

Streptococcal Disease, Group A, Invasive

Agent: *Streptococcus pyogenes* (bacteria)

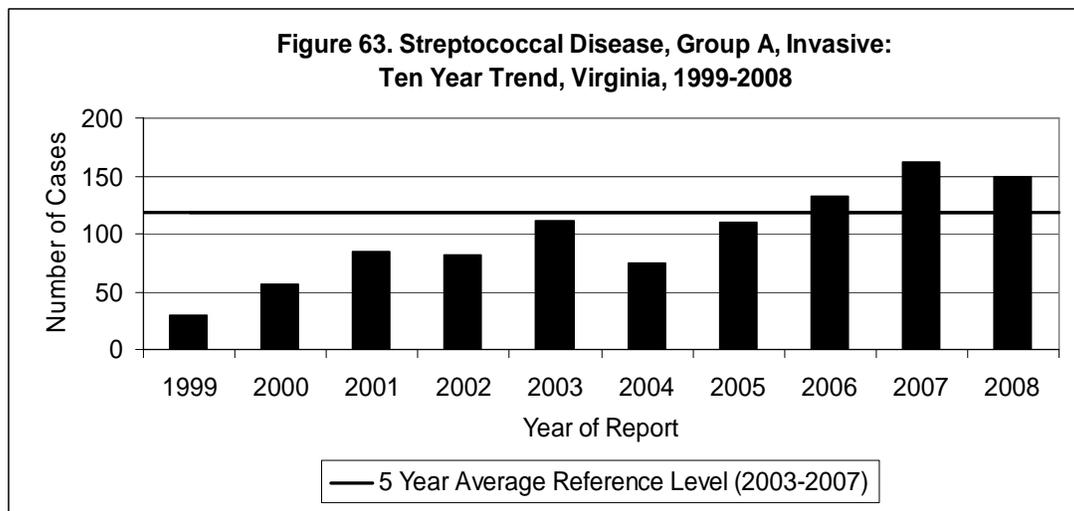
Mode of Transmission: Person-to-person through direct contact with mucus from the nose or throat of persons who are infected or through contact with infected wounds or sores.

Signs/Symptoms: Fever, dizziness, confusion and severe pain, swelling, redness and heat at wound site. Rarely, a flat red rash occurs over large areas of the body.

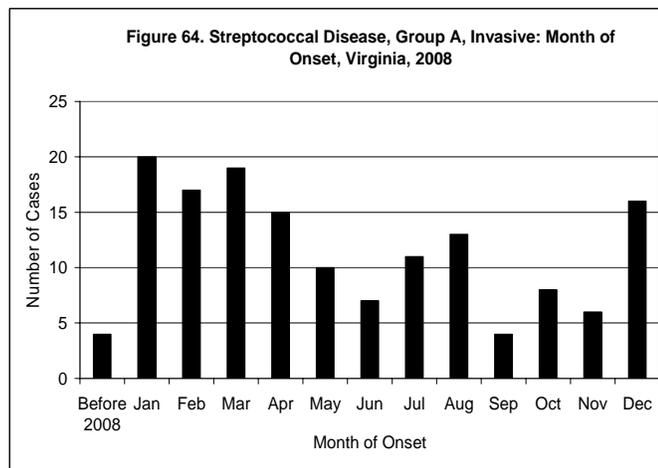
Prevention: Prompt identification and treatment of cases and temporary exclusion of infected healthcare employees from work for the first 24 hours of antibiotic therapy. Keep wounds clean and seek medical care at signs of infection.

Other Important Information: The two most severe group A streptococcal invasive infections are necrotizing fasciitis (NF) and streptococcal toxic shock syndrome (STSS). NF infections present with severe pain and rapid destruction of tissue. STSS infections are characterized by shock and rapid organ failure.

During 2008, 150 cases of invasive group A streptococcal (GAS) disease were reported in Virginia. This is a 7% decrease from the 162 cases reported in 2007, and a 27% increase above the five year average of 117.8 cases per year (Figure 63).



The highest incidence occurred in infants (6.8 per 100,000). This was followed by the 60 year and older age group (4.3 per 100,000). The other age groups had rates between 0.3 and 2.3 per 100,000. Race information was missing for 29% of reported cases. Among cases for which race was reported, the rate in the white population (1.5 per 100,000) was slightly higher than the rate in the black population (1.2 per 100,000), and was more than three



times the rate of the “other” population (0.4 per 100,000). Females had slightly higher incidence than males (2.0 and 1.8 per 100,000, respectively). By region, the northwest region had the highest rate (3.4 per 100,000), while the other regions in the state had rates ranging from 1.4 to 2.3 per 100,000. A seasonal trend was noted with 37% of cases occurring during the first quarter of the year and with a peak in January (Figure 64). Among cases reported in 2008, eleven deaths were attributed to GAS infection. Eight (73%) of the deaths occurred in those aged 50 years and older, and six (55%) were in males. No cases of toxic shock due to group A streptococcal infection were reported.