

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).

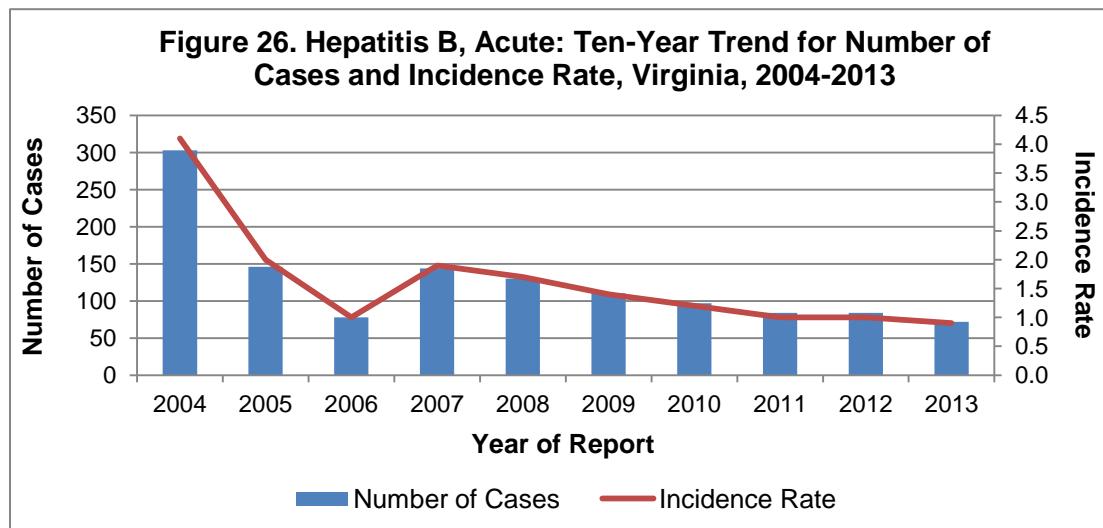
Signs/Symptoms: Fever, fatigue, loss of appetite, nausea, abdominal pain, and jaundice. Infection can be asymptomatic. The likelihood of developing symptoms is age-dependent with adults and children over the age of five years being more likely to develop symptoms.

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 may lead to chronic (i.e., long-term) infection. The risk of chronic infection is inversely related to the age of the patient at the time of 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.

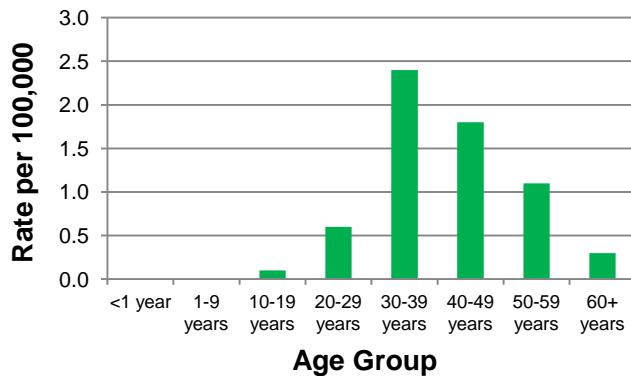
Hepatitis B, Acute: 2013 Data Summary	
Number of Cases:	72
5-Year Average Number of Cases:	101.0
% Change from 5-Year Average:	-29%
Incidence Rate per 100,000:	0.9

In 2013, 72 cases of acute hepatitis B infection were reported in Virginia, a decrease from the 84 cases reported in both 2012 and 2011. This represents a 29% decrease from the five-year average of 101.0 cases per year (Figure 26), and a substantial reduction from routine incidence of over 500 cases per year in the mid-1980s. The general 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 (2.4 per 100,000), followed by the 40-49 year age group (1.8 per 100,000) (Figure 27). Unlike the two prior years, in 2013 there was one case reported in a person under the age of 20 years. Over one third of cases (39%) had missing or unknown race information. Among the 61% of cases for whom information on race was available, incidence rates were similar in the “other”, black, and white race populations, ranging from 0.3 to 0.6 per 100,000. Rates were also similar in males and females (1.0 and 0.8 per 100,000, respectively).

Figure 27. Hepatitis B, Acute: Rate by Age Group, Virginia, 2013



The southwest region had a notably higher incidence rate for acute hepatitis B infections in 2013 (2.3 per 100,000) than the other regions in Virginia (range 0.3 to 1.1 per 100,000). In particular, rates in the far southwest were among the highest, with one locality having a rate of 23.6 per 100,000 in 2013 (refer to map below). Disease onset occurred throughout the year.

No new hepatitis B outbreaks were reported in Virginia in 2013. Six cases identified in 2013 were connected to a 2012 community-wide outbreak associated with injection drug use in the southwest region. Risk factors were identified in 42% of cases, with multiple risks listed for some individuals. Of those with risk factor information, recreational drug use and contact with a person with hepatitis B virus infections were the most frequently reported risk behaviors (63% and 37% of cases, respectively). No deaths were reported in 2013 that were attributable to acute hepatitis B infection.

Hepatitis B, Acute, Incidence Rate by Locality Virginia, 2013

