January 29, 2013

The Honorable Martin O’Malley
Governor
State of Maryland
Annapolis, MD 21401-1991

The Honorable Joan Carter Conway
Chair, Senate Education, Health, and
Environmental Affairs Committee
2 West Miller Senate Building
Annapolis, MD 21401

The Honorable Peter A. Hammen
Chair, House Health and
Government Operations Committee
Room 241 House Office Building
Annapolis, MD 21401

RE: DHMH 2012 Activities toward Implementing Requirements of Md. Code Ann.,
Health-General § 18-1001, Hepatitis B and Hepatitis C Prevention and Control in Maryland

Dear Governor O’Malley, Chair Conway, and Chair Hammen:

Md. Code Ann., Health - General §18-1002, requires the Department to annually report on activities relating to the prevention and control of hepatitis B (HBV) and hepatitis C (HCV) infection in Maryland. I have attached a report of the Department's activities in 2012 related to HBV and HCV prevention and control in Maryland.

I hope this information is helpful. If you have any questions or comments concerning the report, please contact Ms. Marie Grant, Director, Office of Governmental Affairs at (410) 767-6481.

Sincerely,

Joshua M. Sharfstein, M.D.
Secretary

Enclosure

cc: Ms. Laura Herrera
Ms. Marie Grant
Ms. Michelle Spencer
Ms. Deborah McGruder
Ms. Sara T. Albert, MSAR# 7894
2012 Annual Report

Implementation of Md. Health-General Code Ann. § 18-1001, Hepatitis B and Hepatitis C Prevention and Control within Maryland

Joshua M. Sharfstein, MD
Secretary
Department of Health and Mental Hygiene
Per Maryland Code Ann., Health-General § 18-1002, this report describes the Maryland Department of Health and Mental Hygiene’s (DHMH) activities relating to the prevention and control of hepatitis B virus infection (HBV) and hepatitis C virus (HCV) infection in Maryland. DHMH’s hepatitis prevention programs are conducted within the Prevention and Health Promotion Administration, Infectious Disease Bureau.

Background

An estimated 3.5-5.3 million persons are living with viral hepatitis in the United States, and millions more are at risk for infection. Because viral hepatitis can persist for decades without symptoms, 65-75% of infected Americans remain unaware of their infection status and are not receiving care and treatment. In the decade to come, more than 150,000 Americans are expected to die from viral-hepatitis-associated liver cancer or end-stage liver disease. Most morbidity and mortality result from the chronic form of viral hepatitis caused by hepatitis B virus (HBV) and hepatitis C virus (HCV) infection. According to the Center for Disease Control and Prevention (CDC), each year about 15,000 deaths are caused by HBV or HCV associated liver cancer or end-stage liver disease. Almost half the liver transplantations in the United States are necessitated by end-stage liver disease associated with HBV or HCV infection.

In the United States, 2.7-3.9 million persons are estimated to be infected with hepatitis C virus. Surveillance data suggest that about 20,000 persons are newly infected with HCV annually in the United States. HCV is the leading cause of liver transplants in this country. The number of HCV related deaths, which now stands at about 12,000 Americans per year, is expected to rise in the coming decade. Although new cases have dropped sharply, hundreds of thousands of people who were infected decades ago are expected to start experiencing the effects of liver damage. Three-quarters of the people who are infected do not know it, because they are not tested for the virus and because infection can be asymptomatic for years while it stealthily attacks the liver. Because this disease is transmitted by blood, those infected largely are former or current injection drug users – a population that characteristically has little or no health insurance – who may not be the most able to stick to a lengthy treatment regimen that can have serious side effects. It is estimated that 50% to 90% of injection drug users infected with Human Immunodeficiency Virus (HIV) are also infected with HCV.

