

Chronic hepatitis B

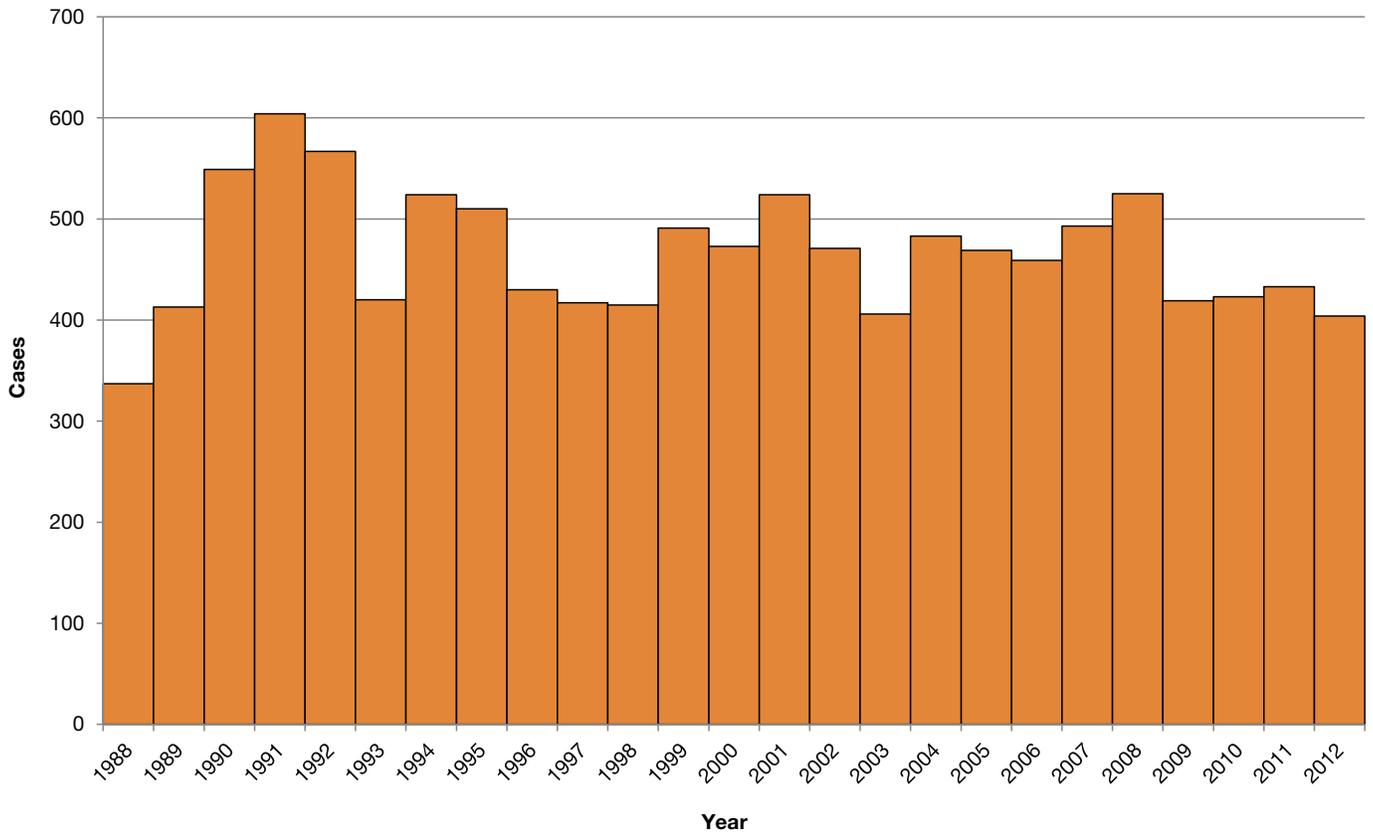
Persons with chronic hepatitis B are known as “chronic carriers” — a state of infection defined by the persistence of hepatitis B surface antigen (HBsAg) in the blood for more than six months. The likelihood of becoming a chronic carrier varies by age at infection. Fewer than 6% of acutely infected adults 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-six percent of Oregon cases in 2012 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 continue

to transmit hepatitis B until vaccine-induced immunity is nearly universal.

