



Finding a Cure for Hepatitis B: More NIH Research is Needed

The hepatitis B virus (HBV) is associated with almost 1 million deaths each year worldwide, making it the 10th leading cause of death in the world. In the United States, 1 in 20 Americans has been infected with HBV and up to 2.2 million are chronically infected. Left undiagnosed and untreated, 1 in 4 of those with chronic HBV infection will die prematurely from liver failure and/or liver cancer. Although HBV is preventable and treatable, there is still no cure for this disease. In view of the epidemic scope of hepatitis B and the fact that the virus was discovered 50 years ago, it is disappointing that funding for HBV research at the National Institutes of Health (NIH) has declined by almost 16% since FY 2011. Due to the tremendous investment of the NIH, a cure for hepatitis C is now available. **The Hepatitis B Foundation and its partners recommend doubling current NIH funding to \$100 million for HBV to leverage new research opportunities to find a cure and finally eliminate this serious liver disease.**

There is the need, the know-how, and the tools to take us to a cure that will bring hope to more than 240 million people worldwide suffering from HBV. A cure was accomplished for hepatitis C with increased federal attention and funding. It can be accomplished for HBV as well. The current treatments for HBV are not cures. They require lifelong medication. Even after 10 years of treatment, people are still at very high risk for premature death from liver failure and liver cancer.

In addition to the devastating toll on patients and their families, ignoring HBV is costing the U.S. an estimated \$4 billion per year in medical costs. Yet, the NIH will spend only \$49 million in 2016 on HBV research. And it is disappointing that funding for HBV has declined by almost 16% since FY 2011. Targeted research commitment has made a significant difference for HIV/AIDS, which is currently funded at \$3 billion. *By doubling the current NIH budget for hepatitis B to \$100 million there is a good chance of success in finding a cure in the next 5-10 years. There are exciting new research developments and opportunities in the field that make finding a cure for HBV very possible.*

Each year, despite an effective vaccine, there are 30 million new HBV infections worldwide and an estimated 50-70,000 new infections in the U.S. Moreover, despite the availability of seven approved medications to manage chronic HBV infection, none are curative, most require lifelong use, and only reduce the likelihood of death due to liver disease by 40-60%. These medications are effective in just 50% of those recommended for treatment. The impact of HBV in the U.S. and abroad is well documented. Globally, 2 billion people have been infected with HBV, of which more than 240 million are chronically infected, and up to 1 million people die each year (2 people die per minute from HBV).

The link between HBV infection and primary liver cancer is well established with up to 60% of global liver cancer cases caused by the hepatitis B virus. In the U.S., primary liver cancer is the second deadliest cancer with a 5-year survival rate less than 15%. In fact, the CDC 2016 *Annual Report to the Nation on the Status of Cancer* found that unlike other cancers, liver cancer incidence and death rates are rising. Due to the link between HBV and liver cancer, a stronger focus on liver cancer at the NIH is important. For example, while Specialized Programs of Research Excellence (SPOREs) currently exist for every other major cancer at the National Cancer Institute of the NIH, none currently exist for liver cancer.

The Hepatitis B Foundation and its partners recommend doubling the federal investment in HBV research is necessary and supports the bicameral and bipartisan request in June 2016 by 14 Members of Congress to the NIH Director Dr. Frances Collins for the development of a "Professionals Judgement Budget" to identify and document the research projects needed to cure and eliminate hepatitis B.