

Think About the Link: Hepatitis B, Hepatitis C and Cancer

Hepatitis B and hepatitis C are viruses that have been linked to different types of cancer. The good news is that there is a vaccine against hepatitis B, and you can be screened for hepatitis C, which can be treated and cured.

The Viruses:

Hepatitis B is a liver infection caused by the hepatitis B virus. An individual can become infected with hepatitis B through transmission of bodily fluids from an infected person. Transmission can occur through sexual contact; sharing needles, syringes, or other equipment used for injecting recreational drugs; or from mother to child during birth. Black non-Hispanic,¹ Hispanic² and Asian/Pacific Islander individuals³ are at higher risk for hepatitis B infection. Approximately 90 percent of infants who develop hepatitis B remain chronically infected.⁴ Signs and symptoms of hepatitis B vary by age. Most infected children and adults with weakened immune systems show no symptoms, but 30 percent to 50 percent of people ages five years and older do show symptoms, including (but not limited to) fever, fatigue, loss of appetite and nausea. People with chronic hepatitis B may show no symptoms or may show symptoms of cirrhosis (liver decay) or liver cancer.⁵

Hepatitis C is a liver infection caused by the hepatitis C virus, a blood-borne virus. The most common way hepatitis C is transmitted is by sharing needles or other equipment used for injecting recreational drugs. African-Americans,⁶ Hispanics² and people born between 1945 and 1965⁷ are at higher risk for hepatitis C infection. Hepatitis C becomes a chronic infection for 75 percent to 85 percent of infected people, but it can also be a short-term illness for some. Chronic hepatitis C can cause life-long health problems. Most people with short-term hepatitis C show no symptoms, or exhibit mild symptoms including, but not limited to, fever, fatigue, dark urine and abdominal pain. While most people with chronic hepatitis C show no symptoms, many have chronic liver disease, including cirrhosis or liver cancer.⁸

The Cancer Link:

Hepatitis B and hepatitis C can cause liver cancer. In fact, about 80 percent to 95 percent of all liver cancer cases are related to the hepatitis B or hepatitis C viruses.⁹ Most people do not know they have these viruses and do not receive treatment that can help prevent them from developing liver cancer.

Did You Know?

- Approximately 700,000 to 1.4 million people in the U.S. have a chronic hepatitis B virus infection.¹⁰
- Approximately 3.5 million people in the U.S. have chronic hepatitis C infection.⁸
- Sixty-seven percent of adults are not aware that hepatitis B increases the risk of liver cancer.¹¹

Cancer Prevention:

A safe and effective vaccine is currently approved to protect against hepatitis B. The best way to prevent hepatitis B is to get vaccinated.

The Centers for Disease Control and Prevention recommends all children receive their first dose of hepatitis B vaccine at birth and complete the three- to four-dose series between six to 18 months of age. Children up to 18 years old should also receive the vaccine if they did not receive it earlier.¹² Talk to your primary care provider about getting yourself and your children vaccinated to prevent liver cancer and other health issues. People who travel to certain countries where the virus is prevalent also should consider getting the vaccine.

While no vaccine exists to prevent hepatitis C, you can reduce your chance of infection by avoiding activities that spread the virus, especially using injectable drugs. There are blood tests that can screen for hepatitis C. If you are at risk, talk to your primary care provider about getting screened. If you have hepatitis C, there are several treatments available that can reduce your chance of developing cirrhosis or liver cancer.

Did You Know?

- Each year in the U.S., about 20,000 men and 8,000 women are diagnosed with liver cancer, and about 16,000 men and 7,000 women die from the disease.⁹
- Only 13 percent of Hispanics are aware of the higher rate of hepatitis B-induced cancers among their demographic, and only 12 percent are aware of the higher rate of hepatitis C-induced cancers.¹¹
- Only 29 percent of Asian-Americans are aware of the higher rate of hepatitis B-induced cancers among their demographic.¹¹
- Only 11 percent of Baby Boomers (born between 1945 and 1965) are aware of the higher rate of hepatitis C-induced cancers among their demographic.¹¹
- Seventy-six percent of adults are not aware the hepatitis B vaccine can reduce the risk of liver cancer.¹¹
- Seventy-three percent of adults are not aware hepatitis C treatment can reduce the risk of liver cancer.¹¹
- Only 9 percent of adults say their health care provider has ever discussed prevention strategies for hepatitis C.¹¹
- Health care providers report only 59 percent of patients diagnosed with hepatitis C ultimately receive treatment.¹¹

The Risk Factors:

*You may be at increased risk for liver cancer if you:*¹³

- Drink alcohol in excess
- Use tobacco products
- Are obese
- Are exposed to cancer-causing chemicals
- Harbor the hepatitis B or hepatitis C virus

You are at risk for hepatitis B if you:

- Have sex with someone who is infected
- Have multiple sexual partners
- Have a sexually transmitted disease
- Are a man who has sex with other men
- Have ever injected recreational drugs and shared needles
- Live with someone who has chronic hepatitis B
- Have traveled to 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.¹⁴
- Are exposed to blood in their workplace
- Are on long-term hemodialysis
- Were born to a mother with hepatitis B

You are at risk for hepatitis C if you:

- Are exposed to blood in the workplace
- Were born between 1945 and 1965
- Have ever injected recreational drugs and shared needles
- Received a blood transfusion or organ transplant before July 1992 (This is when blood and organs started being screened for hepatitis C.)
- Got a tattoo or body piercing done with unsterile equipment
- Were treated for a blood-clotting problem before 1987
- Are on long-term hemodialysis
- Are infected with HIV

The Campaign

Think About the Link is a multi-year education campaign developed by the Prevent Cancer Foundation to increase awareness of the connection between certain viruses and cancer. The campaign is focused 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 and access to available treatment options for hepatitis C.

References:

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- ⁴ CDC. "Viral Hepatitis- Hepatitis B Information." May 31, 2015. <http://www.cdc.gov/hepatitis/hbv/>.
- ⁵ CDC. "Hepatitis B FAQs for the Health Professionals." October 23, 2015. <http://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#b1>.
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- ⁸ CDC. "Hepatitis C FAQs for the Public." January 8, 2016. <http://www.cdc.gov/hepatitis/hcv/cfaq.htm>.
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- ¹⁰ CDC. "Hepatitis B FAQs for the Public." October 23, 2015. <http://www.cdc.gov/hepatitis/hbv/bfaq.htm>.
- ¹¹ Sourced from a survey conducted by the Prevent Cancer Foundation in partnership with Russell Research Firm
- ¹² CDC. "Hepatitis B In-Short." August 21, 2012. <http://www.cdc.gov/vaccines/vpd-vac/hepb/in-short-adult.htm#who>
- ¹³ Prevent Cancer Foundation. "Liver Cancer." June 24, 2015. <http://preventcancer.org/learn/preventable-cancers/liver/>.
- ¹⁴ WHO. "Hepatitis B." <http://www.who.int/csr/disease/hepatitis/whocdscsryo20022/en/index1.html>.