

Hepatitis B, Acute

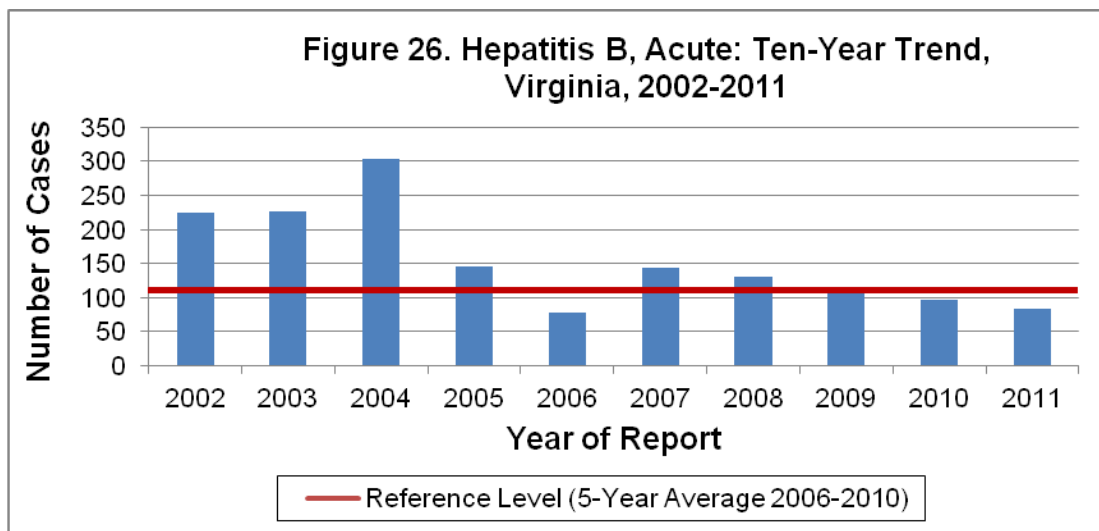
Agent: Hepatitis B virus (HBV); hepadnavirus

Mode of Transmission: Person-to-person transmission through infected blood or body fluids (e.g., sexual, perinatal, or through the skin by nonsterilized needles or syringes).

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.

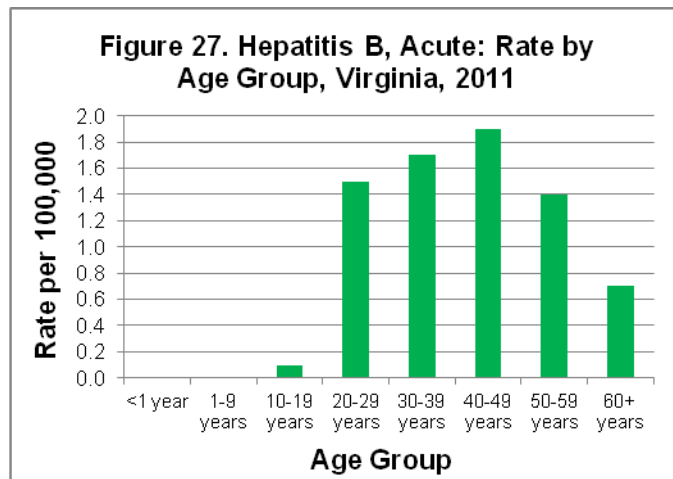
Prevention: Preventive strategies include immunization of people at increased risk of infection; screening of all pregnant women and treatment of children born to women that test positive; routine immunization of infants; routine immunization of adolescents who have not previously been immunized; and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



In 2011, 84 cases of acute hepatitis B were reported in Virginia and represent a 13% decrease from the 97 cases reported in 2010, and a 25% decrease from the five-year average of 111.8 cases per year (Figure 26). Since 2005, there has been a general downward trend of reported cases in Virginia that reflects the trend seen nationally. The greatest decline has been among children born since 1991 when routine vaccination for children was first recommended.

Reported cases ranged in age from 17 to 81 years. The highest incidence rate was observed in the 40-49 year age group (1.9 per 100,000), followed by the 30-39 year age group (1.7 per 100,000) (Figure 27). Only one case was reported in persons under the age of 20 years. Thirty-four



percent of reports were missing race information. Among cases with race reported, the rate in the black population (1.4 per 100,000) was more than twice the rate in the white population (0.6 per 100,000). No cases were reported from the “other” race group. The rate in males was higher than the rate in females (1.3 and 0.8 per 100,000, respectively). The central region had the highest incidence rate (2.1 per 100,000), followed by the southwest region (1.6 per 100,000). The other regions had rates between 0.4 and 0.9 per 100,000. Acute hepatitis B infections do not have a seasonal pattern, but an outbreak resulted in a clustering of cases in the fourth quarter.

Risk factors were identified in 48 (57%) of cases, with multiple risks for some individuals. Of those with risk factor information, contact with a person with confirmed or suspected acute or chronic hepatitis B virus infections (11, 23%) and multiple sex partners (7, 15%) were the most frequently reported potential sources of infection. Among the cases reported in 2011, one death in an adult female was attributed to acute hepatitis B infection.