

Hepatitis B, Acute

Agent: Hepatitis B virus (Hepadnavirus)

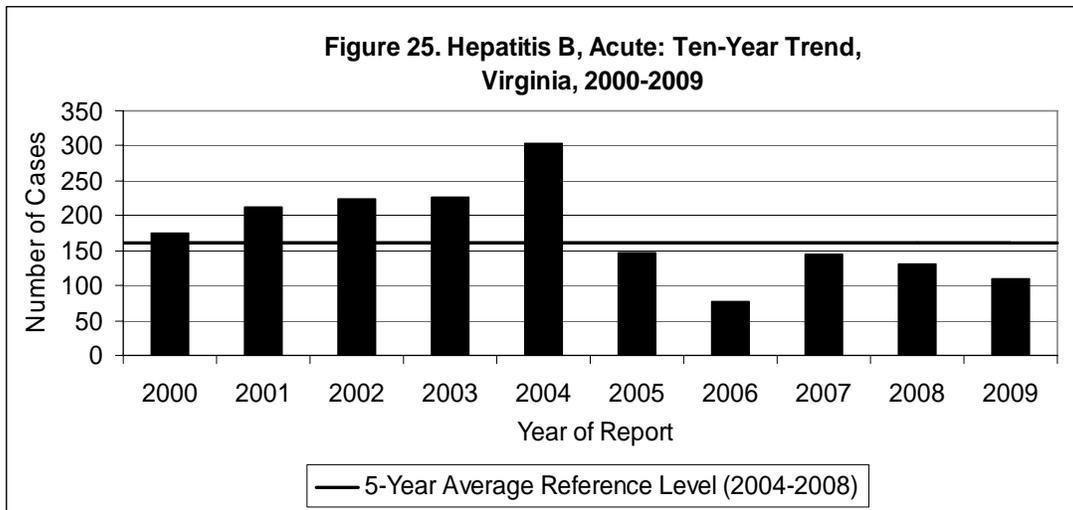
Mode of Transmission: Person-to-person transmission by blood or body fluid exposure (e.g., sexual, perinatal, or through the skin, such as during injection drug use).

Signs/Symptoms: Fever, fatigue, loss of appetite, nausea, abdominal pain, and jaundice. Infection can be asymptomatic. The likelihood of developing symptoms is age-dependent with adults and children over the age of five years being more likely to develop symptoms.

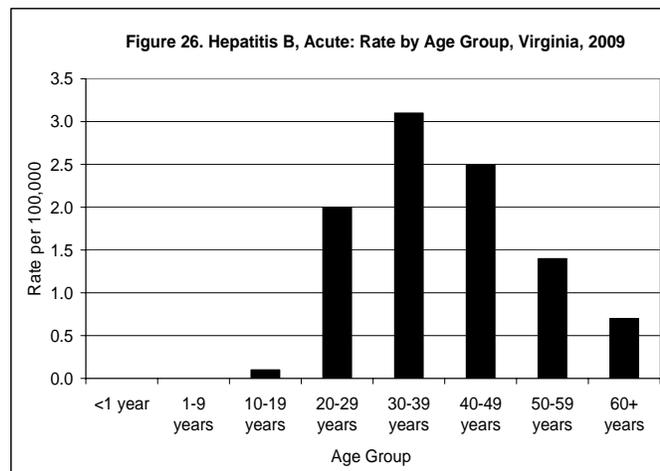
Prevention: Preventive strategies include immunization of people at increased risk of infection; screening of all pregnant women and treatment of children born to women that test positive; routine immunization of infants; routine immunization of adolescents who have not previously been immunized; and screening of donated blood and organs.

Other Important Information: Infection with hepatitis B virus may lead to chronic (i.e., long-term) infection. Death from liver disease occurs in 15%-25% of those with chronic infection.

The 110 cases of acute hepatitis B reported in Virginia during 2009 represent a 15% decrease from the 130 cases reported in 2008, and a 31% decrease from the five-year average of 160.2 cases per year (Figure 25).



By age group, the highest incidence rate was seen in the 30-39 year age group (3.1 per 100,000), followed by the 40-49 and the 20-29 year age groups (2.5 and 2.0 per 100,000, respectively) (Figure 26). Only one case was reported in a person under the age of 20 years. Fifty-two percent of reports were missing race information. Among cases with race reported, the rate in the black population (1.5 per 100,000) was more than two times the rate in the white population (0.6 per 100,000), and



nearly four times the rate in the “other” population (0.4 per 100,000). The rate of occurrence in males was slightly higher than the rate in females (1.6 and 1.2 per 100,000, respectively). The central region had the highest rate of new acute hepatitis B infections (3.1 per 100,000). The other regions had rates between 0.7 and 1.4 per 100,000. Acute hepatitis B infections do not have a seasonal pattern.

Of cases with identified risk factors, having multiple sex partners was the most frequently reported potential source of infection. During 2009, VDH conducted an investigation of acute hepatitis B infections among residents of an assisted living facility in the central region. This led to the identification of thirteen acute hepatitis B infections among residents and staff, which were attributed to sharing of blood glucose monitoring equipment. Among the cases reported in 2009, two deaths in adults (one male and one female) were attributed to acute hepatitis B infection.