

Acute hepatitis B

Hepatitis B is a vaccine-preventable viral disease of the liver that occurs when the virus of an infected person passes (through blood, semen or saliva) into the bloodstream of a non-immune person. Percutaneous or permucosal exposures take place when hypodermic needles are shared; when blood splashes into an eye; during sex; by biting; from lapses in hygiene involving glucometer and other fingerstick devices to test blood sugar levels; from breaches in infection control in health care settings; and when a baby is born whose mother is a hepatitis B carrier.

Acute hepatitis B virus (HBV) infection (diagnosed by the presence in serum of IgM antibody to the hepatitis B core antigen [IgM anti-HBc] or hepatitis surface antigen [HBsAg]) usually, but not always, causes jaundice. Some infections are mild, even asymptomatic, and may go undetected. Hepatitis B has been preventable by vaccination since 1982 and, to promote universal vaccination and hence protection, was added to the recommended childhood immunization schedule in 1992 with the series starting at birth.

Acute hepatitis B rates continue to decline in Oregon — a decline that started here after the hepatitis B vaccine was licensed in 1982.

Local health departments investigated and reported 27 acute cases in 2012. Sixty-three percent of the cases were male. The most

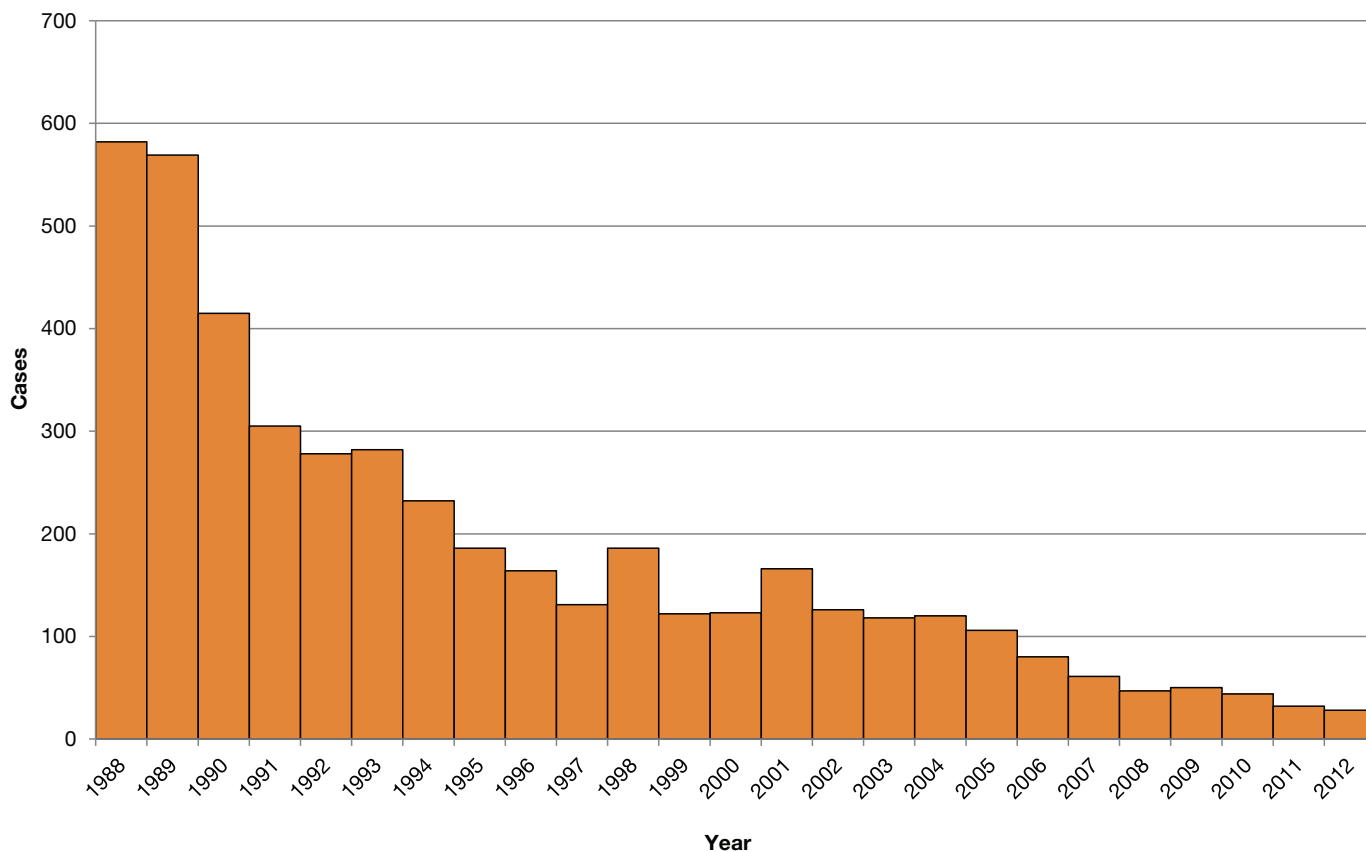
commonly reported risk factors include injection drug use (IDU) and sexual risk factors (history of multiple sexual partners; men who have sex with men [MSM]). No risk factor was identified for 19% of cases. There were no outbreaks of hepatitis B in 2012.

