

Tuberculosis

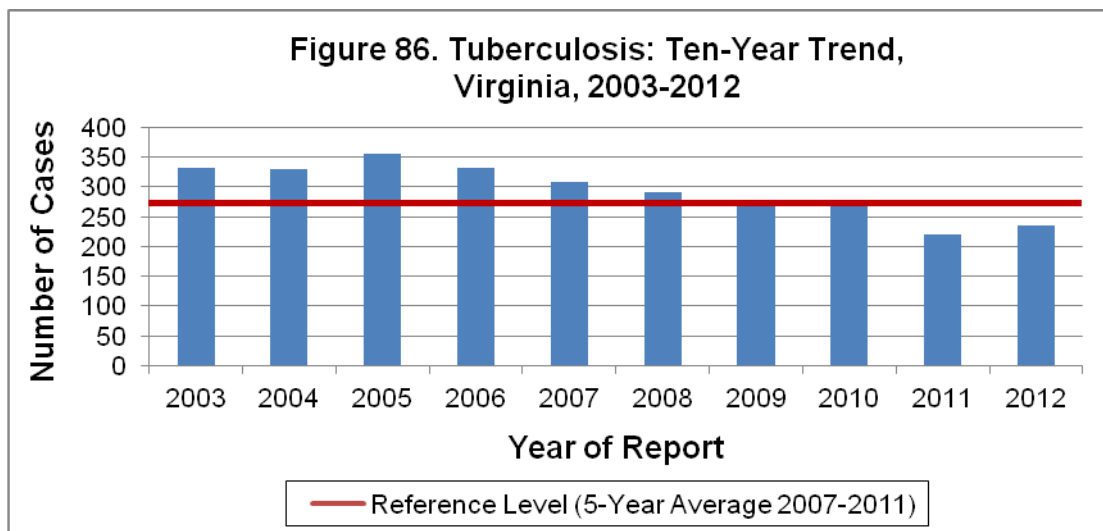
Agent: *Mycobacterium tuberculosis* (bacteria)

Mode of Transmission: Inhalation of tubercle bacilli via airborne droplets produced when patients with pulmonary or respiratory tract tuberculosis exhale the bacilli through coughing, singing, or sneezing.

Signs/Symptoms: Dependent on the organ(s) affected. General systemic signs and symptoms include fever, chills, night sweats, weight loss and fatigue. Symptoms of pulmonary tuberculosis may also include a prolonged (i.e., greater than 3 weeks) productive cough and coughing up blood.

Prevention: Control measures include the prompt identification, diagnosis and treatment of persons with infectious tuberculosis, followed by timely contact investigations to identify and treat additional persons with active tuberculosis disease and persons with latent tuberculosis infection. Infection control measures should be practiced in high-risk settings.

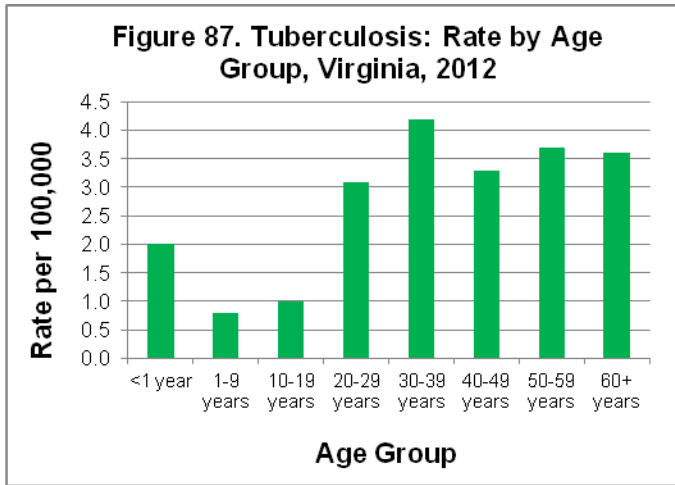
Other Important Information: Persons with latent tuberculosis infection do not have any signs or symptoms of disease. These persons do not spread tuberculosis bacteria. Approximately 10% of those infected with tuberculosis will develop active disease during their lifetime, with the greatest risk for disease progression during the two years following infection. Co-infection with HIV and other immune suppressing conditions represent the greatest risks for progression to active disease.



Virginia continues to see a decline in TB cases. Although the 235 tuberculosis cases reported in 2012 represent a 6% increase from the 221 cases reported in 2011, this was a 14% decrease from the five-year average of 272.6 cases per year (Figure 86). Nationally, 2012 was the twentieth consecutive year of declining rates of TB. In Virginia, TB cases among those born in the U.S. decreased by 15%, from 61 in 2011 to 52 in 2012, but increased by 14% among the foreign-born, from 160 cases in 2011 to 183 cases in 2012. The 78% of Virginia cases among the foreign-born is the largest proportion ever seen in

Virginia. Among the foreign-born, the five most frequent countries of origin were India, Mexico, the Philippines, Viet Nam and South Korea.

Incidence was higher in adults than in children and adolescents. The highest incidence rate occurred among those in the 30-39 year age group (4.2 cases per 100,000). Rates among other adult age groups ranged from 3.1 to 3.7 cases per 100,000. Rates among children ranged from 0.8 per 100,000 in the 1-9 year age group to 2.0 per 100,000 in those less than one year of age (Figure 87). By race, the highest incidence was observed in the “other” race group (17.4 per 100,000), while rates were substantially lower in the black and white populations (3.0 and 1.5 per 100,000, respectively). Males experienced a higher rate (3.2 per 100,000) than females (2.6 per 100,000).



The highest number of cases and highest incidence rate occurred in the northern region, where 70% of the foreign-born TB cases lived (142 cases, 6.2 per 100,000) (Figure 88). Five multidrug resistant cases (resistant to isoniazid and rifampin) were reported in 2012. Among cases reported in 2012, twenty-one deaths were attributed to tuberculosis. Seventy percent of these deaths occurred among persons aged 60 years and older.

