

## Chronic hepatitis B

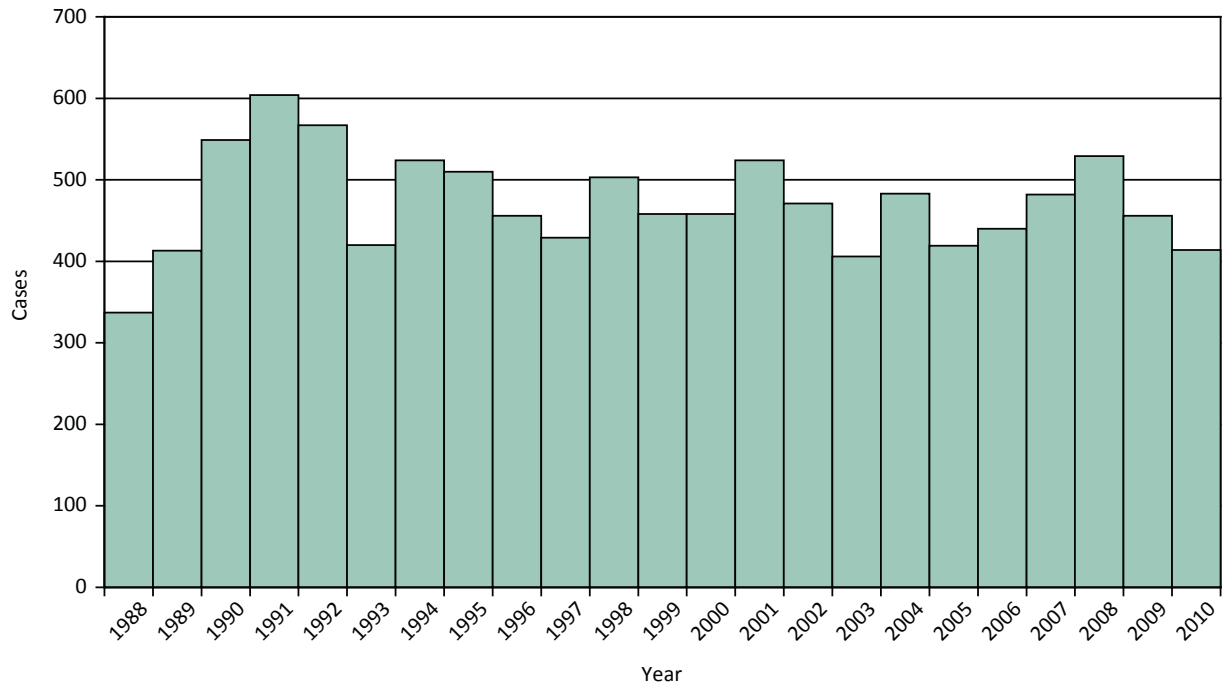
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Persons with chronic hepatitis B are known as “chronic carriers” — a state of infection defined by the persistence of hepatitis B surface antigen (HBsAg) in the blood for more than six months. The likelihood of becoming a chronic carrier is affected 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. Forty-four percent of 2010 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 2010, there were 414 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 prenatal screening. In 2010, five children  $\leq 4$  years old were reported as chronic carriers, two were born in countries where prevalence of chronic hepatitis B is high. 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, 1988–2010



### Incidence of chronic hepatitis B by county of residence: Oregon 2000–2010