HBV is not spread through food or water, sharing eating utensils, breastfeeding, hugging, kissing, hand holding, coughing, or sneezing.

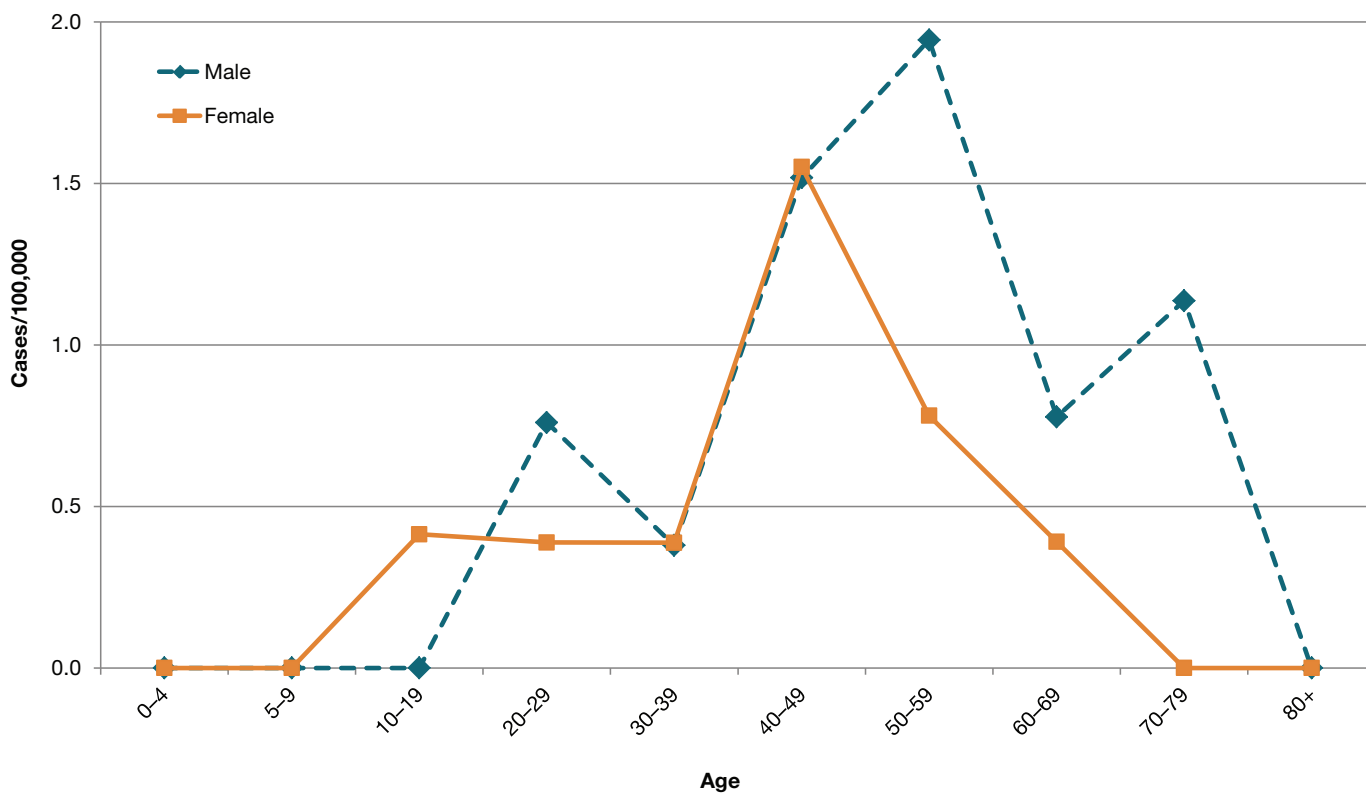
No cure is available for hepatitis B, so prevention is crucial. The best way to be protected from hepatitis B is to be vaccinated with hepatitis B vaccine. Vaccines can provide protection in 90% to 95% of healthy persons. The vaccine can be given safely to infants, children, and adults in three doses over a period of 6 months.

