

## **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).

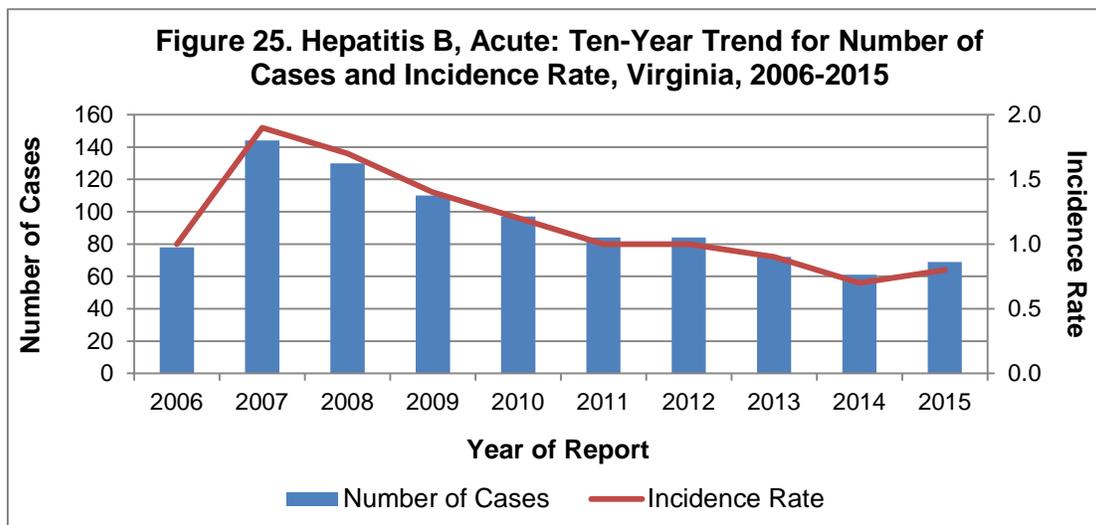
Signs/Symptoms: Fever, fatigue, loss of appetite, nausea, abdominal pain, and jaundice. Infection can be asymptomatic. The likelihood of developing symptoms is age-dependent with adults and children over the age of five years being more likely to develop symptoms.

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. Additional preventive measures include adherence to safe sexual practices, not sharing items contaminated with blood (i.e., needles, razors, and toothbrushes), and following standard precautions and infection control practices during all medical procedures.

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.

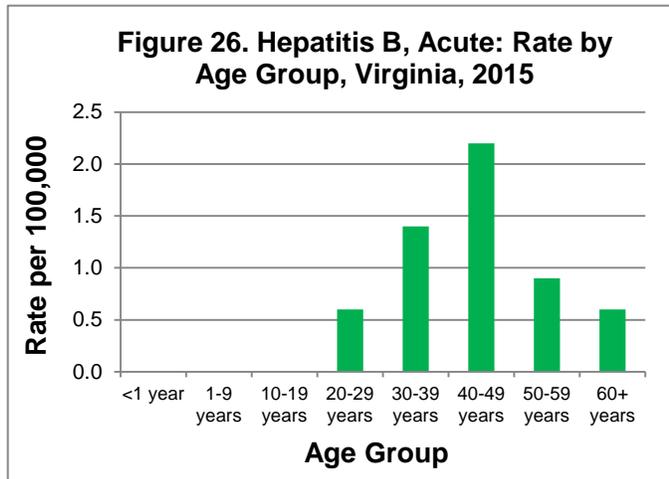
<b>Hepatitis B, Acute: 2015 Data Summary</b>	
Number of Cases:	69
5-Year Average Number of Cases:	79.6
% Change from 5-Year Average:	-13%
Incidence Rate per 100,000:	0.8

In 2015, 69 cases of acute hepatitis B infection were reported in Virginia, an increase from the 61 cases reported in 2014. Overall, there has been a 13% decrease from the five-year average of 79.6 cases per year (Figure 25). 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 40-49 year age group (2.2 per 100,000), followed by the 30-39 year age group (1.4 per 100,000) (Figure 26). No cases were reported among individuals younger than 20 years of age. Race was not provided for 35% of cases. Among those with a known race, incidence was similar among the black and white populations (0.6 per 100,000, each), followed closely by those identified as being in the “other” race population (0.3 per 100,000). Incidence rates among males and females were also similar (0.9 and 0.8 per 100,000, respectively).



During 2015, the southwest region had a higher incidence rate for acute hepatitis B infections (2.8 per 100,000) than any other region in Virginia (range 0.2 to 1.3 per 100,000). Notably, incidence rates in the far southwest area of that region were among the highest (refer to map below). Disease onset occurred throughout the year. No acute hepatitis B outbreaks were reported in Virginia in 2015.

Certain behaviors can place a person at greater risk for infection with hepatitis B virus. These behaviors can include engaging in unsafe sexual practices, injecting drugs or sharing needles or other drug equipment, being exposed to blood while on the job, living or associating with a person who has hepatitis B, traveling to countries with high rates of hepatitis B, or practicing unregulated, unsafe or unclean body piercing or tattooing. During 2015, patient history information on potential risk factors was obtained for 68% of the reported cases. Among those reporting at least one potential risk factor in the 6 weeks to 6 months prior to onset of symptoms, 46% reported non-injected street drug use, 25% injected drugs not prescribed by a doctor, 25% had a blood exposure, 21% had contact with a person with confirmed or suspected acute or chronic hepatitis B virus infection, 18% were incarcerated, 11% received a tattoo, and 7% had a part of their body pierced. No deaths were attributed to acute hepatitis B infection in 2015.

# Hepatitis B, Acute, Incidence Rate by Locality Virginia, 2015