3 Professional Judgment Budget for Comprehensive Viral Hepatitis Prevention and Control in the US as Requested by the U.S. Senate Appropriations Committee”, HHS/CDC, 2010
4 National Alliance of State and Territorial AIDS Directors (NASTAD) letter to Dr. Howard Koh, Assistant Secretary for Health, DHHS, Washington, DC, August 10, 2010.
5 National Alliance of State and Territorial AIDS Directors (NASTAD) letter to Dr. Howard Koh, Assistant Secretary for Health, DHHS, Washington, DC, August 10, 2010.
6 National Alliance of State and Territorial AIDS Directors (NASTAD) letter to Dr. Howard Koh, Assistant Secretary for Health, DHHS, Washington, DC, August 10, 2010.
7 CDC Fact Sheets on CDC website, “Coinfection with HIV and Hepatitis C Virus”, Nov. 2005.
Currently, there are an estimated 800,000-1.4 million persons living with the hepatitis B virus in the United States. According to the CDC, each year an estimated 3,000 people die from hepatocellular carcinoma (HCC) or chronic liver disease caused by HBV infection. In 2008, an estimated 38,000 persons were newly infected with the virus. HBV is spread in several distinct ways: from mother to child at the time of birth, through incidental household exposures to blood, through injection drug use, and through sexual contact. Globally, unsafe infection control in health-care settings represents a significant mode of viral hepatitis transmission.

In the United States, viral hepatitis must be understood and addressed in the context of health disparities. HCV infection is two to three times as prevalent among African Americans as it is whites, and African American rates of HCV are twice the national average.

**Maryland**

Hepatitis C infection is the most common chronic blood borne-viral infection in Maryland. The primary method of HCV transmission is large or repeated direct exposures through needles that contain contaminated blood and are used to pierce skin. While HCV transmission through blood transfusions and tissue transplants represented a significant proportion of cases 20 years ago, improved screening of the blood supply and transplanted tissue has reduced the risk of transmission through these activities to virtually zero. In contrast, since 1992, the majority of new HCV infections have been linked to the practice of sharing needles among injection drug users. Other sources of HCV infection include sexual exposure, hemodialysis exposure, occupational exposure, and perinatal exposure. Both chronic and acute symptomatic HCV infections are reportable to the local health department by health care providers and medical laboratories operating in Maryland.

According to national estimates, there are between 73,000 to 106,000 people in Maryland who have been infected with HCV during their lifetime. It was recently estimated that there are currently 60,000 individuals with HCV in Baltimore City and an estimated 150,000 individuals with HCV in the Baltimore-Washington area. A study on the transmission rates of HCV among injection drug users demonstrated that injection drug users are at high risk for HCV infection. The study’s findings further indicated that HCV infection occurs shortly after individuals initiate injecting illicit drugs. Another contributing factor is that Maryland has a

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13 Dr. Mark Sulkowski in a presentation at an FQHC Symposium on Hepatitis and TB, February, 2010, Baltimore MD.
disproportionate number of injecting heroin users compared to other states.\textsuperscript{16} Because HCV often causes no symptoms until late in the disease progression, many Marylanders living with HCV are asymptomatic and unaware of their infection. Both chronic and acute symptomatic HBV and HCV infections are reportable to the local health department by health care providers and medical laboratories operating in Maryland.

In 2010, there were 67 cases of acute symptomatic HBV reported, with 8 of the 24 jurisdictions reporting 0 cases, and 24 cases of acute symptomatic HCV reported, with 12 of the 24 jurisdictions reporting 0 cases. In 2011, there were 62 cases of acute symptomatic HBV reported, with 9 of 24 jurisdictions reporting 0 cases, and 35 cases of acute symptomatic HCV reported, with 12 of the 24 jurisdictions reporting 0 cases. Currently, reporting focuses on acute cases of HBV and HCV. Given limitations in funding, many states, including Maryland, do not have the current surveillance capacity to determine chronic cases of HBV and HCV. Baltimore City Health Department has hired a full-time epidemiologist committed to viral hepatitis surveillance services for up to 50\% of his time. However, given the number of reports, it is unclear if this will be sufficient to accurately report data.

