



COMMUNICABLE DISEASE UNIT

Wyoming Viral Hepatitis Elimination Plan 2025-2030

March 2025



Contents

Executive Summary.....	2
Introduction and Background.....	3
Hepatitis Elimination Plan.....	6
Citations.....	12
Appendix.....	14



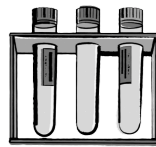


Executive Summary

Viral hepatitis infections increase the risk of liver disease, represent the leading cause of liver cancer, and cause over one million deaths globally each year.¹ The two most common causes of viral hepatitis infections are hepatitis B virus (HBV) and hepatitis C virus (HCV). HBV is vaccine-preventable, and HCV is curable. However, HBV and HCV continue to cause significant morbidity and mortality of serious public health concern. The Wyoming Department of Health (WDH) aims to prevent new hepatitis B and hepatitis C infections, ensure all residents know their status, and promote access to high-quality care and treatment without stigma or discrimination for all people living with hepatitis B and C. The State of Wyoming is committed to the vision of eliminating viral hepatitis through **five key goals**:



Prevent new hepatitis B and C infections.



Increase the capacity of healthcare delivery systems to effectively identify, diagnose, and link people with hepatitis B and C to care.



Improve related health outcomes and reduce hepatitis B and C-related health disparities.



Improve viral hepatitis surveillance and data usage.



Integrate programmatic efforts to address hepatitis B and C holistically.

This plan presents evidence-based goals, objectives, and strategies to work toward hepatitis elimination in Wyoming by 2030. The goals span four pillars, reflecting those outlined in the Wyoming Integrated HIV Prevention and Care Plan: **prevent** new infections, **diagnose** all individuals as early as possible, **treat** those indicated and improve treatment outcomes, and **respond** to potential outbreaks by monitoring HBV and HCV epidemiologic trends. Each of the five overarching goals has objectives representing key outcomes, and all objectives have strategies to achieve each objective. Elimination efforts in Wyoming aim to reduce acute HBV and HCV infections, increase the proportion of people with HBV infection who are aware of their infection, and increase the proportion of people who have cleared HCV infection. The WDH Communicable Disease Unit (CDU) will coordinate implementation activities for this plan's objectives, and the CDU will monitor and evaluate progress toward goals, objectives, and strategies.





Introduction

Wyoming is a frontier state with a total population of 581,381 spread across the ninth-largest state by land area and a population density of 6.0 per square mile in 2022.² Demographically, the largest racial and ethnic groups in 2022 were non-Hispanic White (83.1%), Hispanic/Latino (10.8%), and American Indian/Alaska Native (2.0%). Approximately 11.5% of residents had no health insurance in 2022, 20 out of 23 counties have a primary care Health Professional Shortage Area designation, and Medicaid access has not been expanded.³ As such, many residents lack access to local affordable healthcare.

In 2022, the CDU engaged the National Harm Reduction Coalition (NHRC), the Wyoming Harm Reduction Collective (WyHRC), local public and private providers, and stakeholders across the continuum of hepatitis care to develop the priorities and goals for this elimination plan. NHRC facilitated community engagement, education, and listening sessions to identify priorities and provide implementation recommendations. The statewide community planning group (Comprehensive Care and Prevention Planning Alliance [CAPPA]) held additional planning meetings to ensure the representation of those with lived experience and those working directly with affected populations in this plan. The CDU used the identified priorities to develop five key goals organized into four pillars: **Prevent**, **Diagnose**, **Treat**, and **Respond** (mirroring the Wyoming Integrated HIV Prevention and Care Plan). The larger WDH Public Health Division (PHD) vision of healthy people in healthy communities and its mission to promote, protect, and improve health in Wyoming drives this plan's goals, objectives, and strategies. Finally, this plan aligns with the goals outlined by the U.S. Department of Health and Human Services (DHHS) Viral Hepatitis National Strategic Plan (A Roadmap to Elimination)⁴ and Healthy People 2030 objectives.

