

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).

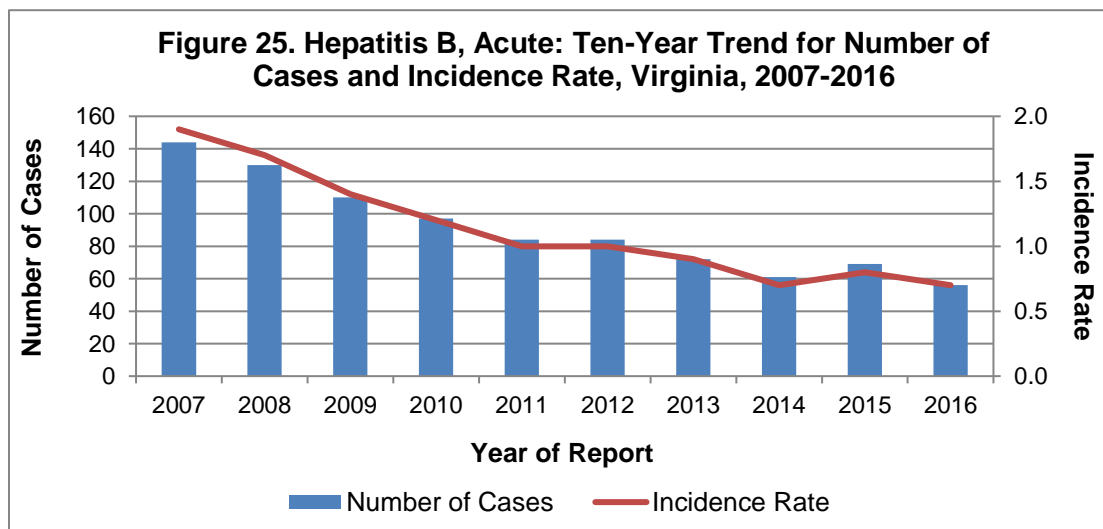
Signs/Symptoms: Fever, fatigue, loss of appetite, nausea, abdominal pain, and jaundice. Infection can be asymptomatic. The likelihood of developing symptoms is age-dependent, with adults and children over the age of five years being more likely to develop symptoms.

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.

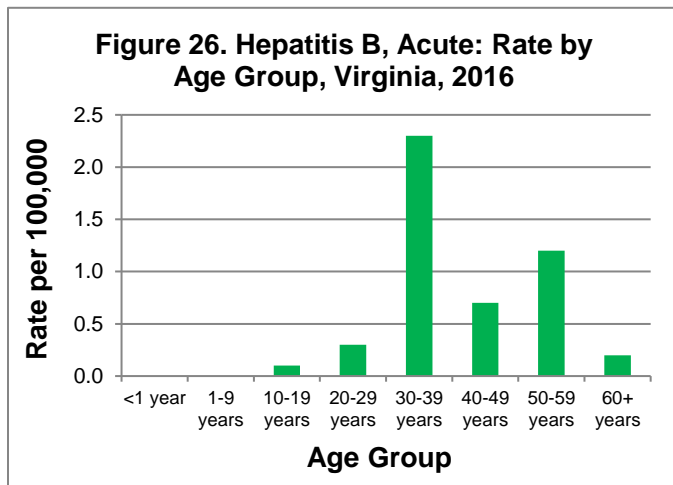
Other Important Information: Infection with hepatitis B virus can lead to chronic (i.e., long-term) infection. Persons who become infected at a younger age are more likely to develop chronic infection. Death from liver disease occurs in 15-25% of those with chronic infection. A nationwide strategy to 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.

Hepatitis B, Acute: 2016 Data Summary	
Number of Cases:	56
5-Year Average Number of Cases:	74.0
% Change from 5-Year Average:	-24%
Incidence Rate per 100,000:	0.7

In 2016, 56 cases of acute hepatitis B were reported in Virginia, a 19% decrease from the 69 cases reported in 2015 and a 24% decrease from the five-year average of 74.0 cases per year (Figure 25). The decrease in reported cases in Virginia reflects a national trend.



The highest incidence rate was observed in the 30-39 year age group (2.3 per 100,000), followed by the 50-59 year age group (1.2 per 100,000) (Figure 26). No cases were reported among individuals younger than 10 years of age. Race information was not reported for 18% of cases. Among those with a known race, incidence was highest among the black population (0.8 per 100,000) compared to the white population (0.5 per 100,000). The incidence rate among males (0.8 per 100,000) was higher than females (0.5 per 100,000).



During 2016, the southwest region had the highest incidence rate for acute hepatitis B infections (1.5 per 100,000), followed closely by the central region (1.3 per 100,000). The remaining regions had lower incidence rates ranging from 0.5 to 0.1 cases per 100,000. Illness onset occurred evenly throughout the year. No acute hepatitis B outbreaks were reported in Virginia in 2016. No deaths were attributed to acute hepatitis B infections in 2016.

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. In Virginia, risk factor information is not collected on every case. Among the 56 cases of acute hepatitis B reported in 2016, ten individuals reported having contact with a person who was confirmed or suspected of having acute or chronic hepatitis B; nine reported using non-injected street drugs; five reported having been incarcerated; four individuals reported injecting street drugs; four reported receiving a tattoo; two reported having their body pierced; and two reported having been exposed to blood. It cannot be determined if these exposures were the source of the infection.

An additional 1,768 newly identified hepatitis B cases were reported in 2016 that were classified as chronic hepatitis B infections for surveillance purposes. These cases were either ruled out as acute hepatitis B or their acute status could not be established because the case was not investigated. The median age of these cases was 43 years. Risk factor information is not routinely collected on chronic hepatitis B cases; however, 35 were institutionalized at the time of their diagnoses.

Hepatitis B, Acute, Incidence Rate by Locality Virginia, 2016