HBV is 50-100 times more infectious than HIV.\textsuperscript{17} According to the CDC, acute HBV infection in adults, although often asymptomatic, can cause severe illness and is associated with a 0.5 – 1\% risk of death from liver failure. Chronic HBV infection, which occurs when the acute infection is not cleared by the immune system, is associated with a 15-25\% risk of premature death from liver cancer or end-stage liver disease.\textsuperscript{18} The acute hepatitis B infection rate in Maryland is 1.2/100,000 Maryland residents. Acute hepatitis B infection rates across Maryland are the surveillance indicators available that guide our efforts to focus public health interventions. In 2011, Baltimore City’s acute hepatitis B infection rate was 2.4/100,000, twice the rate of Maryland’s average.\textsuperscript{19} In response to this silent epidemic, DHMH continues to enhance a statewide immunization program to support adult vaccination efforts, including a partnership with the Baltimore City Health Department and the provision of adult hepatitis B vaccinations to at-risk, uninsured individuals. These vaccination efforts present on-going efforts to combat the substantial health disparities related to viral hepatitis B infection that affect some populations more than others such as Asian/Pacific Islanders (APIs), African Americans and African Immigrants.

The Infectious Disease Bureau continues to work on implementation of the Hepatitis C Advisory Council 2005 Recommendations. Although funding since that time has not significantly changed, the Adult Viral Hepatitis Program continues to work with private and community partners to maximize resources in implementation of the identified activities. Activities over the previous year are described below in addition to future activities for 2013.

\textsuperscript{16} “Outlook and Outcomes”, 2002 Annual Report of the Maryland Alcohol and Drug Abuse Administration. ADAA Publication number 03-2-001
\textsuperscript{17} WHO Factsheet, July 2012. http://www.who.int/mediacentre/factsheets/fs204/en/
\textsuperscript{19} Cases of Selected Notifiable Conditions Reported in Maryland in 2011; Case Rates per 100,000 Population (or per 100,000 Live Births for Congenital Syphilis) by Jurisdiction. Maryland Department of Health and Mental Hygiene, 2011.
2012 Activities

In 2012, viral hepatitis prevention and control activities conducted by DHMH included:

- Utilizing federally funded staff to carry out viral hepatitis prevention and control activities conducted by DHMH;
- Coordinating hepatitis vaccine distribution to high volume vaccination sites in local health departments;
- Increasing public and provider awareness about viral hepatitis;
- Coordinating between public and private sector agencies; and
- Applying for funding from the public and private sector sources.

Utilizing Federally Funded Staff

On October 31, 2012, DHMH concluded the fifth year of a five year Adult Viral Hepatitis Prevention Coordinator (VHPC) Cooperative Agreement from the Centers for Disease Control and Prevention (CDC). This cooperative agreement provided funding that supported one full time equivalent (FTE) Viral Hepatitis Prevention Program Services staff position. This staff position is shared between a Viral Hepatitis Prevention Coordinator (VHPC) and a Senior Program Manager from the HIV Counseling and Testing Program Center who is also a skilled Health Educator. The VHPC’s role is to coordinate activities to prevent all types of viral hepatitis, including hepatitis B and hepatitis C, in Maryland. Both of these staff positions are located in the Infectious Disease Bureau of the Prevention and Health Promotion Administration at DHMH. A Registered Nurse fills 0.65% FTE of the VHPC position and has occupied this position since October 6, 2010; supplemented by a 0.25% FTE Senior Program Manager / Health Educator who brings both counseling and testing programmatic knowledge and health education expertise to DHMH viral hepatitis program services.

Coordinating Vaccine Distribution

Hepatitis A or B infection can have significant impact on an individual who is infected with HCV. Therefore, individuals who are infected with or at risk for contracting HCV should be vaccinated for hepatitis A and B. Beginning in 2008, the CDC provided Maryland with an allotment of adult hepatitis B and combined hepatitis A/B vaccine doses. These vaccine doses were made available to local health departments to vaccinate high risk adults.

