

Legionellosis

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

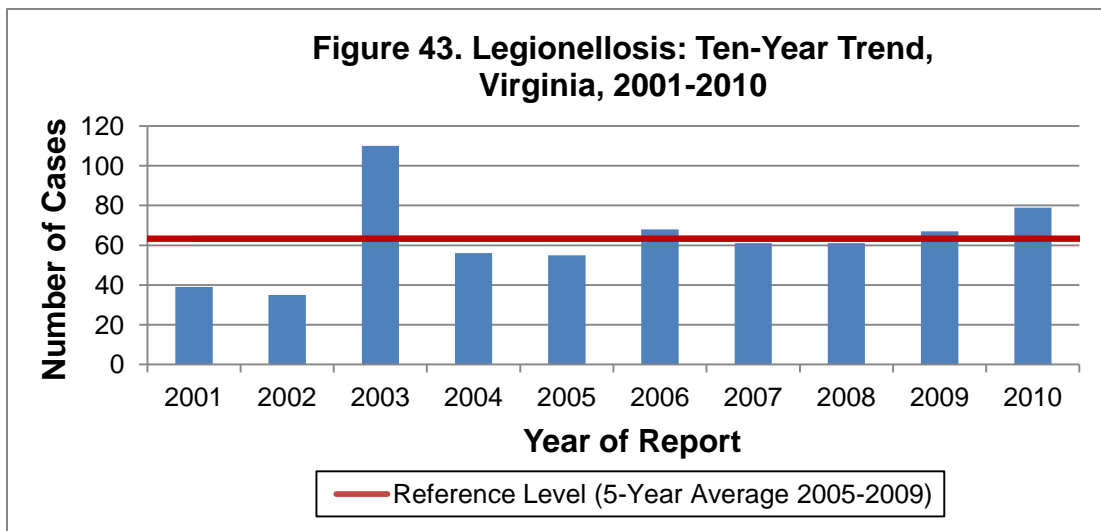
Mode of Transmission: Inhalation of contaminated aerosols (e.g., water sprays, mists).

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.

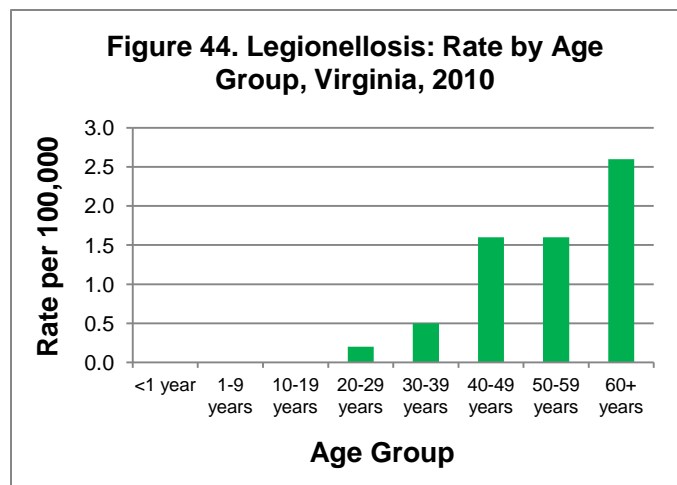
Prevention: For outbreaks, control measures include disinfection of contaminated water sources by chlorination or superheating of water from 160°-170°F, and appropriate mechanical cleaning.

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

During 2010, 79 cases of legionellosis were reported in Virginia, an 18% increase from the 67 cases reported in 2009, and a 25% increase from the five-year average of 63.4 cases per year (Figure 43). 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 (2.6 per 100,000) followed by the 40-49 and 50-59 year age groups (1.6 per 100,000 each). No cases were reported among persons younger than 20 years of age (Figure 44). By race, incidence was slightly higher in the black population than the white population (1.0 and 0.8



per 100,000, respectively). No cases were reported from the “other” race population. Incidence in males was more than twice the incidence in females (1.4 and 0.6 per 100,000, respectively). By region, the highest incidence rate occurred in the northwest region (2.1 per 100,000), followed by the southwest and central regions (1.0 per 100,000 each). Cases occurred throughout the year, with the fewest cases (16%) being reported during the first quarter. No outbreaks attributed to *Legionella pneumophila* were reported in 2010. Among cases reported in 2010, 2 deaths were attributed to legionellosis and occurred in males over 50 years of age.