

Legionellosis

2006 Case Total 10
2005 Case Total 10

2006 Rate 0.29 per 100,000
2005 Rate 0.29 per 100,000

Ten cases of legionellosis were reported in 2006, the same number of cases as 2005. Two cases, both residents of Tulsa County, were associated with an outbreak that was associated with a hotel in Arkansas. (See *Multi-State Outbreak Associated with an Arkansas Hotel—Summary of Oklahoma Cases*). However, this is a 58% decrease from 2004, when 24 cases occurred. An outbreak of legionellosis associated with a hotel hot tub and pool area caused 2004 to be the year with the highest cases reported in the past 10 years.

Cases occurred among residents of 7 counties: Choctaw (1 case), LeFlore (1 case), Muskogee (2 cases), Oklahoma (1 case), Tulsa (4 cases, including 2 associated with an Arkansas hotel) and Washita (1 case). Ages ranged from 40 to 72 years with a median age of 59 years. All but one case occurred in persons 50 or older; the age specific incidence rate for those 50 and older was 9.14 per 100,000.

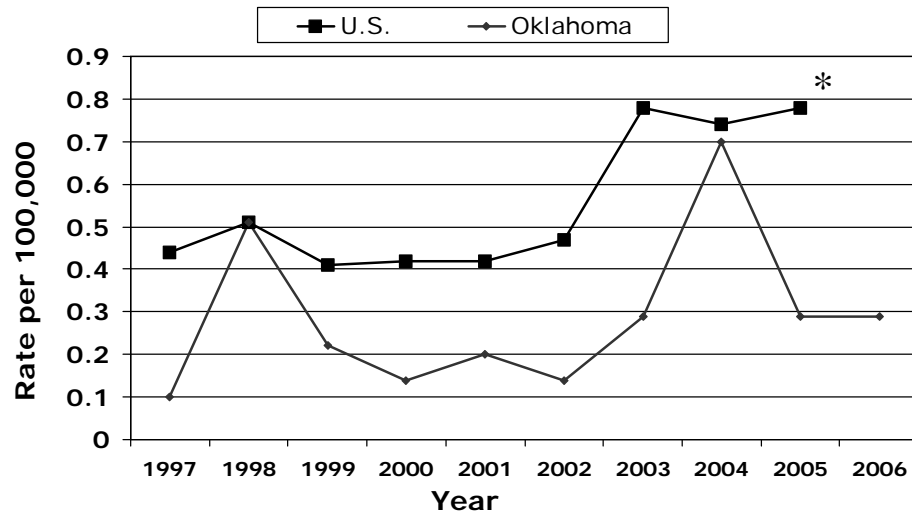
Six (60%) cases were male; three cases died resulting in a case fatality rate of 30%. Racial information was available for 9 patients, all were white, and of the eight cases for whom ethnicity was known, all were non-Hispanic.

Reported cases of legionellosis in Oklahoma continue to be below the national average (see graph). The true incidence of legionellosis may be lower in Oklahoma when compared to the United States as a whole; however, it is possible that the disease is underdiagnosed and/ or underreported. Clinicians are encouraged to consider legionellosis in patients with pneumonia.

Demonstration of *Legionella pneumophila* serotype 1 in respiratory secretions, or detection by urine antigen are considered diagnostic.

In 2006, eight of the ten cases were diagnosed using urinary antigen tests, two were diagnosed when *Legionella pneumophila* serotype 1 was identified from bronchial wash specimens. Serologic tests for legionellosis exist, however, confirmation requires demonstration of a fourfold change in antibodies between the acute and convalescent phase. Because of the difficulties sometimes encountered in obtaining convalescent sera, as well as the need for timely laboratory confirmation, urinary antigen testing may be a better diagnostic method for many patients suspected of having legionellosis.

Legionellosis Incidence Rate by Year, Oklahoma and U.S., 1997-2006



* Finalized national legionellosis data for 2006 was not available during the publication of this summary.