In September 2010, the CDC announced that it would discontinue funding this initiative although vaccine supplies were available through June 2011 from existing reserves. In September 2011, DHMH allocated 2,050 doses of hepatitis B vaccine to support the continuation of this initiative in local health department areas with high volume vaccination needs. Persistent and aggressive efforts to find alternative sources of funds for hepatitis B vaccine were conducted. In August 2012, in response to a grant application submitted by the Infectious Disease Bureau of the Prevention and Health Promotion Administration at DHMH, the CDC awarded an Immunization Program grant award for a two year grant period covering additional personnel and a vaccine supply of 14,500 doses of hepatitis B vaccine.
This grant will allow for the continuation of the hepatitis B vaccine initiative in local health department areas with high volume vaccination needs of uninsured individuals in Maryland through FY 2014.

Increasing Public and Provider Awareness

DHMH has pursued various opportunities to raise awareness about the importance of viral hepatitis prevention and to provide information about available resources to community members as well as to community providers.

On March 7, 2012, Delegate Shirley Nathan-Pulliam sponsored a full day workshop focused on hepatitis B and minority populations including: the Asian Americans; African Americans; and African Immigrant populations. DHMH provided support for this event. Comprehensive information regarding hepatitis B viral infection and its related epidemiology, transmission, treatment and prevention was reviewed. Additionally, information regarding viral hepatitis-related health care disparities was provided to a large group of attendees from the Asian American, African American and African Immigrant populations.

On April 9, 2012, the “Why Women Cry” conference, sponsored by a Baltimore faith-based community organization, was held in Baltimore. This conference was attended by over 2,300 people. Viral hepatitis B and C prevention and education messages, as well as hepatitis C counseling and testing, were provided to program participants through a community based organization. Additionally, a health education and resource table, staffed by knowledgeable DHMH personnel, included viral hepatitis B and C education and prevention materials which were available throughout the duration of the conference to all interested attendees.

DHMH conducted and supported multiple activities commemorating “Hepatitis Awareness Month” in May 2012. The first collaborative activity was to partner with the Maryland Hepatitis Coalition to present the annual “Hepatitis Heroes” awards. “Hepatitis Heroes” are identified as individuals who go above and beyond the duties required of their positions to support hepatitis patients or program services. The “Hepatitis Heroes” selected for recognition in 2012 included: the clinical staff from the Johns Hopkins Medical Institution Hepatology Clinic; the Executive Director of the Frederick County Hepatitis Clinic, a 501c3 organization in Frederick, Maryland, serving uninsured and underinsured individuals throughout Maryland and nearby surrounding States; and a private practice medical provider who serves a large proportion of Asian-American patients and who co-sponsored the legislative event in Annapolis in March 2012.

DHMH issued a press release and social media messaging on Facebook and Twitter during “Hepatitis Awareness Month” that outlined viral hepatitis prevention and education messages and also presented highlights of the Maryland Hepatitis Coalition initiative to recognize “Hepatitis Heroes” from the community. Additionally, during Hepatitis Awareness Month, viral hepatitis educational brochures and fact sheets about the various types of hepatitis for individuals at-risk and providers were distributed to local health departments and other community health center sites throughout Maryland.
On May 7, 2012, the VHPC was invited to attend the Governor’s signing of House Bill 641, Hepatitis B and Hepatitis C Viruses – Public Awareness, Treatment, and Outreach at the State House in Annapolis, Maryland. This legislation was initiated as one of three bills related to viral hepatitis introduced in the 2012 legislative session. The other two house bills entitled “HB 743 – Inmates – Hepatitis C – Testing, Prevention, Counseling and Treatment, and HB 1084 / SB 611 Health Pregnant Women – Hepatitis B Testing,” did not pass. DHMH provided legislative analysis regarding all three bills initiated during the 2012 legislative session.

