ASTHO Report
In-depth coverage of leading state and territorial public health issues.
November 2021

State Strategies for Advancing Viral Hepatitis Elimination

Executive Summary

Cases of viral hepatitis are on the rise across the United States. Although substantial progress has been made in reducing deaths related to hepatitis B (HBV) and hepatitis C (HCV) viruses, inability to slow the rate of new infections presents an ongoing challenge to elimination goals.

Injection drug use remains a primary contributor to rises in both HBV and HCV, suggesting a need to integrate prevention and treatment strategies into existing harm reduction frameworks. Within both the subpopulation of people who use drugs and the greater population, other major barriers to elimination include lack of awareness, limitations on testing and diagnostic capacity, access to treatment, and limited data.

> Interventions to reduce the burden of viral hepatitis should aim to holistically address the syndemic interaction between HCV, substance use disorders, and the social determinants of health.

State and territorial health officials play a crucial role in advancing efforts towards viral hepatitis elimination within their jurisdictions. ASTHO, with support from CDC, provided capacity building assistance to state health agencies to plan for HBV and HCV elimination. ASTHO issued an RFP in December 2018 that supported the implementation of selected demonstration projects in seven states.

> Data suggests that upwards of 50% of individuals living with chronic HBV or HCV are unaware of their status.[1]

This report details the implemented strategies and subsequent outcomes of each of these projects. Based on this synthesis, outlined below is a preview of key actions for state and territorial public health leaders to consider as they advance elimination planning in their own jurisdictions.

- Leverage existing data sources to identify reporting gaps or barriers to patient engagement and retention through the care cascade.
- Establish multistakeholder partnerships that reduce silos in HCV treatment and care provision.
- Consider comprehensive communications campaigns to increase awareness of availability of testing among affected populations.
- Work to expand provider capacity to diagnose, treat, and cure individuals with HCV.

Framework for Advancing Elimination Efforts

Chronic viral hepatitis is a serious, potentially life-threatening infectious disease. In 2016, approximately 3.3 million Americans were estimated to be living with chronic HBV or HCV infection.[2,3] From 2014-2018, rates of HBV and HCV rose by 11%, and 71%, respectively.[4] Additionally, viral hepatitis treatment costs a combined billions of dollars a year to individuals, healthcare systems, states, and the federal government. Ultimately, efforts to eliminate chronic viral hepatitis will decrease healthcare costs, lead to better health outcomes among vulnerable groups, and contribute to a healthier population overall.

State and territorial health officials play a crucial role in guiding approaches to addressing viral hepatitis at all stages of the care cascade, from initial identification of infection to retention through treatment. The demonstration projects completed in Indiana, Iowa, Louisiana, Pennsylvania, Rhode Island, Virginia, and Washington state support the World Health Organization's call to eliminate viral hepatitis by the year 2030. This elimination goal is defined as a 90% decrease in incidence of chronic infections and a 65% reduction in mortality.

As highlighted in the Viral Hepatitis National Strategic Plan: 2021-2025, the year 2020 marked the 10th year of implementation of a national strategic plan for hepatitis elimination. Since the last iteration of the plan in 2017, the United States has improved its capacity to manage and treat individuals with HBV and HCV, but the need to improve prevention and clinical services remains. Additionally, systematic and coordinated data collection is necessary to improve surveillance for viral infections. The seven demonstration projects completed by ASTHO's awardees address the following high-level goals of the national strategic plan:

1. Prevent new viral hepatitis infections.
2. Improve viral hepatitis-related outcomes of people with viral hepatitis.
3. Reduce viral hepatitis-related disparities and health inequities.
4. Improve viral hepatitis surveillance and data usage.
5. Achieve integrated, coordinated efforts that address the viral hepatitis epidemics among all partners and stakeholders

The initiatives and outcomes of each demonstration project are detailed below.

Indiana

The Indiana State Department of Health (ISDH) collaborated with the Regenstrief Institute to develop robust HCV care cascades that assist in identifying areas of patient drop-off within cascade progression, designing interventions to improve patient retention, and evaluating usefulness of interventions in increasing progression to sustained virologic response.

Key Activities:

- Gathered data from the Indiana Health Information Exchange and the Michiana Health Information Network to construct two HCV care cascade dashboards hosted in Tableau and filterable by variables such as age group, gender, insurance status, race, and ethnicity.

