

Hepatitis B & Cancer

Hepatitis B is a virus linked to liver cancer. The good news is there are vaccines available to protect against the virus and other steps you can take to reduce your liver cancer risk.

The cancer connection

Hepatitis B can cause liver cancer. In fact, up to 60 percent of all liver cancer cases in the world are related to the hepatitis B virus.¹ Most people who contract the virus do not know they have it and do not receive treatment to prevent liver cancer.²

The virus

Hepatitis B is a virus that can lead to chronic liver infection. You can become infected with hepatitis B through transmission of bodily fluids from an infected person. Transmission can occur through sexual contact, sharing needles or other drug-injection equipment, or through transfer from mother to child during birth. African-American,³ Hispanic,⁴ Asian and Pacific Islander⁵ populations are at higher risk for hepatitis B infection. Approximately 90 percent of infants who get hepatitis B remain chronically infected.²

Signs and symptoms of hepatitis B vary by age. Most infected children or adults with weakened immune systems show no symptoms, but 30 to 50 percent of people age five or older experience symptoms, including fever, fatigue, loss of appetite and nausea. If you have chronic hepatitis B, you may not have symptoms or you may show symptoms of cirrhosis (liver scarring) or liver cancer.⁶

Cancer prevention

The best way to prevent hepatitis B is to get vaccinated. A safe and effective vaccine currently exists to protect against hepatitis B. The Centers for Disease Control and Prevention (CDC) recommends all children receive the first dose of hepatitis B vaccine at birth and complete the three-to-four dose series between six-18 months of age. Children up to 18 years old should also receive the vaccine if they did not receive it earlier. The vaccine is also available for adults over the age of 18 who are at high risk of hepatitis B infection.⁷ Talk to your health care professional about getting yourself and your children vaccinated to prevent liver cancer and other health issues.

If your health insurance does not cover the cost of the hepatitis B vaccine, there are assistance programs available. Most hepatitis B vaccines are covered by the Vaccines for Children (VFC) Program, a federally-funded program that helps provide vaccines to children (age 18 or younger) whose parents or guardians may not be able to afford them. Some hepatitis B vaccine manufacturers also offer patient assistance programs to cover vaccine costs for adults 18 years or older.

Hepatitis B & Cancer

Did you know?

- Approximately 850,000 to 2.2 million people in the U.S. have chronic hepatitis B virus infection.⁸
- Approximately 257 million people worldwide have chronic hepatitis B virus infection.⁹
- 67 percent of adults are unaware hepatitis B increases the risk of liver cancer.¹⁰
- Each year in the U.S., about 22,000 men and 9,000 women are diagnosed with liver cancer, and about 16,000 men and 8,000 women die from the disease.¹¹
- Liver cancer is the fastest-rising cause of cancer death in the U.S. and the second-leading cause of cancer death globally.¹²
- Only 13 percent of Hispanics are aware of the higher rate of hepatitis B-associated cancers among their demographic.¹¹
- Only 29 percent of Asian-Americans are aware of the higher rate of hepatitis B-associated cancers among their demographic.¹¹
- 66 percent of adults are unaware the hepatitis B vaccine can reduce the risk of liver cancer.¹¹

The risk factors:

You may be at increased risk for hepatitis B infection if you:

- Have had unprotected sex with someone who is infected
- Have had multiple sexual partners
- Have a sexually transmitted infection
- Are a man who has sex with other men
- Have injected recreational drugs or shared needles
- Live with someone who has chronic hepatitis B
- Have traveled to (or come from) a country where many people have hepatitis B. Areas with high continuous prevalence of hepatitis B include Southeast Asia and the Pacific Basin (excluding Japan, Australia and New Zealand), sub-Saharan Africa, the Amazon Basin, parts of the Middle East, the Central Asian Republics and some countries in Eastern Europe.¹³
- Are exposed to blood through your work
- Are on long-term hemodialysis
- Were born to a mother with hepatitis B

Hepatitis B & Cancer

Think About the Link[®] campaign:

Think About the Link[®] is a prevention and education campaign from the *Prevent Cancer Foundation*[®] to advance awareness of the connection between certain viruses and cancer. The campaign focuses on three viruses linked to cancer: human papillomavirus (HPV), hepatitis B and hepatitis C. *Think About the Link*[®] aims to increase screening rates for the viruses, increase immunization rates for HPV and hepatitis B and raise awareness of available treatment options for hepatitis C.

REFERENCES

- 1 Wong, C., & Goh, K. "Chronic hepatitis B infection and liver cancer." *Biomedical Imaging and Intervention Journal*, 2(3), e7. <http://doi.org/10.2349/bij.2.3.e7> CDC "How common are HPV infections?" <https://www.cdc.gov/media/releases/2016/p1020-hpv-shots.html>
- 2 CDC. "Viral Hepatitis- Hepatitis B Information." May 31, 2015. <http://www.cdc.gov/hepatitis/hbv/>.
- 3 CDC. "African Americans/Blacks." March 14, 2014. <http://www.cdc.gov/nchhstp/healthdisparities/africanamericans.html#Hepatitis>.
- 4 CDC. "Leading Causes of Death, Prevalence of Diseases and Risk Factors, and Use of Health Services Among Hispanics in the United States — 2009–2013." May 8, 2015.
- 5 CDC. "Asian & Pacific Islanders." May 31, 2015. <http://www.cdc.gov/hepatitis/Populations/api.htm>.
- 6 CDC. "Hepatitis B FAQs for the Health Professionals." October 23, 2015. <http://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#b1>.
- 7 CDC. "Hepatitis B In-Short." August 21, 2012. <http://www.cdc.gov/vaccines/vpd-vac/hepb/in-short-adult.htm#who>
- 8 CDC. "Hepatitis B FAQs for the Public." October 23, 2015. <http://www.cdc.gov/hepatitis/hbv/bfaq.htm>.
- 9 WHO. "Hepatitis B." <http://www.who.int/mediacentre/factsheets/fs204/en/>
- 10 Sourced from a survey conducted by the Prevent Cancer Foundation in partnership with Russell Research Firm
- 11 CDC. "Liver Cancer." August 19, 2015. <http://www.cdc.gov/cancer/liver/>.
- 12 Islami, et.al. "Disparities in liver cancer occurrence in the United States by race/ethnicity and state." June 6 2017. <http://onlinelibrary.wiley.com/doi/10.3322/caac.21402/full>
- 13 WHO. "Hepatitis B." <http://www.who.int/csr/disease/hepatitis/whocdscsrlyo20022/en/index1.html>.