

# Pennsylvania Viral Hepatitis Elimination Plan

Bureau of  
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**pennsylvania**  
DEPARTMENT OF HEALTH

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# Acknowledgements

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# Introduction

Viral hepatitis is a costly and preventable disease. Hepatitis B is a vaccine-preventable disease but only 1/3 of United States (U.S.) adults are vaccinated against hepatitis B<sup>1</sup>. Hepatitis C is the most common bloodborne infectious disease in the U.S. and is often a profound consequence of substance use disorders<sup>2</sup>. As of 2017, an estimated 50,000 Pennsylvanians are chronically infected with hepatitis B and over 200,000 are chronically infected with hepatitis C<sup>3</sup>. New infections are increasing each year amongst Pennsylvanians who use drugs. Since 2018, reports of hepatitis A in Pennsylvania have significantly increased, primarily driven by person-to-person spread amongst people who use drugs and people experiencing homelessness. In 2020, Pennsylvania reported the third highest count of newly reported chronic hepatitis C infections in the U.S. by state at 7,615<sup>4</sup>. An estimated 4 in 10 Pennsylvanians living with hepatitis C are unaware of their infection<sup>5</sup>.

The National Academies of Sciences, Engineering and Medicine state that elimination of hepatitis B and C is possible by 2030 in the U.S. with significant expansion of vaccination, screening, and linkage to care<sup>6</sup>. Elimination planning is a critical step towards this goal and requires significant Commonwealth stakeholder engagement. In 2019, the Pennsylvania Department of Health (DOH) selected 30 external stakeholders to serve as Viral Hepatitis Elimination Planning Committee members tasked with drafting an elimination plan in partnership with DOH. In October 2019, the Planning Committee drafted Viral Hepatitis Elimination (VHE) plan goals and objectives. The Planning Committee identified four subsections within the plan: 1) Prevention and Education; 2) Testing and Linkage to Care; 3) Treatment Access; and 4) Data and Surveillance. In 2020, four workgroups were formed to refine the goals and objectives under each subsection. These workgroups were led by Planning Committee members and the call for participants was advertised through a broader stakeholder network. Born out of this Commonwealth-wide stakeholder network, a Pennsylvania coalition, Hep Free PA, was formed in 2019 by a body of stakeholders, many of whom served on the Planning Committee. DOH supports Hep Free PA as an elimination planning partner dedicated to improving prevention, diagnosis, care, and treatment of viral hepatitis throughout Pennsylvania.

In addition to the Planning Committee, DOH created the Pennsylvania Interagency Hepatitis Workgroup to enhance collaboration across Commonwealth agencies, review the VHE plan and draft viral hepatitis elimination implementation plans by agency. Agencies represented in this workgroup include DOH, the Department of Corrections, the Department of Drug and Alcohol Programs, the Department of Education, the Department of Human Services, and the Department of Insurance. Implementation plans are currently under review by the agencies and will document VHE plan components' commitments by agency as well as resource allocation and funding strategies.

In 2021, DOH piloted listening session opportunities for people affected by viral hepatitis to share their experience navigating the disease in Pennsylvania. People with lived experience play a critical role in VHE planning but may experience barriers to participating in this work. DOH piloted these listening session opportunities to reduce participation barriers and encourage people with lived experience to influence the VHE planning process. In 2021, DOH

advertised three low barrier methods of participating: 1) virtual small group listening sessions 2) voicemail submission of experience 3) completion of online survey. These opportunities were advertised via Hep Free PA and in partnership with several community-based organizations serving people with lived experience.

People with lived experience shared several themes: 1) barriers to diagnosis and treatment exist throughout the state, including insurance barriers, but barriers are reduced with the assistance of community-based organizations; 2) viral hepatitis has significantly affected people's lives, especially related to fear and anxiety over premature death and transmission to family members; and 3) DOH needs to improve awareness around viral hepatitis prevention, diagnosis, and treatment, and expand syringe service programs. Through this pilot, participants were introduced to Hep Free PA and invited to become active members of this elimination-focused coalition. Many lessons learned were borne out of this pilot project and this work will continue to be expanded upon with future grant funding.