Outcome: The final cascades provide representation for over 90% of Indiana hospitals and 70% of residents. The dashboards will be used to create stakeholder-specific care cascades based on the variable of interest and provided in a factsheet format, in addition to distribution of static reports on each jurisdiction to every county. ISDH plans to continue updating these care cascades bi-annually to evaluate the effectiveness of interventions and policy changes and to allow for a historical view of the progress of HCV elimination planning in the state.

Iowa

The Iowa Department of Public Health (IDPH) worked with two harm reduction providers in the state to implement a pilot testing and patient navigation program.

Key Activities:

- Gathered feedback from people disproportionately impacted by HCV about needs and barriers to prevention, linkage to care, and treatment.
- Increased testing and diagnosis at substance use treatment facilities.
- Provided patient navigation services for those diagnosed with HCV.
- Developed a care cascade for patients diagnosed with HCV.

Outcome: The initial stage of this project gathered feedback from 170 Iowans on drug use preferences, systems engagement, HCV testing and treatment, and healthcare priorities through a survey, focus groups, and a consumer advisory board with people who use drugs. Feedback from an additional 550 Iowans was obtained via an online survey related to sexual health, substance use, and healthcare needs**.** Utilizing this feedback, IDPH worked to increase testing rates by integrating HCV testing and assessment into client intake assessments for those entering substance use treatment at 10 sites run by Sieda Community Action and at 14 medication-assisted treatment (MAT) clinics run through UCS Healthcare. Testing at MAT clinics continued throughout 2020, and both initiatives resulted in more than 800 HCV tests completed overall. Through a partnership with the Project of the Quad Cities, IDPH provided patient navigation services to 55 Iowans and identified barriers and opportunities to cascade progression to be used for future strategic planning efforts. Lastly, IDPH partnered with the University of Nebraska Medical Center to analyze surveillance data on HCV for the creation of a HCV cure cascade, with the ultimate goal of guiding micro-elimination efforts and evaluating interventions over time.

Louisiana

The Louisiana Department of Health (LDH) team hired six registered nurses to conduct an in-depth record abstraction of persons previously reported to have HCV at 12 different facilities in order to identify reporting gaps or barriers to obtaining or completing treatment.

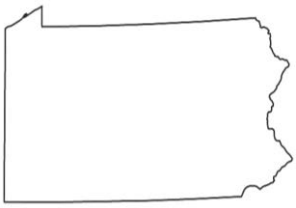
Key Activities:

- Found, collected, and updated demographic, risk factor, clinical, medical provider, laboratory, and treatment data to help distinguish gaps in progression through the care cascade.

Outcome: In total, 2,551 chart abstractions were completed for 2,457 unique patients. Through this process, 573 patients were prescribed treatment and 188 of those achieved sustained virologic response. Overall, results confirmed a low rate of patient progression through the care cascade, detrimental synergistic effects of substance use disorders on HCV treatment retention, and the need for provider training on treatment. Data extracted by LDH will be used to better tailor programmatic interventions to target communities.

Pennsylvania

The Pennsylvania Department of Health (PA DOH) worked to understand barriers and opportunities related to enhanced HCV screening and linkage to care at drug and alcohol treatment facilities in the state, including the different needs of rural and urban communities.



Key Activities:

- Synthesized data on the service capacity of more than 300 drug and alcohol treatment centers.
- Established an ongoing collaborative partnership with the Department of Drug and Alcohol programs.
- Piloted patient engagement sessions to identify challenges and potential solutions.

Outcomes: An initial survey of 330 randomly selected licensed drug and alcohol treatment facilities yielded a 70% response rate and provided information related to the availability of services across the state. In 2021, carryover funds from this project were used to pilot patient engagement sessions that allowed for better integration of patient voices and lived experience into viral hepatitis elimination planning efforts. Ongoing collaboration with the Pennsylvania Department of Drug and Alcohol Programs, initiated through this project, allowed PA DOH to apply for additional State Opioid Response funds now being used to develop a service integration toolkit and technical assistance program to improve service delivery for HIV and viral hepatitis at these facilities. Findings from this pilot effort revealed a need for more extensive research on patient engagement methods that will be crucial to advancing efforts to eliminate HCV in Pennsylvania.

Rhode Island

The Rhode Island Department of Health (RIDOH) worked with the media and the Department of Corrections (RIDOC) to increase screening, linkage to care, treatment, and cure rates among individuals born between 1945-1965 and sentenced inmates.