Key partners for the development and implementation of the Wyoming Hepatitis Elimination Plan include:

- Primary care providers
- Infectious disease providers
- Obstetrics and gynecology (OB/GYN) providers
- Gastroenterologists/hepatologists
- Emergency medicine providers
- Addiction medicine providers and substance use treatment programs
- Federally Qualified Health Centers
- KnoWyo
- NHRC
- WyHRC
- CAPPA
- Peer specialists (Recover Wyoming)
- Corrections partners
- Colorado Health Network
- WDH Behavioral Health Division (BHD), Mental Health and Substance Use Treatment Services
- WDH PHD, Substance Abuse and Tobacco Prevention Program
- WDH PHD, Immunization Unit
- WDH PHD, Wyoming Public Health Laboratory (WPHL)





Hepatitis B and C Overview

Hepatitis Virus



Transmission Route	Perinatal		Perinatal	
	Blood exposure		Blood exposure	
	Sexual contact		Sexual contact (less frequently)	
Vaccination	Vaccine-preventable		No vaccine	
			No lifelong immunity following infection	
Cure	No cure		Curable with 2-4 months of daily oral medication	
	Medications can manage disease progression			
Natural History	1-6 month incubation		2 week - 6-month incubation	
	May become chronic, most commonly in children ≤ 5 years		55-85% of infections become chronic	
Symptoms*	Symptoms of HBV and HCV are similar and can include:			
	Fatigue		Abdominal pain	
	Jaundice		Loss of appetite	
	Fever		Pale-colored stool	
	Nausea & vomiting		Dark urine	

*Many individuals do not experience symptoms during acute infection.





Priority Populations

Priority populations are those who are most likely to be impacted by hepatitis B and hepatitis C. National and state-level prevalence data, patient-reported exposure and potential routes of transmission, and evidence-based indications define these groups. Nationally, the highest rate of newly reported chronic HCV cases is among those aged 20-39 and 55-70.⁵ In Wyoming, the age distribution skews older than the national average, with 71% of cases in 2023 among those aged 40 years and older. Nationally, the rate of newly reported HBV infections tends to be highest among Asian American and Native Hawaiian/Pacific Islander individuals, and the rate of newly reported HCV infections tends to be highest among American Indian/Alaska Native individuals.⁵ In Wyoming, the average five-year rate per 100,000 persons (2019-2023) of newly reported HBV infections was highest among non-Hispanic Asian (39.3) individuals, followed by non-Hispanic Black (24.8) individuals. In Wyoming, the average five-year rate per 100,000 persons (2019-2023) of newly reported HCV infections was highest among non-Hispanic Native Hawaiian/Pacific Islander individuals (49.5), followed by non-Hispanic American Indian/Alaska Native (48.4), non-Hispanic Black (28.4), and non-Hispanic White (17.8) individuals.

From 2019-2023, the Wyoming counties with the highest rates of newly identified HBV cases per 100,000 persons were Goshen (6.3), Hot Springs (4.4), and Albany (4.2). The counties with the highest rates of newly identified HCV cases per 100,000 persons were Niobrara (284.1), Goshen (163.9), and Natrona (61.4). Notably, Goshen and Niobrara counties house Wyoming Department of Corrections (DOC) facilities where all new inmates receive a medical evaluation. Estimates from 2023 suggest the rate of HCV in incarcerated individuals is approximately 10 times higher than in the general population.⁶ The prevalence of HCV in corrections facilities is likely a contributing factor to the consistently higher rate of HCV cases in those counties. Prioritizing diagnosis and treatment in incarcerated individuals is critical to making progress toward HCV elimination. Among cases of newly reported chronic HCV in Wyoming for whom exposure information was available in 2023, injection drug use was identified by 73.9% of individuals. Injection drug use was reported most frequently in those aged 25-29, with 86.7% identifying injection drug use.

