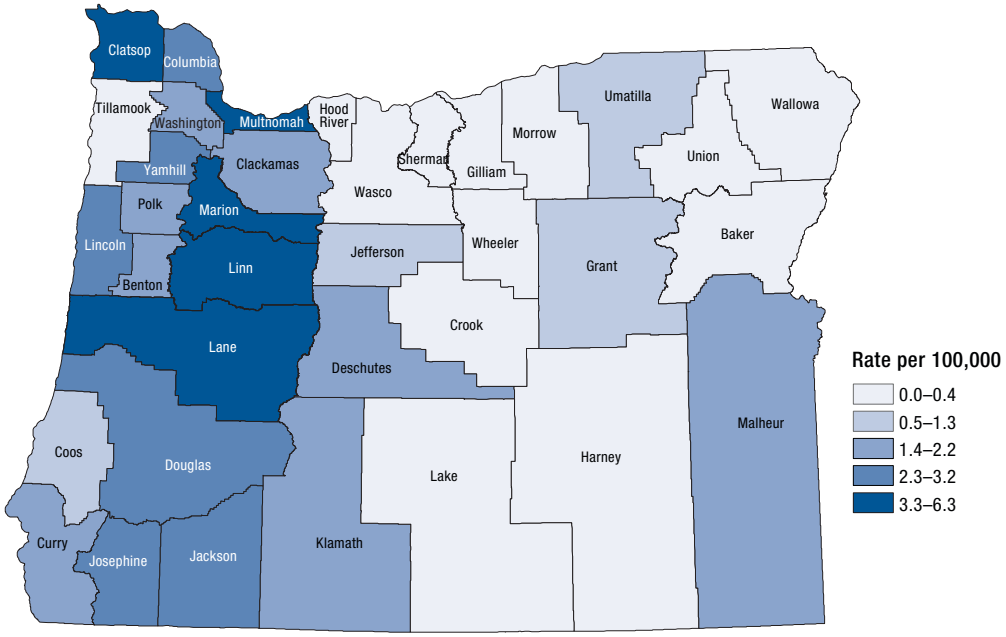
Incidence of acute hepatitis B by county of residence: Oregon, 2000–2009



Chronic hepatitis B

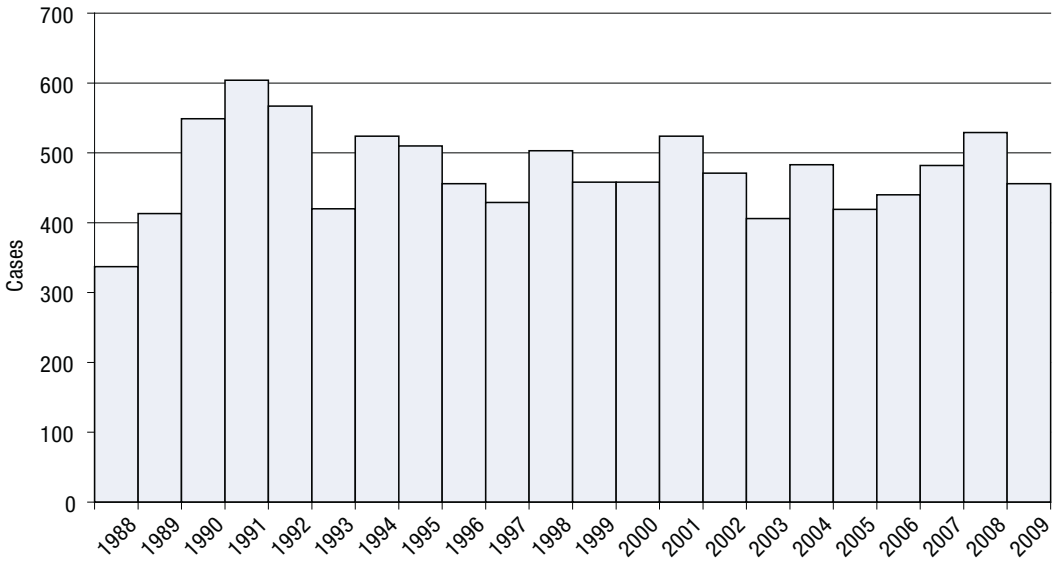
Persons with chronic hepatitis B are known as "chronic carriers" — a state of infection defined by the persistence of hepatitis B surface antigen (HBsAg) in the blood for more than six months. The likelihood of becoming a chronic carrier is affected by the age at infection. Fewer than 6% of acutely infected adults in the United States become carriers, compared to 25% (with HBeAg-negative moms) to 90% (with HBeAg-positive moms) of children infected in early childhood or during birth. Perinatal infection can be prevented by prompt administration of hepatitis B immune globulin and initiation of the three-dose hepatitis B vaccination series. This perinatal intervention is widely practiced in the United States — all states have federal funding for perinatal hepatitis B prevention programs — but not in other parts of the world, particularly Asia and sub-Saharan Africa, where the prevalence of chronic hepatitis B is higher to begin with. Seventy-nine percent of 2008–2009 reports were from foreign born individuals. Chronic carriers are at greater risk of developing life-threatening diseases (e.g., chronic active hepatitis, cirrhosis or liver cancer) decades later. Carriers will sustain transmission of hepatitis B in the United States until vaccine-induced immunity is nearly universal.

