

Legionellosis

Agent: *Legionella* species (bacteria); most infections in the United States are caused by *Legionella pneumophila*

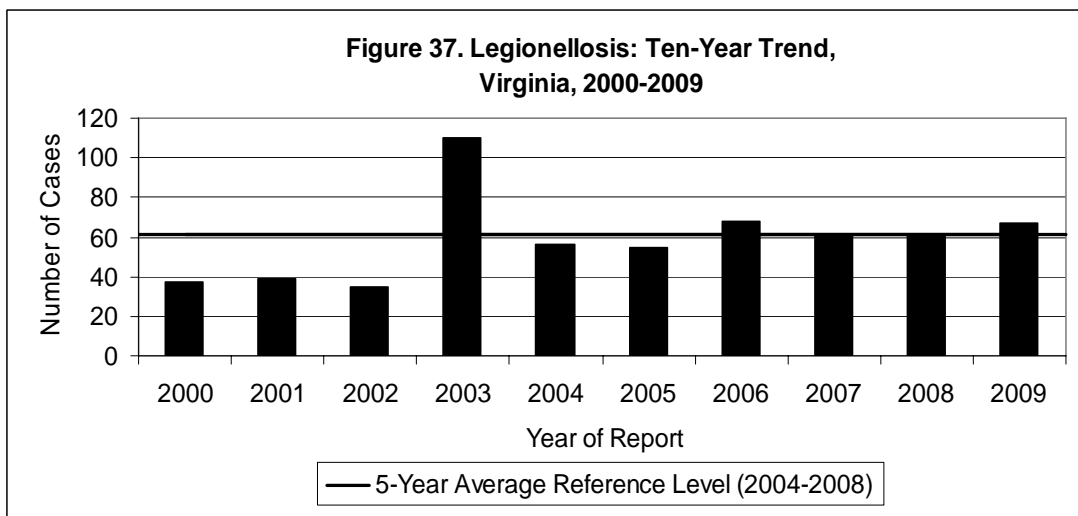
Mode of Transmission: Inhalation of contaminated aerosols (e.g., water sprays, mists).

Signs/Symptoms: Infection with *L. pneumophila* causes two distinct illnesses: Legionnaires' disease, characterized by fever, muscle aches, headaches, malaise, cough, and pneumonia; and Pontiac fever, a milder influenza-like illness without pneumonia. Pontiac fever and Legionnaires' disease are referred to as "legionellosis", separately or together.

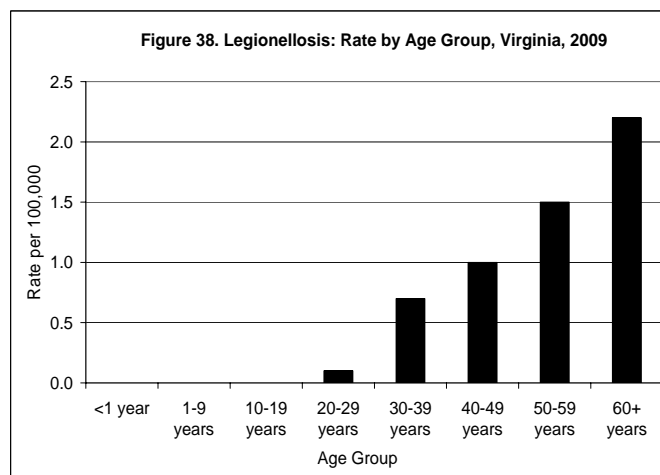
Prevention: For outbreaks, control measures include disinfection of contaminated water sources by chlorination or superheating of water from 160°-170°F, and appropriate mechanical cleaning.

Other Important Information: Legionellosis is more common among people who smoke or have chronic medical conditions.

During 2009, 67 cases of legionellosis were reported in Virginia. This is similar to the 66 cases reported in 2008, and represents a 9% increase from the five-year average of 61.2 cases per year (Figure 37). This trend is consistent with a national pattern which showed a sudden increase in legionellosis cases in 2003, and higher incidence in the post-2003 period than in the pre-2003 period. The cause of this increase is not clearly understood.



Legionellosis incidence is closely associated with age. The highest incidence occurred among adults in the 60 year and over age group (2.2 per 100,000) followed by the 50-59 year age group (1.5 per 100,000). No cases were reported among persons younger than 20 years of age (Figure 38). By race, incidence was similar for the black and white populations (0.6 and 0.7 per 100,000, respectively). Males had a higher incidence than females (1.1 and



0.7 per 100,000, respectively). Regionally, the southwest region had the highest incidence (1.7 per 100,000), followed by the northwest region (1.5 per 100,000 each). Ninety percent of the cases had onset in the last three quarters of the year and were evenly distributed among those quarters. This seasonal trend is also observed nationally. No outbreaks attributed to *Legionella pneumophila* were reported in 2009. Among cases reported in 2009, 10 deaths were attributed to legionellosis and occurred in persons ranging in age from 50 to 89 years. Seven of those who died were male and three were female.