

Haemophilus influenzae Infection, Invasive

Agent: *Haemophilus influenzae* (bacteria)

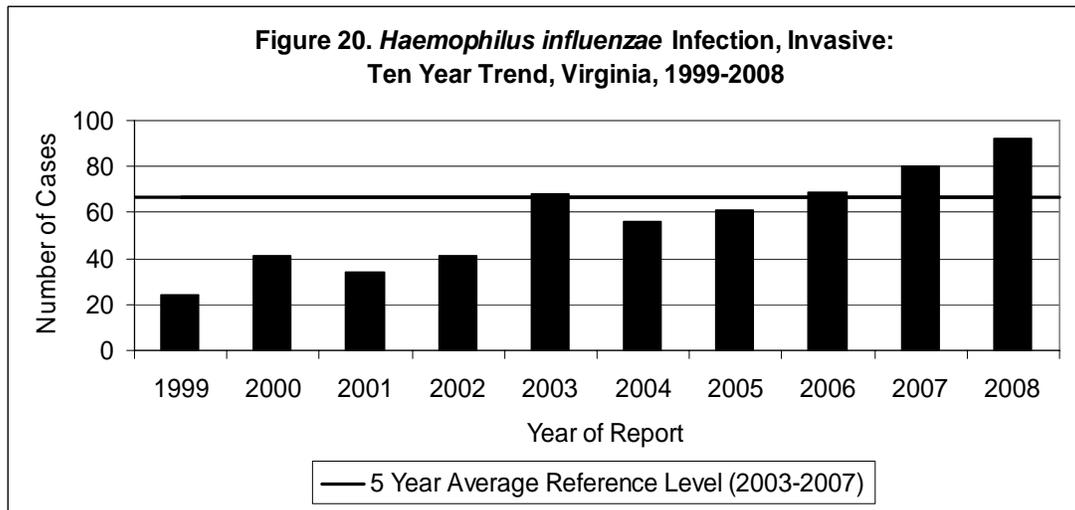
Mode of Transmission: Person-to-person by inhalation of respiratory droplets or direct contact with nose and throat discharge during the infectious period.

Signs/Symptoms: Inflammation of the lining of the brain and spinal cord, inflammation of the epiglottis which may lead to blockage of upper airway and death, pneumonia, skin infection, arthritis, or bloodstream infection.

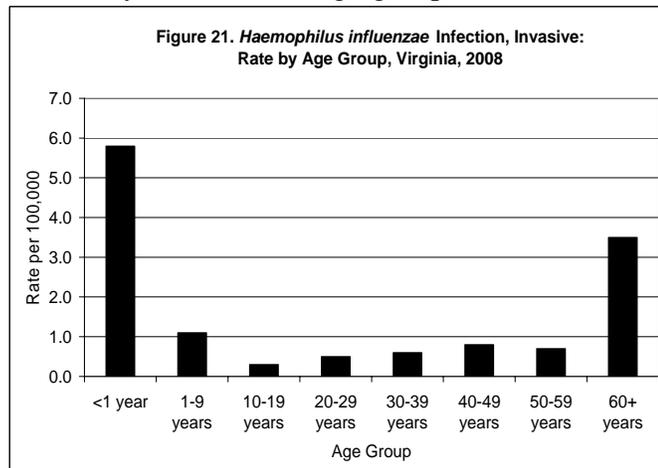
Prevention: Vaccination with conjugate *Haemophilus influenzae* type b (Hib) vaccine beginning at 2 months of age.

Other Important Information: Since the licensure of conjugate Hib vaccine in the late 1980s, the incidence of invasive Hib disease has declined by more than 99% compared with the pre-vaccine era.

Ninety-two cases of invasive *H. influenzae* infection were reported in Virginia during 2008. This is a 15% increase from the 80 cases reported in 2007, and a 38% increase from the five year average of 66.8 cases per year (Figure 20).



Incidence was highest in the youngest and oldest age groups. Children less than 1 year of age had a rate of 5.8 per 100,000, while the 60 year and older age group had a rate of 3.5 per 100,000 (Figure 21). The other age groups had rates between 0.3 and 1.1 per 100,000. Among those for whom information on race was available, the black, “other” and white populations had similar rates, ranging from 1.0 to 1.2 per 100,000. Incidence in females was comparable to incidence in males (1.3 and 1.1 per 100,000, respectively). The northwest and central regions had the highest rate (1.7 per 100,000), followed by the southwest region



(1.4 per 100,000). The other regions had rates between 0.7 and 0.9 per 100,000. Cases occurred throughout the year with the highest proportion (31%) occurring in the second quarter. Vaccination status at time of disease was known for 9 of the 12 children under five years of age (75%). Eight children had received at least one dose of Hib vaccine and one child was too young to be vaccinated. The serotype for individual isolates was reported for 37% of reported cases, and none of these isolates were confirmed as type B. Among the cases reported in 2008, seven deaths were attributed to invasive *H. influenzae* infection, all of which occurred in persons greater than fifty years of age.