Nationwide, the successful integration of hepatitis B vaccine into the immunization schedule has contributed to a 96% decline in the incidence of acute hepatitis B in children and adolescents. Approximately 95% of new infections occur among adults and unvaccinated adults with behavioral risk factors or who are household contacts or sex partners of HBV-infected people. For this reason the Advisory Committee on Immunization Practices recommends that health care providers implement standing orders to identify adults at risk and to administer hepatitis B vaccine as part of routine practice.

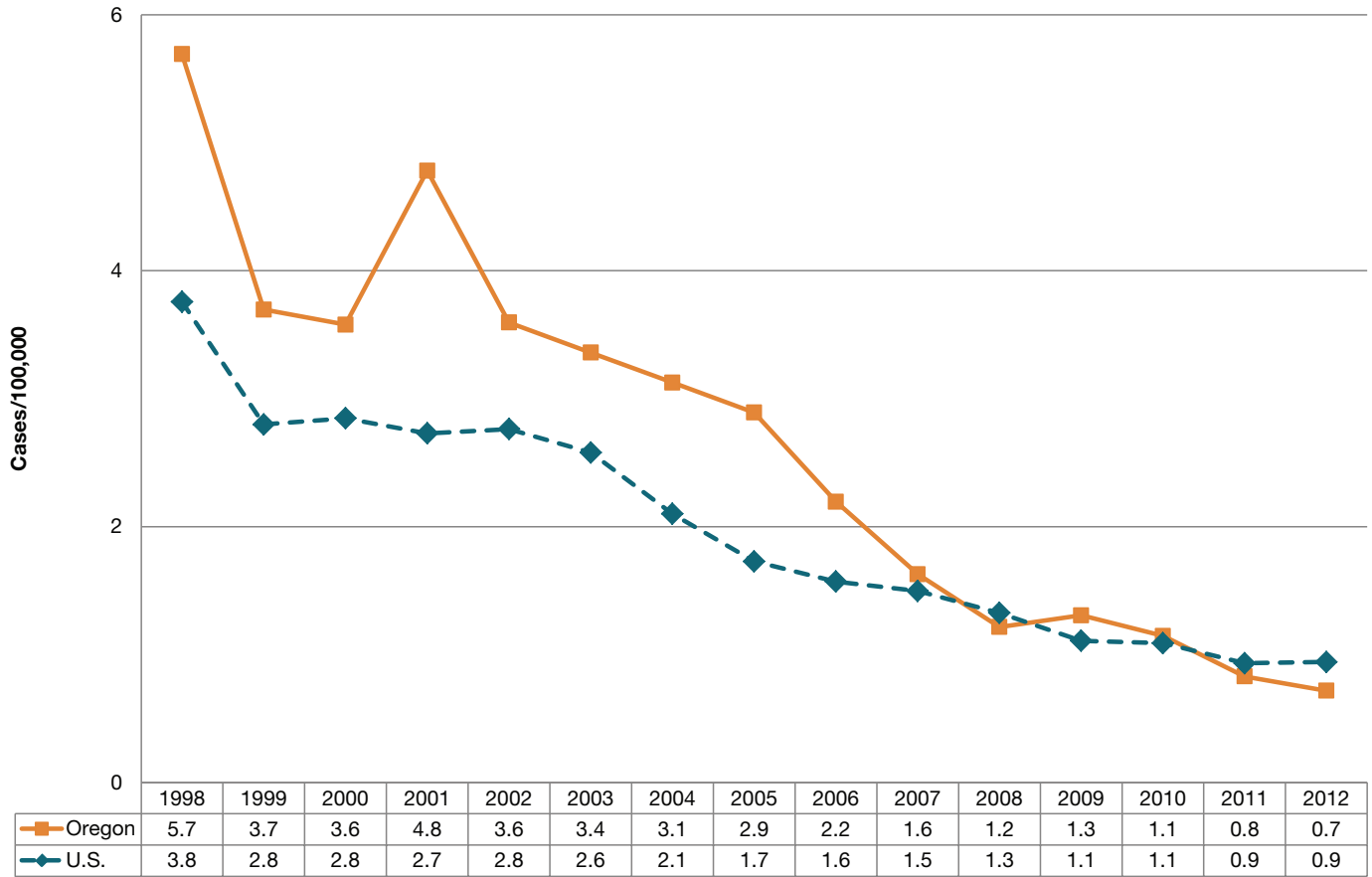
Acute hepatitis B by year: Oregon, 1988–2012



