



# Increase NIH and NCI Funding for Hepatitis B and Liver Cancer Research

**Hep B United urges Congress to increase NIH funding for Hepatitis B research by \$38.7 million per year for 6 years to develop a cure for Hepatitis B.**

## *National Institutes of Health Funding for a Hepatitis B Cure*

In the U.S., 1 in 20 people have been infected with the hepatitis B virus (HBV) and up to 2.2 million individuals are chronically infected. Worldwide, more than 292 million people are chronically infected with HBV, and HBV is associated with 780,000 deaths each year. Despite an effective hepatitis B vaccine, each year, there are 30 million new HBV infections worldwide and 40,000-60,000 new infections in the U.S. **Left undiagnosed and untreated, 1 in 4 of those with chronic HBV infection will die prematurely from cirrhosis, liver failure and/or liver cancer.** Although HBV is preventable and treatable, there is still no cure for this disease.

**Only seven medications are approved to manage chronic HBV infection, none are curative, most require lifelong use, and often only reduce the likelihood of death due to liver disease by 40-60%.** In recent years, a cure was discovered for hepatitis C. With increased prioritization and federal funding and support for hepatitis B research, a cure can be developed for hepatitis B, as well. This highlights the need to develop more effective medications to treat and cure hepatitis B through increased National Institutes of Health (NIH) funding.

The NIH funding for hepatitis B was only \$44 million in FY 2018, an amount not adequate to prioritize and fund research to develop a cure for hepatitis B. Funding for HBV research at the NIH has declined by over 8% since FY 2014, despite large increases for NIH overall, and is expected to fall even further in FY 2019. **The lack of a cure for hepatitis B due to inadequate hepatitis B research funding is costing the U.S. an estimated \$4 billion per year in medical costs,** and has a devastating effect on patients and their families.

**The Hepatitis B Foundation's scientific leadership recommends increasing NIH hepatitis B research funding by \$38.7 million per year for 6 years** to fund research initiatives identified in the Foundation's Roadmap for a Cure for HBV. This would enable us to fully eliminate HBV through the development of a new cure for HBV. Furthermore, Hep B United urges the National Institute of

Diabetes and Digestive and Kidney Diseases (NIDDK) and the National Institute of Allergy and Infectious Diseases (NIAID) to issue targeted calls for HBV research proposals in FY 2019 that focus on developing new treatments and a cure for hepatitis B.

The World Health Organization and the U.S. National Academies of Science, Engineering, and Medicine have declared the elimination of hepatitis B is possible with adequate resources and support. By increasing NIH funding for hepatitis B research, this will significantly increase the likelihood of discovering a cure for hepatitis B. If we are able to cure all individuals with chronic hepatitis B infection, we can use this new cure in conjunction with the hepatitis B vaccine that already exists to prevent and cure hepatitis B, allowing us to definitively eliminate hepatitis B in the U.S and around the world.

## *National Cancer Institute (NCI) Priorities and Funding*

The link between hepatitis B virus (HBV) infection and primary liver cancer is well established with 60% of global liver cancer cases caused by HBV. In the U.S., liver cancer is the 2nd deadliest cancer with a 5-year survival rate of 20%. In 2016, the CDC reported that unlike other cancers, the rates of liver cancer incidence and death are rising. Primary liver cancer death rates have tripled since 1980, and death rates for liver cancer increased 43% from 2000-2016. As a result, NCI should work in close collaboration with NIAID and NIDDK on prioritizing increased funding for research on HBV and liver cancer, and NCI should create a targeted liver cancer research initiative, since NCI's Specialized Programs of Research Excellence (SPOREs) currently exist for every major cancer except for primary liver cancer.

In order to work towards a cure and to increase the 5-year survival rate of liver cancer, the Hepatitis B Foundation recommends that NCI issue targeted calls for proposals, and further signal its prioritization of liver cancer research by increasing dedicated funding and creating an ad hoc special emphasis panel to review grant applications focused on addressing liver cancer.

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