



Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Robert R. Neall, Secretary

February 26, 2020

The Honorable Larry Hogan
Governor
State of Maryland
Annapolis, MD 21401-1991

The Honorable Paul G. Pinsky
Senate Education, Health, and
Environmental Affairs Committee
2 West Miller Senate Building
Annapolis, MD 21401-1991

The Honorable Shane E. Pendergrass
House Health and Government
Operations Committee
Room 241 House Office Building
Annapolis, MD 21401-1991

**RE: Health-General Article, §18-1002, Annotated Code of Maryland – 2019 Annual Report
– Implementation of Hepatitis B and Hepatitis C Prevention and Control in Maryland**

Dear Governor Hogan, Chair Pinsky, and Chair Pendergrass:

Pursuant to Health-General Article, §18-1002, the Maryland Department of Health (Department) is required to submit an annual report on its activities relating to the prevention and control of hepatitis B virus (HBV) and hepatitis C virus (HCV) infection in Maryland. The attached is a report of the Department's activities in 2019 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 me or my Deputy Secretary of Operations Gregg Todd at 410-767-4557 or Gregg.todd@maryland.gov.

Sincerely,

Robert R. Neall
Secretary



Prevention and Health Promotion Administration

**2019 Annual Report
Implementation of Hepatitis B and Hepatitis C
Prevention and Control in Maryland
Health-General Article §18-1002**

Robert R. Neall
Secretary, Maryland Department of Health

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I. Background

Hepatitis B in Maryland

Hepatitis B virus (HBV) infects the liver and can cause both acute and chronic liver diseases. When a person is newly infected with HBV, it is called an acute infection. Most healthy adults with an acute HBV infection do not have any symptoms and are able to get rid of the virus without any complications. Chronic hepatitis infections occur when an acute infection is not cleared by the immune system. Anyone who comes in contact with blood or other bodily fluids of an HBV-infected individual is at risk for transmission.¹ Additionally, infection is transmissible from mother to child, and infants are more likely than adults to become chronically infected after viral exposure.² There is currently no cure for chronic HBV infection, but it is vaccine-preventable.

Based on national prevalence data, the Centers for Disease Control and Prevention (CDC) estimate that there are between 850,000 - 2.2 million individuals living with HBV in the United States.³ In Maryland, the rate of reported acute HBV infection increased slightly in 2018 (0.9 cases per 100,000 people) compared to 2017 (0.6 cases per 100,000 people) but the 2018 reported rate was still lower than the peak reported rate in 2010 (1.1 cases per 100,000 people).

In 2018, there were 53 reported cases of acute HBV and 1,879 reported cases of chronic HBV in Maryland, with a rate of 31.1 reported cases per 100,000 people.⁴ Based on 2018 surveillance data from the Maryland National Electronic Disease Surveillance System (NEDSS), the jurisdictions in Maryland with the highest rates of reported chronic HBV were Montgomery County (51.1 cases per 100,000 people), Prince George's County (46.8 cases per 100,000 people), Somerset County (42.8 cases per 100,000 people), and Baltimore City (40.5 cases per 100,000 people).⁵

Hepatitis C in Maryland

Hepatitis C virus (HCV) is a major cause of chronic liver disease. CDC estimates 3.5 million individuals are living with HCV infection in the United States.⁶ HCV also poses a significant burden on public health in Maryland. In 2013, the rate of acute HCV infection in Maryland (0.9 cases per 100,000 people) surpassed the national rate (0.7 cases per 100,000 people). Since then, the rate of acute HCV in Maryland has decreased overall. In 2018 there were 0.7 cases per 100,000 people.⁷ Although these data are promising, they should be interpreted with caution. The majority of acute HCV cases may go unreported each year. Acute HCV cases may not be reported because newly infected individuals are asymptomatic, or because symptoms do not consistently present themselves in individuals who are newly infected with the virus.

In 2018, there were 6,326 cases of chronic HCV infection reported through NEDSS.⁴ The rate of chronic HCV decreased by about 14 percent in 2018 (104.6 cases per 100,000 people) compared to the peak of cases in 2013, when 121.4 cases per 100,000 people were reported. The jurisdictions with the highest reported rates in 2018 were Somerset County (346.6 cases per 100,000 people), Baltimore City (273.4 cases per 100,000 people), Allegany County (243.7 cases per 100,000 people), Cecil County (231.5 cases per 100,000 people), and Washington County (199.4 per 100,000 people). The increasing rate of reported chronic HCV cases in suburban jurisdictions indicates improved efforts to promote awareness, screening, and diagnosis of HCV infection across the State.