The following VHE plan aligns with the U.S. Department of Health and Human Services' Viral Hepatitis National Strategic Plan: A Roadmap to Elimination in the U.S., 2021 – 2025<sup>7</sup> as well as the White House initiative focused on hepatitis C elimination by 2030 through streamlined testing and treatment. Former iterations of this national plan were referenced in the development of the VHE plan. The following VHE plan represents a revised iteration to be updated annually and published on the DOH website. Currently, resources for viral hepatitis elimination activities are limited and funding is needed to accomplish the goals documented in this plan. Long-term and short-term goals were drafted to document what needs to be accomplished in Pennsylvania for viral hepatitis to be eliminated. SMART (Specific, Measurable, Achievable, Relevant and Time-Bound) objectives were drafted to document necessary short-term activities. Currently, the Pennsylvania Interagency Hepatitis Workgroup is reviewing programs and existing funding sources to partially support prioritized goals. Through interagency implementation planning and additional resource allocation, these SMART objectives are intended to be completed by 2025.

# Pennsylvania Viral Hepatitis Elimination Plan

## *Prevention and Education*

**Long-term goal 1: Raise public awareness of viral hepatitis prevention and education as a statewide priority.**

- **Short-term goal PE1.1:** Create a statewide viral hepatitis awareness campaign.
  - **SMART Objectives:**
    - Host a quarterly meeting of the community advisory group of people living with, cured of, and at risk of viral hepatitis to inform the direction of the campaign and to participate in the campaign.
    - Conduct an annual review around viral hepatitis campaigns and existing marketing materials, with a focus on reducing stigma, and develop comprehensive communication and partnership strategy for different communities.
    - Create materials and launch a statewide viral hepatitis print media and social media marketing campaign to ensure accessibility.
    - Create key messages and talking points that can be used by coalition members.
    - Maintain a designated accessible location of educational campaigns and materials across the state
    - Create a storytelling campaign of people living with and/or at risk of hepatitis B and C and their loved ones.
  
- **Short-term goal PE1.2:** Expand capacity with partners to raise awareness about viral hepatitis, acknowledging diversity in Pennsylvania and built upon the trust that community organizations have with at-risk communities.
  - **SMART Objectives:**
    - Maintain partnerships with the following settings serving high-risk patients to distribute viral hepatitis prevention and educational materials and share educational opportunities:
      - Drug and alcohol treatment facilities
      - Centers of Excellence for Opioid Use Disorder (OUD)
      - Correctional settings
        - State Correctional Institutions
        - County jails
      - Syringe service providers
      - Human immunodeficiency virus (HIV) care providers clinics
      - Sexual Transmitted Disease (STD) clinics
      - Reproductive health clinics
      - Federally Qualified Health Centers
      - Free and charitable clinics
      - Dialysis facilities
      - Social services organizations serving foreign-born and limited English proficient communities, especially those reaching Asian American, Pacific Islander and African communities
      - Community organizations serving refugee communities

- **Short-term goal PE1.3:** Expand hepatitis vaccine coverage and education, particularly among high-risk adults.
  - **SMART Objectives:**
    - Assess hepatitis A and B vaccine coverage for adults, identify out of pocket costs by insurance provider in Pennsylvania and develop recommendations for insurance providers based on assessment results.
    - Assess hepatitis A and B vaccination status of all incarcerated persons and staff and review policies to determine if and where improvements are needed within State Corrections to enhance vaccination coverage for hepatitis A and B.
    - Ensure hepatitis A and B vaccine coverage is part of Pennsylvania’s viral hepatitis outbreak response plan.
    - Assess hepatitis A and B vaccine coverage for people living with HCV and HIV and determine if and where improvements are needed to enhance vaccination coverage for hepatitis A and B.

**Long-term goal 2: Expand the availability of co-located viral hepatitis and harm reduction services and programs throughout the state.**

- **Short-term goal PE2.1:** Improve access to sterile syringes and other injection equipment for viral hepatitis prevention by supporting statewide harm reduction service expansion.
  - **SMART Objectives:**
    - Provide evidence to stakeholders including government officials around the effectiveness of harm reduction services for the prevention of viral hepatitis.
    - Assess viral hepatitis services ongoing in Pennsylvania syringe service program (SSP) settings and develop recommendations for continuation and/or improvement of these services statewide.
    - Create mode/method for people and organizations to share experiences with viral hepatitis prevention efforts in SSPs.
- **Short-term goal PE2.2:** Ensure that people receiving viral hepatitis education and prevention interventions also have access to overdose prevention and treatment for substance use disorder.
  - **SMART Objectives:**
    - Incorporate questions and education about overdose prevention in HIV and viral hepatitis testing/prevention programs and link to naloxone for interested individuals.