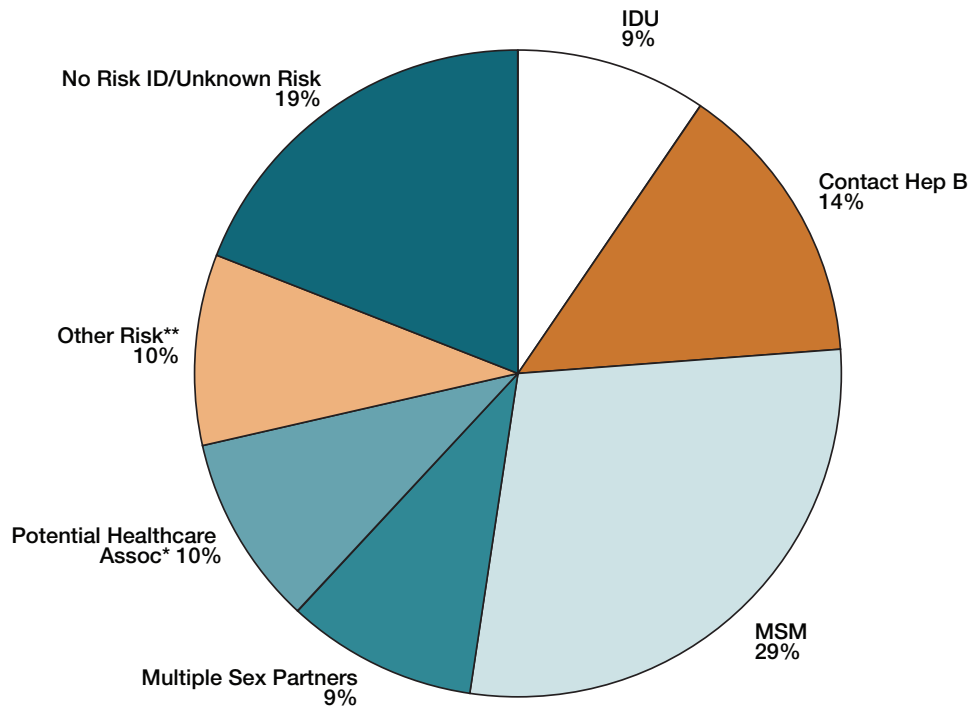
Incidence of acute hepatitis B by age and sex: Oregon, 2012



