

Viral Hepatitis and Liver Cancer

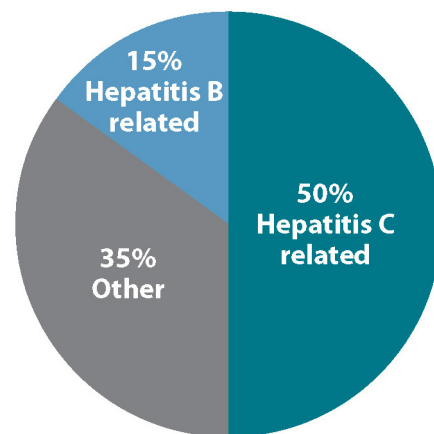
In March 2016, the Centers for Disease Control and Prevention, the American Cancer Society, the National Cancer Institute, and the North American Association of Central Cancer Registries released their [Annual Report to the Nation on the Status of Cancer, 1975 – 2012](#) (ARN).

The report shows, in contrast to most other cancers in the U.S., liver cancer incidence is increasing at a rapid rate (2.3 percent per year overall from 2003 – 2012) – second only to thyroid cancer – and the rate of deaths due to liver cancer is increasing faster than for any other type of cancer.

Hepatitis B and C are major contributing factors to liver cancer – underscoring the critical importance of hepatitis prevention and treatment. The most recent U.S. cancer data show:

- [Liver cancer increased 72 percent](#) between 2003 – 2012 (16,265 to 28,012)
- [Almost 23,000 people died from liver cancer in 2012](#), a 56 percent increase in deaths since 2003
- The ARN indicates Hepatitis C and liver cancer-associated death rates were highest among baby boomers, born 1945 – 1965, who also represent the vast majority of Americans with hepatitis C infection

Factors Contributing to Liver Cancer Incidence in the U.S.



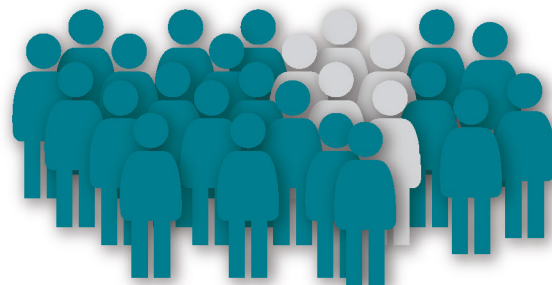
Some Populations are Particularly Affected by Viral Hepatitis and Liver Cancer

People with hepatitis B and hepatitis C have the greatest risk of liver cancer. In the U.S., approximately 65 percent of liver cancer cases are related to hepatitis B or C, with nearly 50 percent attributable to hepatitis C alone. Some groups of Americans are at increased risk for chronic viral hepatitis infection.

Hepatitis C

- Approximately 3.5 million Americans are living with chronic hepatitis C infection
- More than 75 percent are baby boomers, many of whom were unknowingly infected before hepatitis C was discovered in 1989
- Overall prevalence of hepatitis C among baby boomers is six times that of other adults
- Because hepatitis C has been silently damaging their livers for many years, baby boomers are particularly vulnerable to cirrhosis and liver cancer
- More recently, troubling increases in the rate of new hepatitis C infections related to injection drug use have occurred among young people in some parts of the country

81% of American adults with hepatitis C are baby boomers



Hepatitis B

- As many as 2.2 million Americans are living with hepatitis B
- Hepatitis B disproportionately affects Asian Americans and Pacific Islanders (AAPIs) – while AAPIs make up less than 5 percent of the U.S. population, they account for more than 50 percent of Americans with hepatitis B
- AAPIs have historically been the racial/ethnic group most affected by liver cancer

Hepatitis B and C are Preventable and Treatable

While there is currently no vaccine to prevent hepatitis C infection, highly effective treatment options are now available that can cure over 85 percent of cases. However, because hepatitis C initially has few noticeable symptoms, at least half of those infected don't know it. For years, even decades, hepatitis C can slowly and silently damage the liver, leading to cancer and other serious health consequences.

