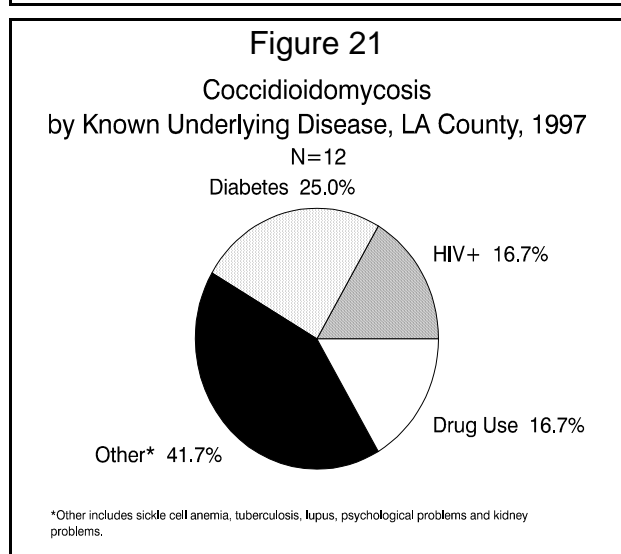
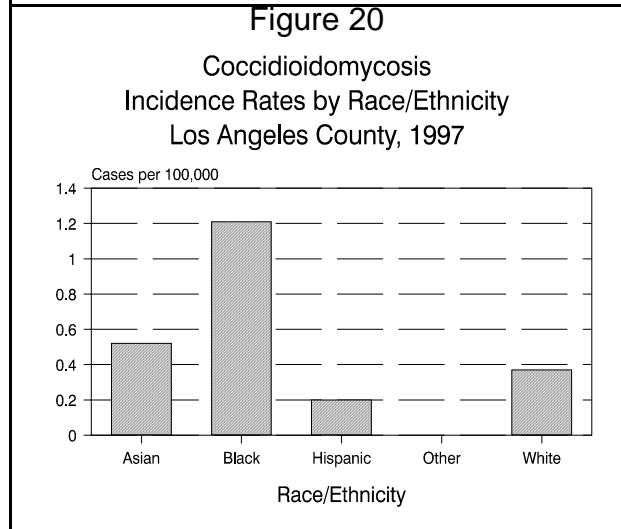
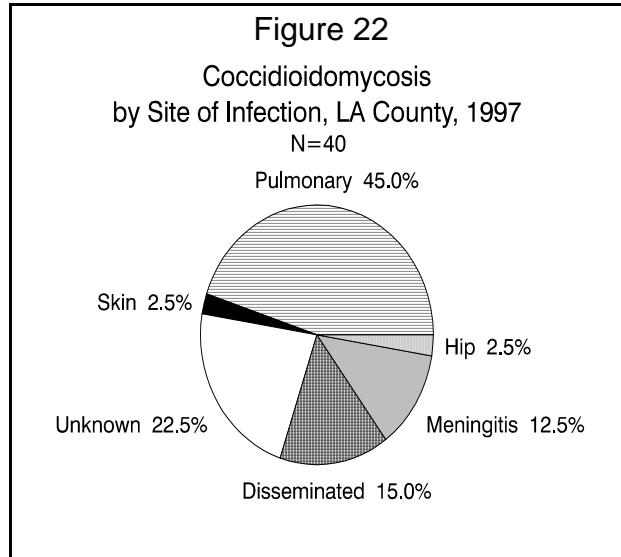
**Sex:** The male-to-female rate ratio was 3:1. The difference is likely due to occupational and recreational dust exposure of males although this is not clearly evident from the information collected (Figure 19). No cases reported being pregnant.

**Race/Ethnicity:** As shown in Figure 20, a higher incidence among Blacks (1.21 cases per 100,000 population) with incidence substantially lower in Asians (0.61) and Whites (0.40) occurred. Incidence in Hispanics was the lowest (0.20). Ethnic groups considered at highest risk for **disseminated disease** (spreading to and infecting many parts of the body) are Blacks, Filipinos and other Asians, Mexican Americans, and Native Americans. Of the six cases with disseminated disease, there were three Blacks, two Asians, and one Hispanic from Mexico.

**Location:** Antelope Valley District had the highest rate of coccidioidomycosis at 2.00 per 100,000 population (6 cases). One other northern county district, West Valley, had the second highest rate of 1.33 (10 cases). For the previous three years, Antelope Valley District ranked at least second for the highest annual incidence.

**Travel:** Seven cases reported travel four weeks before onset of illness: three traveled within California and four traveled outside California to such places as Arizona, Nevada, and Utah. Traditionally, coccidioidomycosis is known to be endemic in these areas as well as California.

**Underlying Disease:** Of the 12 cases with known underlying disease, three cases were diabetics, two were HIV positive, two were drug users, and five had other various diseases (Figure 21). Although 70% of the cases had



no known underlying disease, there was no difference in gender, race, or age with those who reported underlying illness. Of the cases that died, one of the persons was HIV positive, one had diabetes, one had leukemia, and two had no known underlying disease.

**Site of Infection:** Of the cases reported in 1997, sites of infection were reported as 45% primary pulmonary, 16% disseminated, 13% meningitis, 3% skin, 3% hip and 23% of the case infection sites were unknown (Figure 22).

## **COMMENTS**

Coccidioidomycosis is a disease associated with exposure to dust containing *Coccidioides immitis* spores. Environmental conditions conducive to an increased occurrence of coccidioidomycosis are as follows: arid to semi-arid regions, dust storms, lower altitude, hotter summers, warmer winters, and sandy, alkaline soils. Southern California is a known endemic area. Since there is no safe and effective vaccine or drug to prevent this disease, prevention lies mainly in dust control such as planting grass in dusty areas, putting oil on roadways, wetting down soil, air conditioning homes, and wearing masks or respirators. Future areas of study should examine weather patterns and geography using geographic information systems to quantify the effects on the incidence of coccidioidomycosis.