Similarly, according to *HepVu*, a website launched by Emory University's Rollins School of Public Health in April 2017, an estimated 41,000 Marylanders were living with HCV from 2013 to 2016.⁸ The number of chronic HCV cases reported in Maryland has decreased from 8,004 reported cases in 2016 to 6,326 reported cases in 2018.⁴ The rate of reported chronic HCV cases also decreased from 133.5 cases per 100,000 people in 2016 to 104.7 cases per 100,000 people in 2018.⁴

Although Maryland has increased efforts to address the HCV burden across the State, there are still hard-to-reach populations that are affected by HCV and are not connected to care. The impacted populations include justice-involved individuals, persons who use drugs, and homeless populations. Therefore, the burden of HCV infection in Maryland is assumed to be higher than what is reported; however it is unclear whether the downward trend in the number of reported cases is an early indication of improving prevention, treatment, and linkage-to-care interventions, especially in high burden jurisdictions.

According to CDC estimates, in the United States about 25 percent of people living with Human Immunodeficiency Virus (HIV) are co-infected with HCV.⁹ As of December 2018, there were 31,559 people living with diagnosed HIV in Maryland. Among these individuals, 4,157 (approximately 13.2 percent) are co-infected with HCV.¹⁰ The Maryland jurisdictions with the greatest percentages of co-infected persons are Baltimore City (63 percent), Baltimore County (10 percent), and Prince George's County (9 percent). Nearly 2 percent of all co-infected individuals with HCV and HIV had a last known residence in a Maryland correctional facility.¹¹ In Maryland, the baby boomer cohort has the highest prevalence of HCV infection among all age groups, which is consistent with national data. In 2018, despite making up only 24.7 percent of Maryland's population, people born from 1945-1965 accounted for 50.8 percent of reported chronic HCV cases in the State.^{12, 13}

II. Maryland Department of Health HBV and HCV Infection Activities, 2019

The Maryland Department of Health (the Department) works with public, private, and community partners to maximize resources to address both HBV and HCV in Maryland. Activities conducted in State fiscal year 2019 are described below.

Expansion of Maryland Community-Based Programs to Test and Cure HCV

In 2014, the Department was awarded \$1.2 million in annual funding from CDC to implement Maryland Community-based Programs to Test and Cure Hepatitis C, also known as the Maryland Test and Cure Program (the Program). This four-year cooperative agreement with CDC and its accompanying grant were extended until September 2019, giving the Department an additional year for implementation. The grant supports a multi-pronged approach to clinical integration of HCV testing, care, and treatment at primary care settings in Baltimore City and Baltimore County, two Maryland jurisdictions with a high burden of HCV infection.

The Program has grown into a coalition of medical and public health experts with the shared goal of eliminating HCV in Maryland. The coalition is primarily composed of partners with decades of experience in HIV prevention and care, leading experts in the treatment of HCV mono-infected and HIV/HCV co-infected individuals, and primary care providers who recognize the significant need for local HCV testing and care.

The Program includes comprehensive provider training and education, linkage-to-care services by local health departments, and modification of electronic medical records to enhance HCV services and improve surveillance reporting. The work done by the coalition reveals that substantial infrastructure and coordination are necessary to implement and maintain high quality HCV service delivery. Additionally, the work has demonstrated the need to develop clinical expertise related to HCV screening, care, and treatment. Program sites include federally qualified health centers (FQHCs), sexually transmitted infection (STI) clinics, and clinical sites for Maryland Medicaid managed care organizations. Providers at these sites participate in the training component of the Program.

2019 Program Partners

In addition to the expanded participation of clinical providers in the fourth year of the Program, three additional clinical sites joined the Program in 2019, increasing access to high quality HCV diagnosis and treatment services for Maryland residents. These partners bring diverse experience and expertise in the delivery of critical health services to Maryland residents.