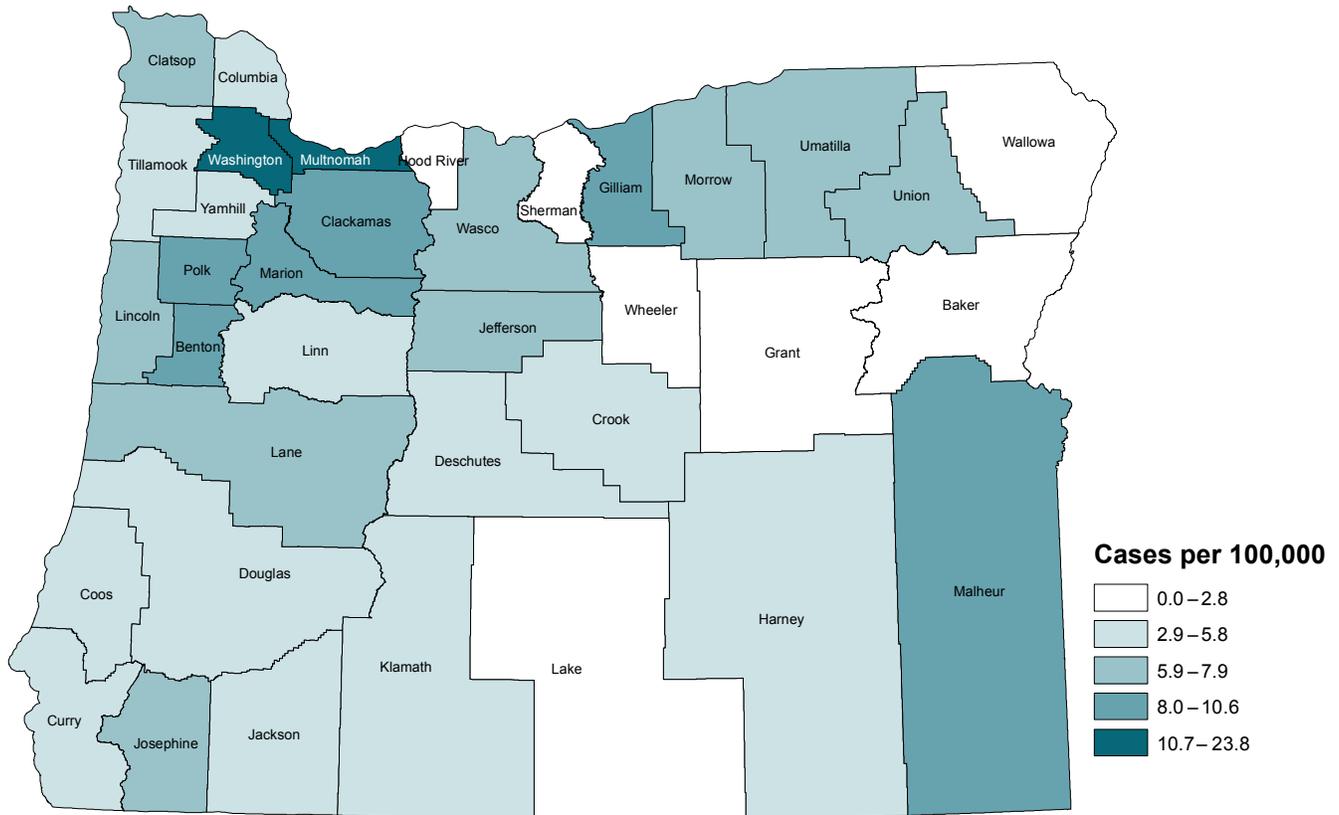
Recommendations and strategies to prevent new cases include the following: routinely vaccinating all infants at birth; screening all pregnant women for hepatitis B; administering hepatitis B immune globulin (HBIG) in addition to hepatitis B vaccine to infants born to HBsAg-positive mothers; and ensuring that all infants complete the hepatitis B vaccine series. When given within 24 hours of birth, HBIG and vaccine are 85%–95% effective in preventing hepatitis B disease in children born to HBV-infected mothers.

In 2012, there were 402 newly reported carriers in Oregon; 41% of these were women. Women, however, tend to be diagnosed earlier than men, perhaps due to prenatal screening. In 2012, three children <5 years of age were reported as chronic carriers. One child was born in China, a country of high prevalence, and the other two were born in Oregon to mothers who were chronic carriers. Chronic carriers are not reportable in many states, so a table comparing Oregon to the rest of the United States is not provided.

Newly reported chronic hepatitis B by year: Oregon, 1988–2012



Incidence of newly reported chronic hepatitis B by county of residence: Oregon, 2003–2012



Prevention

- Get vaccinated
- Persons who are sexually active can:
 - Limit the number of partners.
 - Use condoms properly from start to finish when having sex.
- Persons who inject drugs can:
 - Avoid sharing needles or works with others.
 - Use only clean needles and works.
- Purchase new sterile needles from pharmacies.
- Use universal precautions and best practices to prevent needle stick injuries.
- Vaccinate all newborns against hepatitis B.
- Screen all pregnant women for hepatitis B. Infants born to hepatitis B-positive mothers should receive hepatitis immunoglobulin along with vaccine at birth.
- Chronic carriers should not share personal care items such as razors or toothbrushes.
- Investigation of cases, including the identification of unvaccinated contacts to encourage vaccination.