Recommendations and strategies to prevent new cases include the following: routinely vaccinating all infants at birth; screening

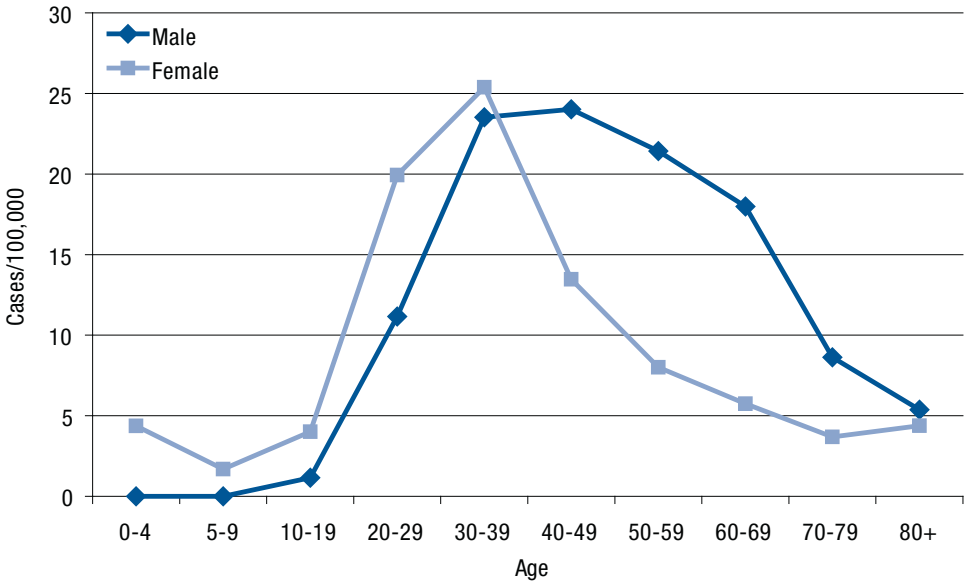
all pregnant women for hepatitis B; administering hepatitis B immune globulin (HBIG) in addition to hepatitis B vaccine to infants born to HBsAg-positive mothers; and ensuring that all infants complete the hepatitis B vaccine series.