- Family Health Centers of Baltimore is an FQHC with over three decades of providing community-oriented, high quality, and patient-centered health care services to low income communities. The HCV clinical program is integrated into the existing HIV prevention and case management services provided by the Family Health Centers of Baltimore.
- The Institute for Behavior Resources/REACH Health Services (IBR/REACH) is a well-established FQHC with expertise in behavioral health services including substance use disorders and overdose treatment and prevention. IBR/REACH will provide co-located HCV and substance use disorders services in the same facility without the need to refer substance use disorder clients diagnosed with HCV infection to a specialist.
- Park West Health System, an FQHC with a long history of providing comprehensive Ryan White HIV/AIDS medical and support services throughout Baltimore, added a new location on the City's west side. Park West Health System now has five clinical sites providing HCV diagnosis and treatment across Baltimore, including underserved areas.

Baltimore City Health Department

The Baltimore City Health Department's sexual health clinics have been part of the Program since its inception and provide co-located HCV treatment services through a partnership with the Department and the Johns Hopkins University. These services focus on patient adherence to treatment. Patients who access these services also receive a variety of supportive services: assistance with obtaining insurance; an assessment of their barriers to treatment adherence, including psycho-social factors such as unstable housing and lack of employment; appointment and prescription reminders in the form of pocket calendars and reminder calls or texts; outreach if the patient misses an appointment, lab draw, or fails to pick up a prescription; and transportation assistance.

The Baltimore City Health Department's linkage-to-care team provides case management and

outreach in collaboration with existing partners in the community to initiate follow-up and to re-engage clients that clinical staff are unable to locate or engage. Other clinical sites include Chase Brexton Health Services at Mount Vernon and CCI Health and Wellness Services. Building upon each clinic's existing comprehensive case management programs, clinicians develop HCV-specific case management services at each clinical site.

To date, each Baltimore City Health Department sexual health clinic has successfully developed and implemented clinic-wide policies and procedures to encourage risk-based screening of patients and clients; enhanced their electronic medical records systems; implemented support tools to facilitate clinical decision making; integrated case management and other treatment adherence supports; and identified additional ways to facilitate clinic-specific approaches to HCV care and treatment, based on target populations and available resources, including the integration of pharmacy staff into their HCV care teams.

Sharing the Cure

A core component of the Program is the clinician training and telemedicine program, Sharing the Cure, which is administered by the Johns Hopkins University's Division of Infectious Diseases. In 2019, the Department and the Johns Hopkins University completed training of the fifth cohort of primary care providers selected from clinical partner sites. Each cohort consists of 20-25 clinicians participating in a 16-week long training involving didactic lectures, a clinical rotation, and a mini-preceptorship.

The Department continued to support Sharing the Cure with State general funds after the expiration of CDC funding in September 2019. Year six of Sharing the Cure is projected to incorporate HIV clinical service providers, including those providers participating in the Ryan White Program, and substance use treatment providers. There are also plans to organize continuing medical education programs for primary care providers in eastern and western Maryland to create a critical mass of local providers who can manage the increasing number of HCV cases identified in suburban and rural Maryland.

HCV Care Markers at Participating Sites

The table below provides data on individuals seen for HCV care at primary care sites that participate in the Program. The baseline time period consists of the 12 months before the start of the Program. At the end of September 2018, a total of 397 individuals with advanced HCV infection were documented as being cured of infection.

Table 1. Selected HCV Care Markers at Clinical Sites in Baltimore City and Baltimore County Partnering in the Maryland Test and Cure Program*

	Baseline (10/1/13-9/30/14)	Project Period + Baseline (10/1/13-9/30/2018)
	N (percent)	N (percent)
HCV confirmatory (RNA) positive	956 (100%)	4,644 (100%)
Genotype or staging test run	562 (58.8%)	4,526 (90.5%)
Fibrosis staging test run	20 (2.1%)	3,293 (73.1%)
Fibrosis score \geq F2[†]	9 (45.0%)	1,847 (49.2%)
Prescribed treatment for HCV	0 (0.0%)	886 (20.2%)
Started treatment for HCV	0 (0.0%)	727 (17.8%)
Completed treatment for HCV	0 (0.0%)	472 (12.2%)
Achieved sustained virologic response	0 (0.0%)	397 (10.3%)

* Includes all clinical agency sites in Baltimore City and Baltimore County with at least 1 year of participation in the *Maryland Test and Cure Program*

[†] Maryland Medicaid's clinical criteria as of September 30, 2018 required a fibrosis score of \geq F2 for HCV treatment approval. Beginning July 1, 2019, Maryland Medicaid lowered the required fibrosis score to \geq F1 for HCV treatment approval. Beginning January 1, 2020, Maryland Medicaid will no longer restrict treatment based on fibrosis score.