On May 19, 2012, in support of “National Hepatitis Testing Day,” the DHMH VHPC coordinated with multiple community-based organizations and community clinics to provide CDC viral hepatitis educational materials and information about the CDC national testing initiative to community-based organizations staff, trainers, health educators, DHMH staff and the general public. As a result of this coordination, hepatitis B and C testing initiatives were conducted in various community health clinics and by multiple community-based organizations, on “National Hepatitis Testing Day” and throughout the month of May. According to a CDC website that accommodated postings of viral hepatitis testing for this national event, Maryland had one of the largest initiatives in the nation for this event.

Coordinating Between Public and Private Sector Agencies

A number of activities continue to be conducted to promote integration of hepatitis B and C prevention and treatment services into existing programs and to educate professionals about viral hepatitis. DHMH is represented at a number of collaboration meetings. These include:

- Quarterly collaboration workgroup meetings with personnel from STI, HIV and TB statewide programs and Baltimore City Health Department;
- Monthly Department of Public Safety and Correctional Services infection control meetings;
- Monthly National Alliance of State and Territorial AIDS Directors Viral Hepatitis Work Group technical assistance conference calls;
- Quarterly Maryland Hepatitis Coalition meetings;
- The Hepatitis B Initiative meetings; and
- Miscellaneous community-based organization groups working on viral hepatitis testing for HBV and/or HCV linkage to care.

Applying for Funding from Public and Private Sector Sources

DHMH submitted three applications for grant funding to the CDC in 2012 for support of viral hepatitis prevention program-related resources and services. The first was an application for funding to support hepatitis B vaccination. As noted earlier in this report, DHMH has received a CDC Immunization grant award to support hepatitis B vaccination program services in high volume vaccination areas.

The second application requested funding support for viral hepatitis C testing. Unfortunately, despite a strong application, DHMH did not receive this grant award.
The third application requested funding from the CDC to support the position of the Viral Hepatitis Prevention Coordinator (VHPC). DHMH received confirmation from CDC that the Department has been awarded this grant and the VHPC will continue to be funded. This was a competitive bid for funding of this position. Baltimore City Health Department has also applied for this grant but did not receive funding.

Materials Development

Additionally, a number of materials are being worked on in-house at DHMH as well as internally at CDC hepatitis education program area. The plan is to work on these resources this year and then distribute broadly when ready and approved. These materials include:

1. Update of the DHMH 2002 Hepatitis C Prevention and Control Plan – to be replaced by the DHMH Viral Hepatitis Strategic Plan and Resource List;
2. DHMH 2002 HIV Policy Update (including bloodborne pathogen information and viral hepatitis information);
3. HIV Counseling and Rapid Testing Regulations expanded to include HCV Rapid Testing Regulations;
4. CDC guidance on one time testing of Baby Boomers – the draft recommendation statement is currently available for comment to the USPSTF from November 27 until December 24, 2012. Upon finalization of these recommendations, this information will be shared with DHMH List Serv network and DHMH Policy Department for press release.

The HCV Support Group Task Force of the Maryland Hepatitis Coalition is working on formation of HCV Support Group materials and network for Baltimore City community. DHMH is also currently researching multiple ways to distribute information to providers. Several of sites noted above have not been explored yet but will be going forward.

Viral Hepatitis Prevention Plan

A Maryland Viral Hepatitis Prevention Plan is being drafted by DHMH and includes feedback provided by HCV / HBV positive individuals and providers administering health care to patients living with HCV / HBV primarily through the Maryland Hepatitis Coalition membership. The plan addresses viral hepatitis types A, B and C. Revisions to the plan reflect the recommendations of the Hepatitis C Advisory Council. Additionally, the plan is expected to include the goals and strategies of the 2011 Health and Human Services Action Plan for the Prevention, Care and Treatment of Viral Hepatitis in conjunction with services made available through the Affordable Care Act and Maryland Health Care Reform. Expanded health insurance coverage, through Medicaid and state based Health Insurance Exchanges, will improve patient access to viral-hepatitis-related prevention, care and treatment services (e.g., health education, testing, vaccination, referral, antiviral therapy, counseling, substance abuse/addiction treatment, and medical monitoring). 20