That's why it is critical that everyone at risk for hepatitis C get screened. Once diagnosed, most hepatitis C cases can be cured in just a few months, and successful treatment reduces liver cancer risk by 75 percent. Diagnosis and treatment also helps decrease transmission of the virus to others.

Screening and vaccinating individuals at high risk for hepatitis B is also critical. Like hepatitis C, most people living with hepatitis B are not aware of their infection, but detection and treatment can prevent serious liver damage, including reducing liver cancer risk between 50 percent and 80 percent. Hepatitis B vaccination, now part of the standard infant vaccine schedule, is also safe and highly effective.

Benefits of Screening and Treatment Extend Beyond Cancer Prevention

Hepatitis screening and treatment not only helps prevent liver cancer, it protects people from a host of other health complications. Untreated chronic hepatitis causes long-term inflammation in the liver, which can eventually lead to liver scarring, cirrhosis, and other damage. Up to 1 in 5 people with hepatitis C develop cirrhosis, and hepatitis C is the number one cause of liver transplants. But with increased screening and treatment, many of these complications could be prevented. Overall, diagnosis and treatment reduces the risk of all-cause mortality among individuals with hepatitis C by 50 percent.

Ensuring individuals at risk have access to prevention, testing, and treatment could dramatically reduce the severe burden of viral hepatitis and drive down liver cancer incidence and death rates in the United States.

Who Should Be Tested For Hepatitis C?

Age-based guidelines:

- All persons born from 1945 through 1965

Risk-based guidelines:

- Anyone who has ever injected illegal drugs
- Recipients of blood transfusions or solid organ transplants before July 1992, or clotting factor concentrates made before 1987
- Patients who have ever received long-term hemodialysis treatment
- Persons with known exposures to hepatitis C, such as:
 - Health care workers after needlesticks involving blood from a patient with hepatitis C
 - Recipients of blood or organs from a donor who later tested positive for hepatitis C
- People living with HIV
- People with signs or symptoms of liver disease (e.g., abnormal liver enzyme tests)
- Children born to mothers who have hepatitis C

Who Should Be Tested For Hepatitis B?

Testing for hepatitis B is recommended for certain groups of people, including:

- People born in Asia, Africa, and other regions with moderate or high rates of hepatitis B
- Unvaccinated people whose parents are from regions with high rates of hepatitis B
- Anyone having sex with a person infected with hepatitis B
- People who live with someone with hepatitis B
- Men who have sex with men
- People who inject drugs
- All pregnant women
- People with HIV infection
- People on hemodialysis
- People who receive chemotherapy or other types of immunosuppressive therapy

Making the Most of Hepatitis C Treatment Advances

Today, the vast majority of hepatitis C infections can be cured, thanks to newly available and highly effective treatment options. But the benefit of new therapies cannot be fully realized unless patients have access to the medications. Hepatitis C screening remains the essential first step to diagnosis and treatment. But once diagnosed, individuals may face additional barriers to care.

The newest and most effective hepatitis C treatments are also the most expensive. CDC studies have shown that treating all hepatitis C-infected persons using these newly available therapies is cost-effective from a societal perspective – on par with cervical cancer screening or cholesterol testing. However, the price of current medications is a formidable barrier for many. Continuing to explore ways to ensure that people have access to needed treatments, including for hepatitis C, is critical.

While resource limitations may require some providers to prioritize certain patients for treatment, it is important that providers continue to do everything possible to follow the guidelines of the American Association for the Study of Liver Diseases (AASLD) and the Infectious Disease Society of America, which [recommend](#) treatment for all patients with chronic hepatitis C.

Providing equitable access to testing, care, and treatment could dramatically reduce hepatitis C-related morbidity and mortality, stop transmission, and ultimately eliminate hepatitis C as a public health concern in the United States.

If you are a member of the news media and need more information, please visit www.cdc.gov/nchhstp/Newsroom or contact the News Media Line at CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention: 404-639-8895 or NCHHSTPMediaTeam@cdc.gov.