Key Activities:

- Implemented a multipronged media campaign promoting HCV screening for Baby Boomers.
- Leveraged electronic medical records, patient tracking tools and created an HCV Committee to improve rates of screening, case confirmation and treatment, positive treatment outcomes, discharge, or referral for inmates at RIDOC.

Outcome: RIDOH's media campaign resulted in significantly increased circulation and impressions of content encouraging HCV testing among the target age group, prompting increased turnout at testing events. Testing and navigation of inmates at RIDOC will be continued, with at least 48 inmates successfully treated between 2018-2020 and 128-of-227 (56%) treated in total. Program goals for 2021 include continued screening, treatment for 100% of eligible inmates, re-infection assessment, and monitoring of viral load after treatment completion.

Virginia

The Virginia Department of Health (VDH) collaborated with multiple partners to implement in-person healthcare provider trainings on HCV treatment, supplemented by case study calls and consultations with subject matter experts on an as needed basis.

Key Activities:

- Increased the capacity for HCV treatment among primary care providers in Virginia.
- Taught strategies to navigate and bring awareness to common barriers to HCV treatment.

Outcomes: Since the initial training, two additional sessions have been completed. In total, 50 clinicians and 25 support staff from 32 facilities attended the trainings. Following training, 54% of clinicians decided to treat patients either independently or via telehealth in collaboration with the University of Virginia, and 38% were considering treatment options. Overall, 87% of referred patients received treatment and 51% completed medication. Finally, VDH created a provider training website to house all materials relevant to the training and is continuing collaboration with project partners to create a more useful and updated provider referral guide that will be updated annually moving forward.

Washington

The Washington Department of Health (WA DOH) worked with the Hepatitis Education Project (HEP) and the University of Washington to expand HCV treatment in primary care and non-traditional settings.

Key Activities:

- Hosted project ECHO sessions aimed at increasing the capacity of the health care workforce to properly assess, diagnose, care for, treat, and ultimately cure persons infected with HCV.
- Created a statewide, online provider inventory list to help identify providers willing to test and treat clients with HCV, with an emphasis on populations who currently or previously used drugs.

Outcomes: From May 2019-December 2019, 26 sessions and 159 case consultations were completed through project ECHO, reaching an audience of over 370 clinicians statewide. Through collaboration with HEP, AbbVie, the Health Care Authority (State Medicaid), and the Division of Behavioral Health and Recovery, WA DOH compiled a list of HCV prescribers filtered by county and zip code. This searchable list was ultimately integrated into the Washington Recovery Help Line website and can be found here.

The Future of Hepatitis Elimination Efforts

To meet the goals of the National Strategic Plan, states and jurisdictions should strive to customize their plans to the needs of target communities. The projects outlined above highlight valuable strategies for advancing elimination efforts centered around initiating collaboration with non-traditional partners, leveraging existing data to extrapolate specific areas of need and evaluate the impact of interventions, and strengthening the capacity of health providers to diagnose, treat, and cure viral hepatitis.

Progress towards hepatitis elimination is dependent on collaboration between federal, state, local, and community-based partners. The success of intervention planning and implementation also hinges on states' and territories' ability to address the syndemic nature of viral hepatitis and conditions such as substance use disorders, mental health disorders, STIs, stigma, and discrimination.

ASTHO encourages states and territories to use the demonstrations detailed here and additional considerations from the National Strategic Plan to help identify strategies and tailor roadmaps to furthering viral hepatitis elimination efforts in their respective jurisdictions.

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1. U.S. Department of Health and Human Services. "Viral Hepatitis in the United States: Data and Trends." Available at https://www.hhs.gov/hepatitis/learn-about-viral-hepatitis/data-and-trends/index.html. Accessed 9-22-2021.
2. Patel EU, Thio CL, Boon D, et al. "Prevalence of Hepatitis B and Hepatitis D Virus Infections in the United States, 2011–2016." *Clinical Infectious Diseases.* 2019. 69(4):709-712. Available at https://academic.oup.com/cid/article/69/4/709/5272449?login=true. Accessed 9-22-2021.
3. Hofmeister MG, Rosenthal EM, Barker LK, et al. "Estimating prevalence of hepatitis C virus infection in the United States, 2013–2016." *Hepatology*. 2018. 69(3):1020-1031. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6719781/. Accessed 9-22-2021.
4. CDC. "Viral Hepatitis Surveillance - United States, 2018." Available at https://www.cdc.gov/hepatitis/statistics/2018surveillance/pdfs/2018HepSurveillanceRpt.pdf. Accessed 9-22-2021.