20 United States Department of Health and Human Services “Combating the Silent Epidemic of Viral Hepatitis, Action Plan for the Prevention, Care and Treatment of Viral Hepatitis.” 2011
Future Activities

The following activities are planned:

   **Release of the Maryland Viral Hepatitis Prevention and Control Plan which addresses viral hepatitis types A, B and C.** The Maryland Viral Hepatitis Prevention and Control Plan, in alignment with the national 2011 Health and Human Services Action Plan for the Prevention, Care and Treatment of Viral Hepatitis,21 will guide viral hepatitis prevention and control activities and will serve as a framework for prioritizing initiatives and projects.

   The DHMH Hepatitis program is currently working with the Office of Minority Health to develop a viral hepatitis education and public awareness plan, based on available resources but that can grow and adapt as new resources become available. This plan will provide prevention messages to the public and raise awareness among healthcare professionals, the populations at-risk, and the community at large about the public health crisis of viral hepatitis. This plan will also identify potential opportunities through the Affordable Care Act and Maryland Health Care Reform for testing, vaccination and treatment of viral hepatitis.

   **Identification of additional funding sources, in accordance with the timeline and resources identified and outlined in the 2011 Health and Human Services Action Plan for the Prevention, Care and Treatment of Viral Hepatitis and in addition to those provided through the Affordable Care Act and Maryland Health Care Reform, to enable the development of viral hepatitis prevention, care and treatment activities.** Specific activities under consideration, should funds become available include:

   - Development of enhanced user-friendly Internet based resources for viral hepatitis awareness and education, both for healthcare professionals and for the general public;
   - Provision of current and updated guidelines and recommendations for viral hepatitis screening and treatment from the Department of Health and Human Services, the Centers for Disease Control and Prevention to partners, and subsequent assessment of compliance of all state and local agencies;
   - Development of a Maryland-specific needs assessment to identify gaps in public awareness and professional education;
   - Review of current surveillance and case follow-up methods, and, if needed, ensure complete, accurate and timely case investigation, data entry, and triage of all viral hepatitis reports in Maryland. Ensure that all Maryland residents are aware of their status and how to access healthcare resources;
   - Purchase and distribution of hepatitis A/B and B vaccines to local health departments, federally qualified health centers and community based organizations;
   - Provide assistance to local health departments in the integration of screening, testing and counseling of adults at risk for adult viral hepatitis, and adults recommended for viral hepatitis testing by the CDC, and referral for appropriate services into their existing programs; and

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21 United States Department of Health and Human Services “Combating the Silent Epidemic of Viral Hepatitis, Action Plan for the Prevention, Care and Treatment of Viral Hepatitis.” 2011
o Collaborate with other relevant agencies to promote improved surveillance of viral hepatitis.

**Education for clients and providers regarding the impact of the Affordable Care Act on individuals with viral hepatitis.** Viral hepatitis programs across the country are unable to provide the level of testing and linkage to care services available to those living with HIV and other diseases. When funding becomes available for testing, lack of health care coverage for uninsured or underinsured individuals would still remain a serious concern. Although medications are often covered through pharmaceutical patient assistance programs, there is no funding for the medical monitoring required for individuals living with chronic hepatitis. Community health centers and other safety-net providers can quickly become overwhelmed by providing care to individuals with chronic hepatitis.

The Affordable Care Act will provide access to care for those individual living with chronic hepatitis. The DHMH Adult Viral Hepatitis Program monitors Maryland’s implementation of the Affordable Care Act to ensure it meets the needs of those living with hepatitis. Throughout 2013, the VHPC will be involved in IDB efforts to educate clients and providers about the affordable care act and ensure individuals understand how to access care through Medicaid or the Maryland Health Insurance Exchange. The VHPC will also work to educate providers regarding new screening recommendations for hepatitis C and ensure appropriate linkages to care occur.