# The Chronic Hepatitis Cohort Study

Division of Viral Hepatitis, U.S .Centers for Disease Control and Prevention

CDC FOUNDATION
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Viral Hepatitis Action Coalition

## SUMMARY

The Chronic Hepatitis Cohort Study (CHeCS) is a multicenter cohort study of chronic hepatitis B and C patients, and the CHeCS investigators include project officers at CDC, the Alaska Native Health Consortium and Arctic Investigations Program, the Henry Ford Health System (HFHS) in Detroit and allied HMO research center investigators at four additional sites: Kaiser Permanente- Hawaii; Lovelace Clinic Foundation in Albuquerque, New Mexico; Kaiser Permanente- Portland, Oregon; and Geisinger Health System in Danville, Pennsylvania. CHeCS data collection began in mid-2010, encompassing over 2,500 patients with chronic hepatitis B and more than 10,000 patients with chronic hepatitis C. Data are collected from pre-existing medical and billing records on demographics, diagnoses, laboratory values, medications, procedures, and medical encounters. Additionally, a confidential survey of patients to assess their ongoing use of substances such as alcohol, tobacco and injection drugs, their psychosocial health, their adherence to their prescribed treatment regimens and other factors, will be implemented in 2011.

CDC estimates that there are about 3.2 million chronically infected hepatitis C virus (HCV) and about 1.0 million chronic hepatitis B virus (HBV) patients in the United States.[1,2,3] Some consider these estimates of the "Secret Epidemic"—as it has been dubbed by Dr. Howard Koh, current US Assistant Secretary of Health-- to be conservative.[4] All agree, however, that when compared with the other major chronic viral infection in the US, human immunodeficiency virus (HIV), very little is known about the spectrum of disease, access to and receipt of care, and population effectiveness of current drug therapies. Few large observational cohort studies are available that can address the population impact of therapies for HCV and HBV, and many issues important to public or national health can only come from larger observational cohort studies. To assess the larger implications and impact of chronic hepatitis B and C on the US population, we have designed and started a 'dynamic cohort' study—with rolling admissions and follow-up from patients' regular visits to their clinicians.

We expect that CHeCS will provide much-needed answers regarding co-morbidities, the natural history of treatment and care, and other aspects of chronic HBV and HCV infection. Also, it is anticipated that therapies for both HBV and HCV will improve over the next several years, and it is crucial to provide answers to questions such as: What is the population-effectiveness of these evolving therapies in measured mortality and disease progression? What are the rates and kinds of resistance to these therapies that develop on a population basis? As they have for HIV/AIDS, these issues will affect not only individual patient care but public health, policy and national and local funding decisions.

(continued on reverse)

1. Armstrong GL, Wasley A, Simard EP, et al. The prevalence of hepatitis C virus infection in the United States, 1999 through 2002. Ann Intern Med 2006; 144:705-14.
2. Wasley A, Kruszon-Moran D, Kuhnert W, et al. The prevalence of hepatitis B virus infection in the United States in the era of vaccination. J Infect Dis 2010; 202:192-201.
3. Daniels D, Grytdal S, Wasley A. Surveillance for acute viral hepatitis—United States, 2007. MMWR 2009; 58 (No. SS-3):1-27. 4. Pyenson B, Fitch K, Iwasaki K. Consequences of Hepatitis C Virus (HCV): Costs of a Baby Boomer Epidemic of Liver Disease. New York; Milliman, Inc., May 2009.
5. Southern WN, Drainoni ML, Smith BD, et al. (in press) Hepatitis C testing practices and prevalence in a high-risk urban ambulatory care setting. J Viral Hepatitis
6. Dr. Bryce Smith, personal communication
7. Cohen C, Holmberg S, Block J, et al. (in press) Is chronic hepatitis B being undertreated in the United States? J Viral Hepatitis

CHeCS is already yielding unique and useful information for public health and policy regarding chronic hepatitis B and C in the United States. For example, the age and racial/ethnic distribution of the CHeCS patients is being used to assess whether an age-based hepatitis C testing strategy, such as of the "Baby Boom" generation, would be more effective than our current risk-based testing strategy, especially of injection drug users, that has been notably unsuccessful.[5,6] Another ongoing CHeCS analysis is examining over one million patients at four study sites to find out who, when and why adults are tested for hepatitis B and C, their rates of positive test results, how many eventually receive hepatitis specialty care and, of them, how many are treated. Previously, this picture has been be estimated and pieced together from disparate and sparse data sources.[7] The CHeCS, a prospective, ongoing, observational cohort study has been designed to collect information in such a way as to provide unique insights into the ongoing "Secret Epidemic" of chronic viral hepatitis in the United States.

For more information or funding opportunities, please contact:

Aimee Ahmed
Manager of Stewardship and Donor Relations
CDC Foundation
55 Park Place, Suite 400, Atlanta, GA 30303
Phone: 404.523.3497 :: Email: aahmed@cdcfoundation.org

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