***Testing and Linkage to Care***

**Long-term goal 1: Ensure all Pennsylvanians know their hepatitis B and C status.**

- **Short-term goal TL1.1:** Improve diagnostic tools and systems for hepatitis B and C.
  - **SMART Objectives:**
    - Assess access to hepatitis B and C testing, including hepatitis C reflex testing in clinical and non-clinical settings that serve high-risk populations including those seeking services at:
      - Drug and alcohol treatment facilities



- Syringe service programs
  - HIV care provider settings
  - Sexually transmitted disease clinics
  - Reproductive health clinics
  - Federally Qualified Health Centers
  - Free and charitable clinics
  - Correctional settings
  - Emergency departments and inpatient hospital settings
  - Pharmacies
  - Employee health divisions of healthcare settings including MAT
  - Additional community settings that reach high-risk adults, including at community-based events
  - Refugee resettlement programs and community organizations serving foreign-born and limited English proficient communities
  - Centers of Excellence OUD
  - Assess hepatitis B and C testing coverage for adults by insurance provider in Pennsylvania and develop recommendations for insurance providers based on assessment results.
    - Develop a working group to assess current challenges and strategize/implement a plan in laboratory settings to expand and assess the availability of reflex hepatitis C testing
    - Develop a working group to assess current challenges and strategize/implement a plan in non-laboratory settings
- **Short-term goal TL1.2:** Expand pharmacy scope of practice to include hepatitis B and C education, vaccination and screening.
    - **SMART Objectives:**
      - Expand partnerships with Pennsylvania Board of Pharmacy, pharmacy associations and pharmacy schools to assess the availability and feasibility of viral hepatitis prevention and treatment service expansion in pharmacy settings.
  - **Short-term goal TL1.3:** Improve provider knowledge and uptake of United States Preventive Services Task Force and Centers for Disease Control and Prevention’s hepatitis B and C screening guidelines.
    - **SMART Objectives:**
      - Conduct provider education in collaboration with professional societies.
      - Assess the integration of hepatitis B and C testing into healthcare system infrastructure and provide recommendations for improvement.
      - Partner with county jails to assess hepatitis B and C testing, including hepatitis C reflex testing and interpretation.
      - Develop county jail leadership champions to promote implementation of testing policies.
      - Develop, implement, and assess strategies to assist county jail providers and institutions in integrating hepatitis B and C testing.
      - Modify county jail electronic medical record prompts related to universal non-risk-based hepatitis B and C testing and linkage to care.

- **Short-term goal TL1.4:** Ensure all pregnant people are tested for hepatitis B and C during pregnancy, and gestational parents living with hepatitis B and/or C are appropriately reported and referred for follow-up care.
  - **SMART Objectives:**
    - Assess current hepatitis C testing and linkage to care practices in prenatal clinics.
    - Provide education to physicians, and prenatal, labor and delivery nurses about hepatitis B and C testing (how to test, how to refer) and linkage to care.
      - Assess hepatitis B and C testing coverage for pregnant people by insurance provider in PA and develop recommendations for insurance providers based on assessment results.
    - Assess hepatitis B and C testing coverage for incarcerated pregnant people and develop recommendations based on assessment results.
    - Assess hepatitis B and C linkage to care for pregnant people through prenatal clinics.
  
- **Short-term goal TL1.5:** Ensure all children born to hepatitis B and/or C-positive gestational parents are vaccinated for hepatitis B, and all infected children are appropriately referred for follow-up care.
  - **SMART Objectives:**
    - Assess current hepatitis C testing and linkage to care practices in pediatric clinics.
    - Provide education to pediatric providers through professional organizations about hepatitis B and C testing and linkage to care.
    - Assess the current infrastructure within County Children and Youth Agencies and adoption agencies to screen for hepatitis B and C and provide recommendations.
    - Assess delivery hospitals' discharge summary inclusion of hepatitis B and C status of gestational parent and provide recommendations.
    - Assess completeness of perinatal hepatitis B prevention measures at birth by delivery hospital and develop recommendations.

**Long-term goal 2:** Ensure all Pennsylvanians living with hepatitis B and/or C access sustainable, appropriate medical care and treatment.

- **Short-term goal TL2.1:** Increase the number of people diagnosed with chronic hepatitis B and/or C who are able to access sustainable care through implementation of innovative and multi-sectoral programs.
  - **SMART Objectives:**
    - Assess existing viral hepatitis peer outreach and patient navigation programs throughout Pennsylvania.
    - Create a sustainable statewide system for peer outreach workers and patient navigators to link infected individuals with appropriate medical care.
    - Develop an online platform for linkage to care to increase access to services among marginalized populations.
  
- **Short-term goal TL2.2:** Improve provider awareness of hepatocellular carcinoma screening guidelines to ensure that all people living with chronic hepatitis B and C are appropriately screened for liver cancer, to prevent cancer-related mortality.

- **SMART Objectives:**
  - Create a pilot program of dedicated staff (navigators) in a hospitals/health system to navigate patients who need hepatocellular carcinoma screening, and ensure appropriate screening takes place.
  - Replicate the pilot program in hospitals/health systems across the state.
    - Build hepatocellular carcinoma screening recommendations into provider viral hepatitis education platforms.
  - Assess hepatocellular carcinoma screening coverage amongst people living with chronic hepatitis B and C by insurance provider in Pennsylvania and develop recommendations for insurance providers based on assessment results.
  - Assess hepatocellular carcinoma screening coverage amongst inmates living with chronic hepatitis B and C and develop recommendations based on assessment results.

## ***Treatment Access***

### **Long-term goal 1: Ensure that every individual living with hepatitis B and C in Pennsylvania receives treatment.**

- **Short-term goal TA1.1:** Streamline, reduce, or remove health insurance hepatitis C treatment prior authorization, broaden liver score assessments to those recommended by American Association for The Study of Liver Diseases, and remove genotype testing requirement for hepatitis C treatment.
  - **SMART Objectives:**
    - Identify the barriers created by prior authorization and genotype testing and provide supportive evidence with updated guidelines and documenting the removal of these requirements in other countries and states.
    - Present the evidence to insurance providers.
- **Short-term goal TA1.2:** Eliminate barriers to Medicaid reimbursement of hepatitis C-related services in Pennsylvania drug and alcohol treatment facilities.
  - **SMART Objectives:**
    - Educate providers on billing practices for hepatitis medications to improve access to care.
- **Short-term goal TA1.3:** Reduce hepatitis B treatment costs and improve access to treatment by addressing adverse drug tiering issues.
  - **SMART Objectives:**
    - Assess barriers to hepatitis B medication access across the state including adverse drug tiering of medication and provide recommendations.
    - Improve education of providers about the availability of hepatitis B medications through various insurance providers.

**Long-term goal 2: Expand the number of hepatitis B and hepatitis C treatment providers in Pennsylvania.**

- **Short-term goal TA2.1:** Document the number of hepatitis B and C treatment providers in Pennsylvania.
  - **SMART Objectives:**
    - Evaluate barriers to treatment management and reimbursement by pharmacists.
    - Conduct statewide assessment of hepatitis B and C treatment providers and document as a resource for the community.
    - Create and maintain online search tool for Pennsylvania hepatitis B and C providers (include information on providers who see uninsured patients including uninsured immigrant populations).
- **Short-term goal TA2.2:** Expand hepatitis B and C treatment training opportunities for providers.
  - **SMART Objectives:**
    - Create Pennsylvania hepatitis B and C treatment continuing education module by building upon existing modules.
    - Expand primary-care focused hepatitis B and C treatment and management training and support.
    - Provide hepatitis B and C treatment and management training to healthcare facility management to increase buy in (focus on cost effectiveness).
    - Evaluate the feasibility of creating a PA hepatitis B and C warmline which would include healthcare provider mentorship at a local level.

**Long-term goal 3: Significantly reduce stigma surrounding hepatitis B and C among patients and healthcare providers.**

- **Short-term goal TA3.1:** Educate providers regarding current American Association for The Study of Liver Diseases /Infectious Disease Society of America guidelines that support treatment of people who use drugs to benefit the individual's health as well as the public's health reducing rates of transmission.
  - **SMART Objectives:**
    - Incorporate harm reduction education and service delivery into all healthcare provider hepatitis B and C treatment trainings.
    - Educate providers about hepatitis B and C treatment as prevention and share best practices.
    - Create and disseminate materials specifically for uninsured immigrant populations to educate patients and providers about treatment access issues.