Considering national and state-level exposure and prevalence data, this plan prioritizes the following groups for outreach and prevention education, screening efforts, and linkage to care:

- People born in high-prevalence countries^{7,8}
- People who currently use or previously used drugs
- People who are currently or formerly incarcerated
- Unhoused and unstably housed people
- Pregnant women
- Infants and children, and adults who did not receive HBV vaccination
- People born between 1945-1965
- American Indian/Alaska Native peoples
- People living with HIV⁹





Hepatitis Elimination Plan

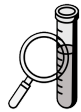
VISION

Wyoming aims to prevent new hepatitis B and C infections, ensure all residents know their status, and promote access to high-quality care and treatment without stigma or discrimination for all people living with hepatitis B and C in Wyoming.



Prevent

Prevent new hepatitis B and C infections.



Diagnose

Increase capacity to effectively identify, diagnose, and link people with hepatitis B and C to care.



Treat

Improve health outcomes and reduce related health disparities.



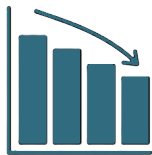
Respond

Improve viral hepatitis surveillance and data usage.

Integrate programmatic efforts to holistically address hepatitis B and C.

Hepatitis Elimination Indicators

The goals, strategies, and objectives outlined in this plan align with those outlined in the National Strategic Plan. The foundational definition of viral hepatitis elimination is a reduction of 90% in new chronic infections and a 65% reduction in mortality.⁴ By working toward the goals in this plan, Wyoming will contribute to the following core indicators to eliminate viral hepatitis as outlined in the National Strategic Plan:



Reduce acute HBV infections by 90% by 2030

Reduce acute HCV infections by 90% by 2030



Increase the proportion of people with HBV infection who are aware of their infection by 90% by 2030



Increase the proportion of people who have cleared HCV infection to 80% by 2030



Goal One: Prevent New Hepatitis B and C Infections

Objectives	Strategies
1.1 Increase awareness of hepatitis B and C	<ul style="list-style-type: none">• Provide information on exposure and transmission routes• Utilize social media and existing marketing strategies to promote awareness of HBV/HCV and encourage testing• Provide education on the possibility of HCV reinfection
1.2 Increase understanding and uptake of hepatitis B vaccination	<ul style="list-style-type: none">• Utilize social media and leverage existing marketing strategies to promote awareness of updated HBV immunization recommendations• Reduce financial and system barriers to providing and receiving the HBV vaccine• Provide HBV immunization in a variety of clinical and non-clinical settings• Improve surveillance infrastructure to monitor adult HBV immunization
1.3 Increase hepatitis B and C prevention and treatment services for defined priority populations	<ul style="list-style-type: none">• Educate priority communities about hepatitis exposure and transmission• Promote harm reduction and safer use education for people who use drugs• Utilize peer support specialists to support people who use drugs and ensure peer specialists are trained and educated on supporting navigation to hepatitis prevention, testing, and treatment services 🔍• Expand access to testing and prevention services in a variety of clinical and non-clinical settings 🔍
1.4 Prevent perinatal hepatitis B and C transmission	<ul style="list-style-type: none">• Provide education to patients of childbearing age and potential about HBV/HCV testing and preventing vertical transmission• Provide education on HBV/HCV screening and management in pregnancy guidelines to primary care, OB/GYN, and other women's health providers



The CDU and Recover Wyoming will train and utilize peer specialists to share HBV and HCV prevention, testing, and treatment information and resources with people who currently use or who have previously used drugs.



The CDU will leverage public health outreach contracts to continue providing HBV and HCV education and testing in non-clinical settings such as county jails, court-supervised treatment programs, substance use treatment facilities, and other community-based organizations.