Enhanced HCV Surveillance Activities and Linkage-to-Care

Communicable disease surveillance is informed by the collection and analysis of information received from providers and institutions that perform infectious disease testing. Maryland regulations require health care providers, health care institutions, and medical laboratories to report both chronic and acute symptomatic HBV and HCV to local health departments.¹⁴ Local health departments and the Department receive both electronic and paper-based reports. Additionally, local health departments follow-up with individual providers and institutions to complete case investigations, as needed.

To strengthen HCV surveillance in Baltimore City and Baltimore County, the Department provides funding and technical assistance to both jurisdictions to increase the number of data entry staff through the Maryland Test and Cure Program. This reduces the backlog of paper HCV laboratory reports, and improves the timely review of electronic reports. Currently, both Baltimore City and Baltimore County are up-to-date with entry of paper reports and are working in real-time on data entry. Also, most laboratories have transitioned to electronic laboratory reporting. Up-to-date reporting makes it easier to identify new cases for surveillance investigation and linkage-to-care.

The Department's Division of Infectious Disease Surveillance within the Infectious Disease Epidemiology and Outbreak Response Bureau continues to investigate new reports of acute HCV cases to identify clusters and outbreaks in the community, and to assess risk factors. There is also a continued effort to expand the number of laboratories that electronically report lab results to local health departments. Many major hospital and laboratory systems have transitioned to electronic reporting (including Medstar and LabCorp), which has reduced the number of laboratory reports requiring manual entry by local health department staff.

The Baltimore City Health Department continues Data-to-Care (using surveillance data for

patient follow-up) activities. Data-to-Care is a relatively new public health strategy that was developed to link HIV-diagnosed individuals to care.¹⁵ Linkage-to-care coordinators use surveillance data to identify individuals who are diagnosed with HCV with no evidence of care in the last six months, and link them with providers who can facilitate appropriate care and follow-up. Linkage-to-care coordinators also connect individuals to health insurance or Maryland Medicaid through the Maryland Health Connection. Coordinators help address immediate barriers to care such as transportation and childcare.

In 2018, the Baltimore City Health Department identified 732 individuals with no evidence of care. Of these individuals, 335 had an HCV RNA positive test, and 225 had an antibody positive test with no confirmed HCV RNA test. A majority of the individuals who were out of care were born between 1945 and 1965 and identified as Black/African American. The Baltimore City Health Department linked 191 clients to care. Some individuals were not linked to care because they could not be located, were already in care, refused assistance, were deceased, or resided in another county.

The Baltimore County Department of Health also runs a linkage-to-care program modeled on Baltimore City's work. In addition to referrals through their rapid testing program, the Baltimore County Department of Health follows-up on historical case reports from surveillance data. Since initiation of the program and through July 2019, the Baltimore County Department of Health was able to identify 130 antibody positive clients through the rapid testing program. Of these, 71 had no confirmed HCV RNA test and 59 were HCV RNA positive. The linkage-to-care program linked twelve (20 percent) of those HCV RNA positive clients to care. The remaining HCV RNA positive individuals were not linked to care for the same reasons as those identified by the Baltimore City Health Department.

Local health department rapid testing programs contribute to enhanced surveillance through promotion of morbidity report forms. Positive HCV rapid test results are reported via the morbidity report forms to the local health departments with patient demographic information and subsequent HCV RNA results, which provides additional information to what is reported by laboratories. All of the sites that participate in HCV rapid testing also document linkage-to-care processes and outcomes.

In 2019, the Department expanded enhanced HCV surveillance activities to local health departments in Baltimore, Somerset, and Washington Counties. The focus of these activities is to strengthen the surveillance system to identify and respond to rapid increases in HCV cases, especially involving persons who use drugs. Surveillance activities are connected to linkage-to-care and treatment for all individuals identified with positive HCV antibodies.

The Department continues to partner with the Maryland Department of Public Safety and Correctional Services to develop an HCV linkage-to-care system for individuals upon release from correctional facilities. Since 2017, the Department has engaged linkage-to-care specialists to manage a rapid HCV testing program for inmates who are about to be released. The linkage-to-care specialists work closely with infection control staff and discharge planners to provide testing and linkage-to-care upon release for HCV antibody-positive individuals.

HCV testing is conducted based on a list of projected releases sent out to all sites at the beginning of each month. Of the 1,998 inmates to be released by June 2019, 164 (8 percent) were identified

to be HCV positive at release. Of the remaining 1,834 individuals, 744 were offered HCV testing at release. A total of 416 individuals accepted and received anti-HCV antibody screening prior to release. Of the 416 individuals tested, 102 were HCV antibody positive and were referred for HCV RNA testing and care in the community.

Linkage to HCV care in the community was provided as part of discharge planning services for 183 eligible inmates known to be HCV infected at release. Sixty individuals were scheduled for a HCV care appointment in the community. Thirteen individuals (22 percent) with a scheduled HCV care appointment were successfully linked to care in the community, defined as attending their first clinical hepatitis-related appointment.

Overall, the number of inmates tested for HCV has steadily increased. However, the linkage-to-care process remains challenging due to many individuals declining services or not attending community appointments. To address challenges in the process, linkage-to-care specialists have prioritized educating inmates on the importance of seeking HCV treatment and attending community appointments after release from prison.

State-Led Rapid HCV Testing Program

In 2017, the Department launched a rapid HCV testing program to identify individuals with HCV who are unaware of their status. The program provides free HCV rapid test kits to local health departments and agencies that serve populations at risk for HCV. Modeled after the Department's HIV prevention, testing, and linkage-to-care program, initial efforts focused on integration of HCV rapid testing at existing HIV testing partner sites.

Participation in the HCV rapid testing program requires sites to have proven capacity to screen, test, and treat or link individuals to HCV care. The Department created a comprehensive HCV testing guidance document to inform HCV testing procedures at participating testing sites as well as at other local organizations interested in initiating rapid HCV testing.

All rapid testing program participating sites were required to undergo training on:

- HCV screening, diagnosis, and referral best practices;
- HCV screening protocols, policies, and procedures;
- How to use the rapid testing device;
- Confirmatory (RNA) testing;
- Data collection and State requirements for infectious disease reporting; and
- Resources for client referral to local HCV care providers.

After completion of the training, participating sites received HCV rapid test kits at no cost to the site based on their readiness to begin testing. The number of tests received was based on the staff capacity of each respective site. The Department continues to monitor and provide technical assistance to each site.

In 2017, rapid HCV testing was initiated at the following local health departments: Baltimore, Carroll, Cecil, Harford, and Worcester Counties. In 2018, Anne Arundel, Frederick, Howard, Somerset, and Washington Counties joined the program. In 2019 Kent and Talbot Counties were added to the program partnership.

In 2019, 18,563 test kits were distributed to program partners, and 10,052 tests were administered with an average 4.9 percent positivity rate. The highest positivity rates were among individuals tested by local health departments in Washington (36.4 percent), Fredrick (26.1 percent), Cecil (20.3 percent), and Baltimore Counties (10.8 percent). Washington and Frederick Counties have largely focused their HCV testing efforts on individuals who are currently injecting drugs or have a history of using drugs.

In 2018, the Department received the Integrated HIV Surveillance and Prevention Programs for Health Departments funding opportunity from CDC. The purpose of the funding opportunity is to implement a comprehensive HIV surveillance and prevention program to prevent new HIV infection and achieve viral suppression among persons living with HIV. The grant allows the funds to be used for Program Collaboration and Service Integration (PCSI) efforts. The Department is using a portion of its CDC PCSI award to support a rapid HCV testing program. This additional funding allows for the purchase of HCV test kits and HCV testing services within HIV prevention activities at local health departments across the State.

Implementation of HBV and HCV Prevention and Control Activities

In November 2016, the Department received a four-year grant from CDC, Improving Hepatitis B and C Care Cascade: Focus on Increased Testing and Diagnosis. The funding allows the Department to focus on comprehensive strategies and activities to: (1) increase the number of individuals in Maryland living with HBV and HCV infections who are tested for HBV and HCV and made aware of their status; and (2) link individuals with HBV or HCV infections to appropriate care and treatment services.

