

Hepatitis B, Acute

Agent: Hepatitis B virus (HBV), a 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).

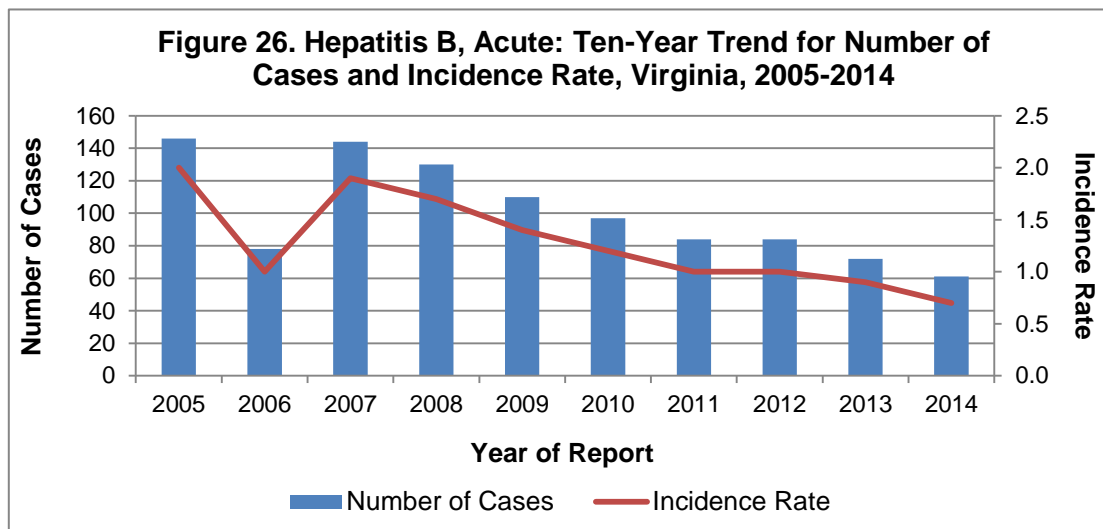
Signs/Symptoms: Fever, fatigue, loss of appetite, nausea, abdominal pain, and jaundice. Infection can be asymptomatic. The likelihood of developing symptoms is age-dependent with adults and children over the age of five years being more likely to develop symptoms.

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

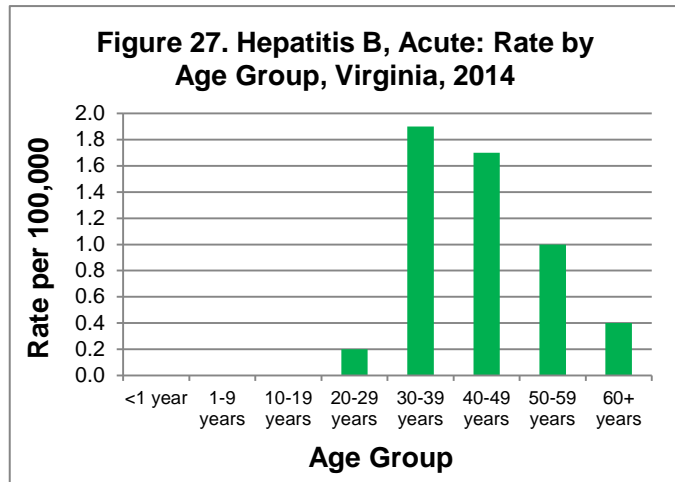
Other Important Information: Infection with hepatitis B virus can lead to chronic (i.e., long-term) infection. Persons who become infected at a younger age are more likely to develop chronic infection. Death from liver disease occurs in 15%-25% of those with chronic infection. A nationwide strategy to eliminate hepatitis B infection was initiated in 1991. It included vaccination of infants at birth, prevention of perinatal hepatitis B infections, vaccination of children and adolescents, and vaccination of adults at high risk of infection.

Hepatitis B, Acute: 2014 Data Summary	
Number of Cases:	61
5-Year Average Number of Cases:	89.4
% Change from 5-Year Average:	-32%
Incidence Rate per 100,000:	0.7

In 2014, 61 cases of acute hepatitis B infection were reported in Virginia, a decrease from the 72 cases reported in 2013. This also represents a 32% decrease from the five-year average of 89.4 cases per year (Figure 26), and continues the downward trend in the number of annual reported cases since 2007. The decrease in reported cases in Virginia reflects a national trend related to the availability of hepatitis B vaccine since 1981, and a strategy initiated in 1991 to eliminate hepatitis B transmission in the United States.



The highest incidence rate was observed in the 30-39 year age group (1.9 per 100,000), followed by the 40-49 year age group (1.7 per 100,000) (Figure 27). No cases were reported among individuals younger than 20 years of age. Race was not provided for 49% of cases. Among those with a known race, incidence was highest among the black population (0.5 per 100,000), followed closely by the white population (0.4 per 100,000), and those identified as “other” race population (0.2 per 100,000). The incidence rate among males was more than double the incidence observed in females (1.1 and 0.4 per 100,000, respectively).



The southwest region had a higher incidence rate for acute hepatitis B infections in 2014 (1.8 per 100,000) than any other region in Virginia (range 0.1 to 0.9 per 100,000). Notably, incidence rates in the far southwest area of that region were among the highest, with one locality observing incidence of 14.8 per 100,000 in 2014 (refer to map below). Disease onset occurred throughout the year. No acute hepatitis B outbreaks were reported in Virginia in 2014.

Risk factors were identified for 54% of hepatitis B cases, with multiple risk factors observed for some individuals. Of those with a known risk factor, recreational drug use was the most frequently reported risk behavior (42%). One death attributable to acute hepatitis B infection was reported in 2014. The death occurred in an adult male in the 40-49 year age group from the eastern region.

Hepatitis B, Acute, Incidence Rate by Locality Virginia, 2014

