

## **Legionellosis**

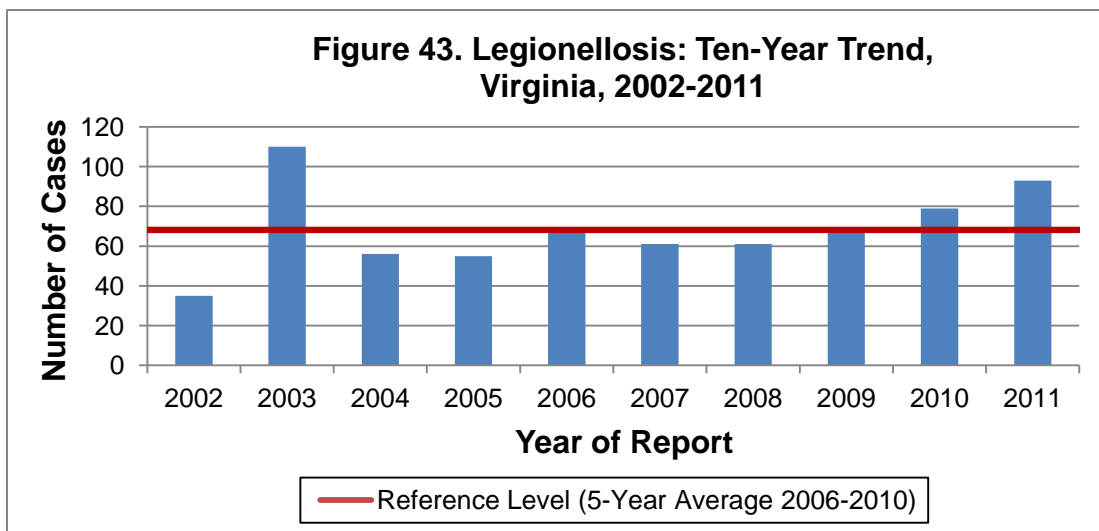
Agent: *Legionella* species (bacteria); most infections in the United States are caused by *Legionella pneumophila*

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

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

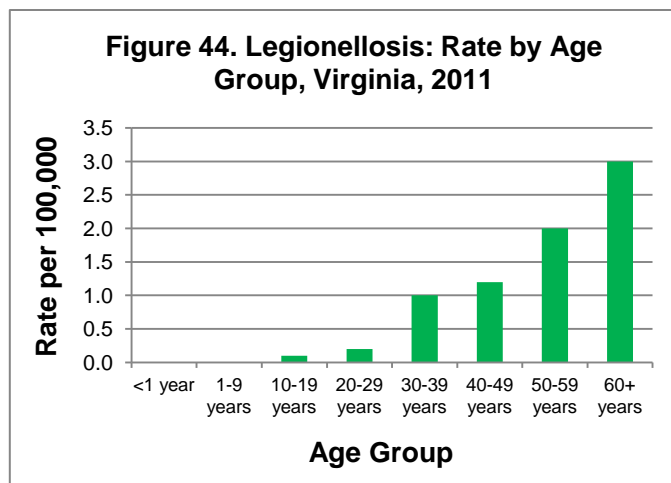
Prevention: For outbreaks, control measures include disinfection of contaminated water sources by chlorination or superheating of water from 160°-170°F, and appropriate mechanical cleaning.

Other Important Information: Legionellosis is more common among people who are elderly, are immunocompromised, or have underlying lung disease.



During 2011, 93 cases of legionellosis were reported in Virginia, an 18% increase from the 79 cases reported in 2010, and a 36% increase from the five-year average of 68.2 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. Factors that may contribute to this rise in reported cases include an increasing population of older persons or persons at high risk for infection, and improved diagnosis and reporting of the condition.

Legionellosis incidence is closely associated with age. The highest incidence occurred among adults in the 60 year and over age group (3.0 per



100,000) followed by the 50-59 and 40-49 year age groups (2.0 and 1.2 per 100,000, respectively). No cases were reported among persons younger than 10 years of age (Figure 44). By race, incidence was higher in the black population than the white population (1.5 and 0.7 per 100,000, respectively). Incidence among males was twice the rate among females (1.5 and 0.8 per 100,000, respectively). By region, the highest incidence rate occurred in the southwest region (1.6 per 100,000), followed by the northwest and central regions (1.5 per 100,000, each). Cases occurred throughout the year, with the highest number of cases (37 cases, 40%) being reported during the months of September and October. Among cases reported in 2011, two deaths were attributed to legionellosis and occurred in males over 60 years of age. No outbreaks attributed to *Legionella pneumophila* were reported in 2011.