In fiscal year 2017, the first year of the grant, the Department received a CDC grant to initiate partnerships and to conduct a Statewide situational analysis to: (1) describe disease burden, epidemiological trends, and laws and policies impacting testing, care, and treatment of HBV and HCV infections; (2) identify high prevalence areas of HBV and HCV infections; and (3) identify settings where testing should be conducted.

Upon completion of the situational analysis, the Department initiated partnerships with the Johns Hopkins University Department of Emergency Medicine (Department of Emergency Medicine) and the Hepatitis B Initiative of Washington, DC (HBI-DC) to address HBV and HCV in three of the highest prevalence jurisdictions in Maryland: Baltimore City, Prince George's County, and Montgomery County.

In addition to providing HCV test kits and controls, the Department provided limited funding to support staffing needed at the Department of Emergency Medicine to complete HCV screening and confirmatory testing, as well as linkage-to-care for HCV-infected individuals. From January 2017 to June 2019, the Department of Emergency Medicine and HBI-DC administered 6,257 rapid HCV tests. Out of the individuals tested, 155 were antibody positive. Of those that received their RNA test, 83 were HCV RNA positive, and 37 were linked to care.

In fiscal year 2018, the second year of the grant, the Department received additional funding to continue existing partnerships and expand to two additional partners: the Anne Arundel and Washington County health departments. The new activities focus on addressing barriers to

implementation of comprehensive testing and linkage-to-care programs. One of the challenges reported by the jurisdictions is the lack of clinical staff to provide testing and linkage-to-care services. The additional funds from the grant were used to provide support for staffing, training, HCV outreach activities, and support for testing and linkage-to-care interventions.

In fiscal year 2019, the third year of the grant, the Department expanded HCV testing services to Prince George's County Hospital Emergency Department with a focus on low income and uninsured individuals who are not well connected to care. Similar expansion has been challenging to sustain at the local health department because of staff workload.

Innovative Approaches to Manage HBV and HCV Co-infections

Following the President's declaration in the 2019 State of the Union address to end the HIV epidemic by 2030, the Department has launched initiatives to synchronize the delivery of services to populations who are at risk for co-infection. These initiatives target populations affected by one or more of the prevailing public health conditions and risk factors responsible for HBV, HCV, HIV, STIs, and substance use disorder, including injection drug use.

HCV screening, diagnosis, and linkage-to-care interventions are now integrated into HIV/STI control activities, syringe services and needle exchange programs, syphilis screening programs, and substance use treatment facilities. Providers' training focuses more on comprehensive management of co-infections, and addresses behavioral factors responsible for increased risk of HBV and HCV transmission.

Expansion of Maryland Medical Assistance for HCV Treatment

In 2019, Governor Hogan included the expansion of HCV treatment in his FY 2020 proposed budget to provide additional access for individuals with evidence of mild liver damage (Metavir score of F1 or greater). In addition, the Maryland General Assembly passed Senate Bill 598, which was signed into law and became Chapter 451 of the Acts of 2019. The legislation directs the Maryland Medical Assistance Program to expand HCV treatment to all Medicaid recipients, regardless of liver damage.^{16, 17} As of January 1, 2020, all Medicaid patients with HCV infection regardless of the degree of liver damage are eligible for antiviral treatment. Removal of the liver damage restriction could make 4,500 more persons with chronic HCV infection eligible for treatment in 2020.¹⁸

This expansion will require adequate infrastructure and systems to support high quality appropriate diagnosis, care, and treatment for persons with chronic HCV infection. To ensure adequate infrastructure and systems, the Department is working on the prospect of using innovative models to make directly acting antiviral medications for the management of chronic HCV infection more affordable.

Maryland Hepatitis C Strategic Plan and Epidemiological Profile

In January 2019, the Department disseminated the Maryland Hepatitis C Strategic Plan (Plan).¹⁹ The Plan articulates comprehensive, broad-based strategies that include a four-pronged approach encompassing prevention of new HCV infection, expanding HCV testing and linkage-to-care, improving access to treatment, and enhancing HCV surveillance. The Plan guides the

implementation of evidence-based interventions for the elimination of HCV infection in Maryland. In order to determine the disease burden and better understand the factors responsible for the spread of HCV, the Department is collating morbidity and mortality data from relevant agencies across the State to develop the State viral hepatitis epidemiological profile. The epidemiological profile will also provide baseline and measurable indicators to ascertain progress towards elimination of HCV.