Incidence of acute hepatitis B: Oregon vs. nationwide, 1998–2012



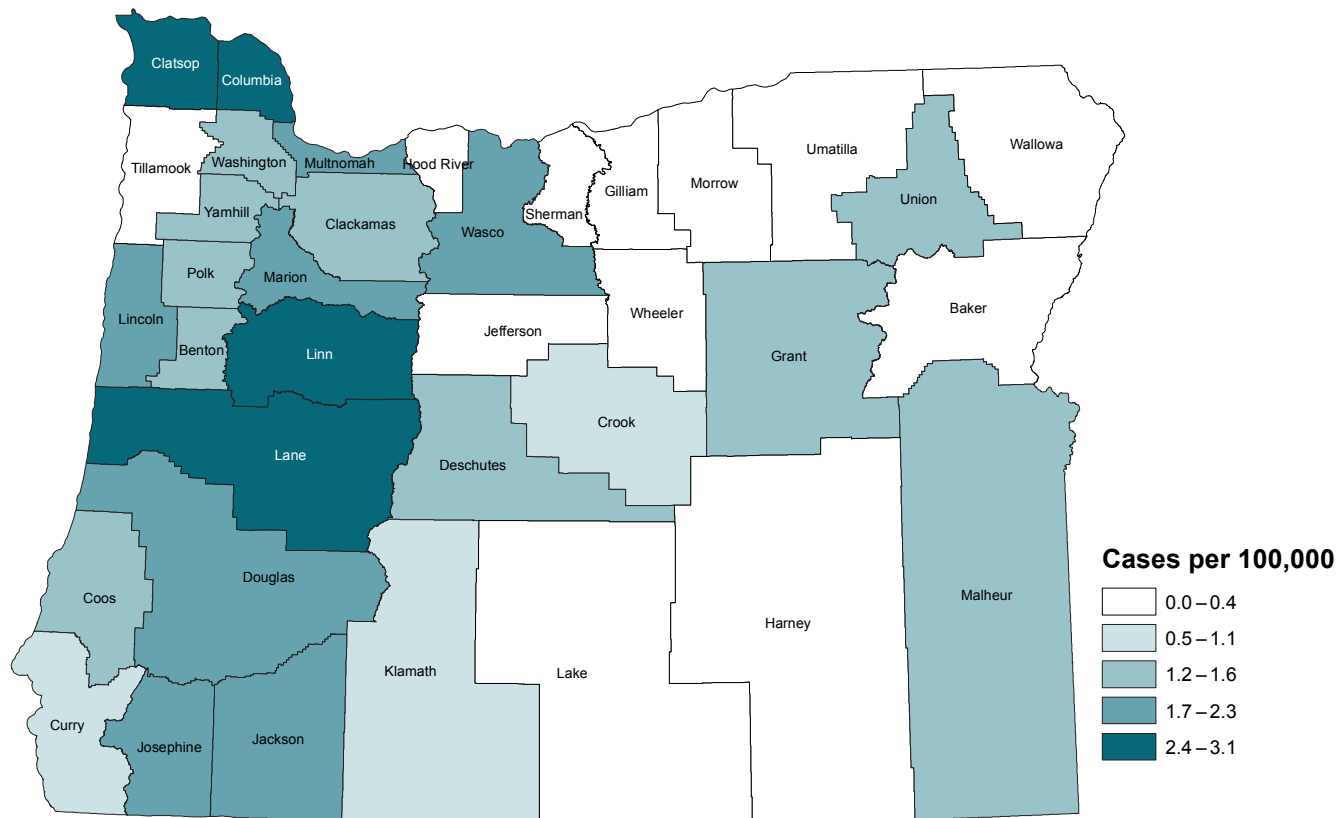
Reported risk factors for acute hepatitis B among interviewed cases, Oregon, 2012



* Transfusion, infusions, dialysis, surgery

** Street drugs, tattoo, pierced, other blood exposure, needlestick

Incidence of acute 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.