***Data and Surveillance***

**Long-term goal 1:** Continuously monitor the hepatitis B and C care cascade of every diagnosed Pennsylvanian.

- **Short-term goal DS1.1:** Monitor the hepatitis B and C care cascade for the following populations: HIV/hepatitis C co-infected, hepatitis B/C coinfecting, clients treated at

Pennsylvania drug and alcohol facilities, clients served at Pennsylvania syringe service program sites, clients served at Federally Qualified Health Centers, incarcerated individuals

- **SMART Objectives:**

- Build statewide viral hepatitis surveillance infrastructure to involve the inclusion of linkage to care services in surveillance workflow.
- Create a care cascade starting with the following populations mentioned in the short-term goal above.
- Identify areas of Pennsylvania in need of screening through geographic analysis of specific care cascades above.
- Mandate reporting of hepatitis C negative antibody tests and negative hepatitis B surface antigen tests through Pennsylvania electronic disease surveillance system.
- Utilize reported negative screening data to inform care cascade and screening rates.
- Mandate reporting of hepatitis C negative RNA tests and hepatitis B negative DNA tests through Pennsylvania electronic disease surveillance system.
- Utilize reported negative hepatitis B and C test results to estimate treatment and reinfection rates.
- Provide technical assistance through DOH to clinics attempting to create a care cascade.
- Summarize hepatitis care cascade data in partnership with Department of Human Services to measure change over time.

**Long-term goal 2:** Continuously monitor hepatitis B and C-related morbidity and mortality.

- **Short-term goal DS2.1:** Create a Pennsylvania viral hepatitis morbidity profile.

- **SMART Objectives:**

- Create a Pennsylvania viral hepatitis-related cancer surveillance system by annually matching surveillance data to cancer registry data to identify individuals with viral hepatitis and liver cancer and identify groups at particular risk for developing cancer.
- Work with insurers to gain access to liver disease diagnoses and outcomes in order to summarize patient-related morbidity data.
- Annually analyze United Network for Organ Sharing data to identify viral hepatitis-related liver transplants.
- Incorporate Pennsylvania-specific Veterans Administration data into morbidity profile.

- **Short-term goal DS2.2:** Annually review viral hepatitis-related death data.

- **SMART Objectives:**

- Annually match viral hepatitis surveillance data with death data.
- Annually analyze the viral hepatitis-related data to identify deaths attributable to liver-related complications and substance use disorders.

**Long-term goal 3:** Ensure viral hepatitis data findings are comprehensively summarized for public consumption.

- **Short-term goal DS3.1:** Share progress of Elimination Plan as shown by data outcomes.

- **SMART Objectives:**
  - Establish measurable outcomes to illustrate elimination progress.
  - Annually publish plan implementation progress
  - Establish measurable outcomes to illustrate elimination progress.
- **Short-term goal DS3.2:** Annually update viral hepatitis data summaries.
  - **SMART Objectives:**
    - Create website to display interactive data dashboard.
    - Publish care cascade and add it to the data dashboard allowing for the public to filter the data by county.
    - Publish hepatitis B epidemiologic profile including morbidity and mortality data.
    - Publish hepatitis C epidemiologic profile including morbidity and mortality data.
    - Create Pennsylvania viral hepatitis data fact sheets for public consumption.

## Citations

<sup>1</sup>Lu PJ, Hung MC, Srivastav A, Grohskopf LA, Kobayashi M, Harris AM, Dooling KL, Markowitz LE, Rodriguez-Lainz A, Williams WW. “Surveillance of Vaccination Coverage Among Adult Populations -United States, 2018.” *MMWR Surveill Summ.* 70 (2021): 1 – 26.

<sup>2</sup>Centers for Disease Control and Prevention. “Hepatitis C.” Last modified July 28, 2020. <https://www.cdc.gov/hepatitis/hcv/index.htm>.

<sup>3</sup>Data courtesy of the Pennsylvania Department of Health and Philadelphia Department of Public Health Viral Hepatitis Program.

<sup>4</sup>Centers for Disease Control and Prevention. “Viral Hepatitis Surveillance Report – United States, 2020.” <https://www.cdc.gov/hepatitis/statistics/2020surveillance/index.htm> Published September 2022. Accessed February 13, 2023.

<sup>5</sup>Centers for Disease Control and Prevention. “CDC Vital Signs: Dramatic increases in hepatitis C.” <https://www.cdc.gov/hepatitis/hcv/vitalsigns/pdf/hepatitisc-vitalsigns-april2020-H.pdf>. Published April 2020. Accessed February 17, 2022.

<sup>6</sup>The National Academies of Sciences, Engineering, and Medicine. 2017. A National Strategy for the Elimination of Hepatitis B and C: Phase Two Report. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24731>.

<sup>7</sup>U.S. Department of Health and Human Services. 2020. Viral Hepatitis National Strategic Plan for the United States: A Roadmap to Elimination (2021–2025). Washington, DC.