Educational Activities to Inform the Public, Providers, and Stakeholders

In 2019, the Department collaborated with the University of Maryland Medical School's Institute of Human Virology to incorporate a one day, bi-annual training on viral hepatitis (Hepatitis Capacity Training) into the AIDS Education and Training Center's training schedule. The training increases knowledge and awareness of HBV and HCV screening and linkage-to-care among staff at local health departments, community-based organizations, FQHCs, and hospitals that serve at-risk populations.

Participants in the training received an overview on viral hepatitis, updates on current HBV and HCV screening and treatment guidelines, identification of special and priority populations, introduction to issues relating to treatment access, and resources available to screen and treat HCV, as well as address the needs of people living with HCV in Maryland. The training module was expanded to include strategies on viral hepatitis screening and linkage-to-care among persons who inject drugs and immigrant populations.

III. Conclusion

In 2019, the Department continued to provide leadership, guidance, and technical assistance across the State to support growing efforts to address HBV and HCV. Over the last year, the Department has significantly expanded its efforts to increase the availability of screening, testing, and treatment for HBV and HCV in Maryland. In 2020, the Department will continue to work to ensure that all Marylanders know their HBV and HCV status and have access to treatment and cure.

Appendix: Glossary of Key Terms

This glossary provides definitions of key terms used in this report.

Acronym	Term	Definition
AIDS	Acquired Immunodeficiency Syndrome	A disease of the immune system due to infection with HIV. HIV destroys the CD4 T lymphocytes (CD4 cells) of the immune system, leaving the body vulnerable to life-threatening infections and cancers. Acquired immunodeficiency syndrome (AIDS) is the most advanced stage of HIV infection. To be diagnosed with AIDS, a person with HIV must have an AIDS-defining condition or have a CD4 count less than 200 cells/mm (regardless of whether the person has an AIDS-defining condition). ²⁰
CCI Health and Wellness Services		A community-based Federally Qualified Health Center.
CDC	Centers for Disease Control and Prevention	The US agency charged with tracking and investigating public health trends.
Confirmatory (RNA) Testing	Confirmatory Ribonucleic Acid Testing	A follow-up blood test that is used to look for the genetic material of the virus that causes hepatitis in order to confirm active infection.
DAA drugs	Directly Acting Antiviral Drugs	Medications that target specific portions of the hepatitis C virus resulting in disruption of viral replication and cure.
FQHC	Federally Qualified Health Center	Outpatient clinics that qualify for specific reimbursement systems under Medicare and Medicaid.
HBI-DC	Hepatitis B Initiative of Washington, DC	A community-based organization dedicated to mobilizing communities to prevent liver disease caused by HBV.
HBV	Hepatitis B Virus	A virus that causes hepatitis B infection and can lead to inflammation and damage to the liver, causing fever, debility, and jaundice.
HCV	Hepatitis C Virus	A virus which is transmitted in infected blood and can lead to inflammation and damage to the liver.

HIV	Human Immunodeficiency Virus	A virus that attacks the immune system.
	Linkage-to-care	The process of engaging newly diagnosed HBV and/or HCV infected persons into HBV and/or HCV care for treatment.
IBR/REACH Health Services	Institute of Behavior Research	A community-based Federally Qualified Health Center.
NEDSS	National Electronic Disease Surveillance System	A secure online framework that allows health care professionals and government agencies to communicate about disease patterns and coordinate national responses to outbreaks.
PCSI	Program Collaboration and Service Integration	A mechanism for organizing and blending interrelated health issues, activities, and services in order to maximize public health impact through new and established linkages across programs to facilitate the delivery of services.
STI	Sexually Transmitted Infection	An infection transmitted through sexual contact, caused by bacteria, viruses or parasites.

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- ¹⁹ Maryland Department of Health. Maryland Hepatitis C Strategic Plan. January 2019. https://phpa.health.maryland.gov/OIDPCS/AVHPP/Documents/Maryland_Hepatitis_C_Strategic_Plan_FINAL_2019.pdf
- ²⁰ U.S. Department of Health and Human Services, HIV/AIDS Glossary, December 3, Accessed 3 December 2019 <https://aidsinfo.nih.gov/understanding-hiv-aids/glossary/3/acquired-immunodeficiency-syndrome>.