Goal Two: Increase Capacity to Effectively Identify, Diagnose, and Link People with Hepatitis B and C to Care

2.1 Increase the proportion of people who are tested and aware of their hepatitis B and C status

- Improve implementation of new universal lifetime hepatitis B and C screening guidelines in primary care settings
- Conduct outreach testing with priority populations
- Confirm that anti-HCV reflex to RNA is the standard procedure in in-state laboratories 🔍
- Encourage and facilitate opt-out hepatitis B and C testing in substance use treatment facilities and programs

2.2 Increase the capacity of healthcare delivery systems to effectively identify, diagnose, and provide care for people with hepatitis B and C

- Develop quality measures and implement automated electronic health record (EHR) reminders for HBV and HCV screening and testing
- Leverage preventive services covered by health insurance companies to expand hepatitis B and C testing
- Support low- and no-cost hepatitis C testing at safety-net testing sites through the provision of KnoWyo rapid anti-HCV test kits
- Expand and improve the effectiveness of navigation and linkage to care in programs providing outreach and screening
- Promote policies to enhance collaborative, integrated, patient-centered models of care to address co-occurring conditions

2.3 Support new and improving diagnostic technologies and other interventions for identification of hepatitis C

- Support continued anti-HCV to HCV RNA reflex testing at the Wyoming Public Health Laboratory
- Provide guidance for the use of point-of-care HCV RNA diagnostics 🔍




WPHL offers anti-HCV screening with automatic reflex to HCV RNA if positive. The partnership between WPHL, the Association of Public Health Laboratories, and the Michigan Public Health Laboratory will continue to support HCV RNA testing at no cost to patients. The CDU provides ongoing technical assistance to statewide laboratories to promote and support the implementation of universal anti-HCV to HCV RNA reflex testing. The CDU will develop evidence-based practice guidelines for clinics and laboratories across the state for the use of newly FDA-approved point-of-care HCV RNA tests.





Goal Three: Improve Related Health Outcomes and Reduce Hepatitis B and C-Related Health Disparities

3.1 Increase the number of people with hepatitis B and C who receive and either continue (HBV) or complete (HCV) treatment

- Maintain navigation and linkage support to connect those diagnosed to treatment providers and social services, regardless of diagnosis setting 
- Implement innovative approaches to engage people with hepatitis B and C in care
- Promote colocation of treatment services with providers for priority populations, such as substance use treatment programs¹⁰
- Encourage the removal of barriers to treatment, such as prior authorization and abstinence requirements

3.2 Improve and expand provider capacity to provide holistic care and treatment for people with hepatitis B and C in a variety of clinical settings

- Use digital collaboration tools such as Project ECHO and online training to expand healthcare provider expertise in hepatitis B and C treatment
- Promote simplified treatment guidelines that require fewer patient visits, and adapt the AASLD/IDSA simplified guidelines to the primary care setting^{11, 12}
- Establish a supportive specialist network to assist in managing hepatitis B and C care for complex patients
- Promote strategies to improve monitoring and care for hepatitis-related sequelae

3.3 Expand culturally competent and linguistically appropriate hepatitis B and C care that addresses social determinants of health and co-occurring conditions

- Develop and disseminate audience-specific educational materials through collaboration with people with lived experience
- Establish approaches that promote hepatitis B and C prevention and care in programs involving housing, education, employment, transportation, and the justice system
- Train health professionals in the delivery of education, counseling, and care that is culturally competent, linguistically appropriate, and that addresses co-occurring conditions



The CDU will continue to support partnerships providing HCV treatment navigation assistance for patients in need of care. Such partnerships will reduce administrative barriers to care by assisting providers and patients in navigating pharmaceutical patient assistance programs. The CDU will promote referral to the statewide HCV treatment navigator across a variety of public and private settings.





Goal Four: Improve Viral Hepatitis Surveillance and Data Usage

4.1 Improve public health surveillance through data collection, case reporting, and investigation

- Complete investigations for all HBV and HCV cases in pregnant patients. Improve reporting of perinatal HCV cases through monitoring of infants born to HCV-positive women
- Evaluate and improve case investigations of acute, chronic, and perinatal HBV and HCV
- Improve the quality and completeness of data, including transmission exposure, race, ethnicity, and country of birth 🔍
- Work with Vital Statistics Services (VSS) to monitor birth and death records that include HBV and HCV

4.2 Improve reporting and sharing of hepatitis B and C data

- Develop a hepatitis C cascade of cure consistent with CDC guidance¹³ 🔍
- Publish an annual surveillance report on HBV and HCV
- Publish annual infographics with surveillance data for public use
- