

Meningococcal Disease

Agent: *Neisseria meningitidis* (bacteria)

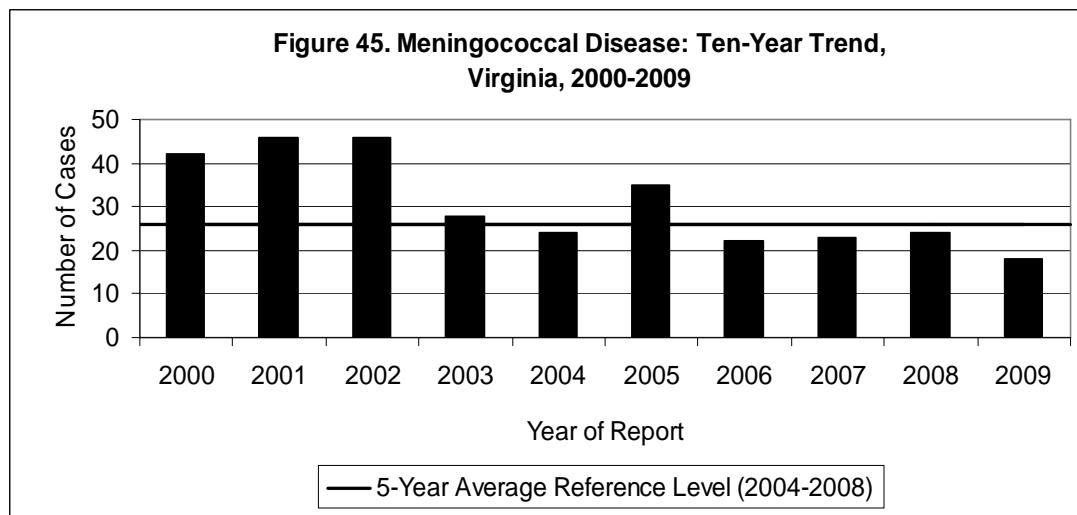
Mode of Transmission: Transmission occurs through contact with respiratory droplets from the nose or throat of infected people (e.g., through coughing or kissing).

Signs/Symptoms: Sudden onset of fever, headache, stiff neck, vomiting, and sensitivity to light. A rash may also be present.

Prevention: Vaccination with recommended meningococcal vaccine. The three most commonly occurring serogroups of meningococcal bacteria in the U.S. are B, C, and Y. There is currently no licensed vaccine that protects against serogroup B in the U.S.

Other Important Information: Crowding, exposure to tobacco smoke, and coexisting respiratory tract infections increase the risk of disease. Five to ten percent of people carry *N. meningitidis* in their nose without having any symptoms of disease; those who develop disease are usually infected by a carrier who does not have symptoms.

During 2009, 18 cases of meningococcal disease were reported in Virginia. This represents 25% fewer cases than the 24 cases reported in 2008, and a 30% decrease from the five-year average of 25.6 cases per year (Figure 45).



The rate of new infections was highest in the 20-29 year age group (0.5 per 100,000). Incidence rates among the remaining age groups were similar and ranged from 0.2 to 0.4 per 100,000, except that no cases were reported in children less than ten years of age or among adults from the 30-39 year age group. Information on race was not provided for 28% of the reported cases. Among cases where race information was reported, the incidence rate in the black population was the same as the rate in the white population (0.2 per 100,000). Incidence for males and females was also the same (0.2 per 100,000). By region, the highest incidence rate was observed in the southwest (0.5 per 100,000), with rates in the other regions ranging from 0.1 to 0.3 per 100,000. By onset date, the largest proportion of cases (33%) occurred in the fourth quarter of the year, and the smallest proportion (11%) occurred during the third quarter.

Of the eleven cases for which a serogroup was identified, two were group B, one was group C, and eight were group Y (Figure 46). Among 2009 cases, two deaths were reported in individuals whose infections developed into meningitis. Both fatalities occurred in females, one in the 20-29 age group, and the other in the 50-59 age group.

Figure 46. Meningococcal Serogroups, Virginia, 2009