In 2008–2009, there were 985 newly reported carriers and, as in the past, they were older than acute cases and close to evenly distributed between men and women. Women, however, are diagnosed earlier than men, perhaps due to pre-natal screening. In 2008, seven children ≤ 2 years old were reported as chronic carriers, six were born in countries where prevalence of chronic hepatitis B is high. In 2009, six children were reported and five were born in high prevalence countries. Chronic carriers are not reportable in many of the U.S. states, so a table comparing Oregon to the rest of the United States is not given.

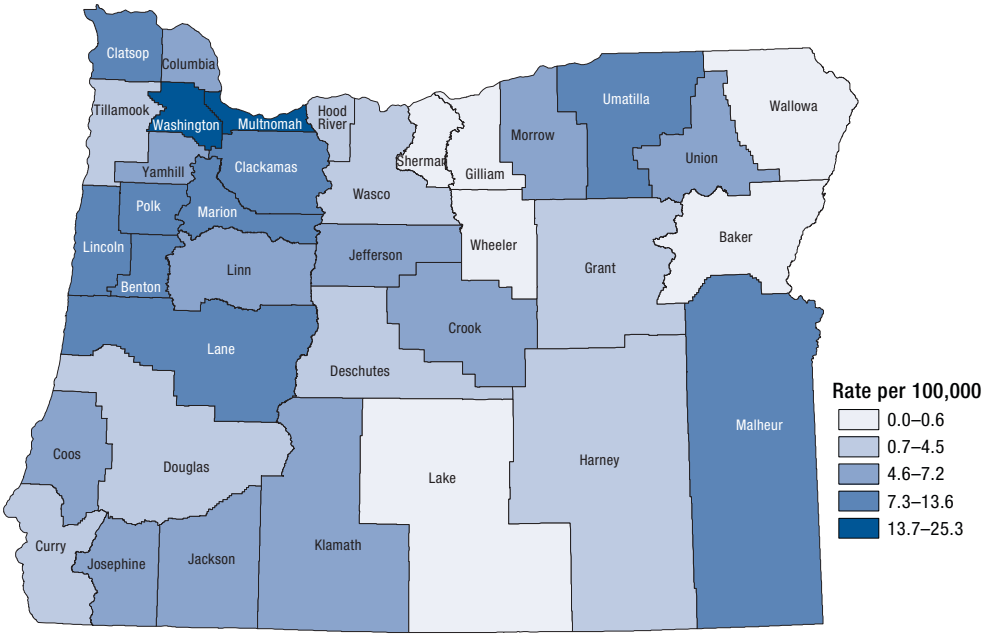
Chronic hepatitis B by year: Oregon, 1988–2009



Incidence of chronic hepatitis B by age and sex: Oregon, 2009



Incidence of chronic hepatitis B by county of residence: Oregon 2000–2009



Hepatitis C

Infection with hepatitis C virus (HCV) causes acute and chronic hepatitis C disease. HCV is found in the blood of persons who have the disease. The most common signs and symptoms of hepatitis C include: jaundice, fatigue, dark urine, abdominal pain, loss of appetite and nausea. However, 80% of persons are asymptomatic. Hepatitis C cases are underreported due to the fact that most persons are asymptomatic and that laboratories can not test for acute HCV infection. Hepatitis C can lead to liver damage and sometimes death due to liver breakdown. Nearly 4.1 million people in the United States have been infected with hepatitis C, of whom 3.2 million are chronically infected. Chronic liver disease develops in up to 70% of chronically infected persons. Hepatitis C infection is the leading indication for liver transplant. Currently, 8,000 to10,000 people die each year in the United States from hepatitis C. There is no vaccine for hepatitis C.

Hepatitis C is spread from one person to another primarily by direct contact with human blood. Most infections are due to illegal injection drug use. The virus can also be transmitted through sexual contact and from infected mothers to their infants at the time of birth. The risk for perinatal HCV transmission is about 4%. If the mother is coinfected with HIV, the risk for perinatal infection increases to about 19%. Since the adoption of routine blood donor screening in 1992, transfusion-associated cases now occur less than one per 2 million units of blood transfused.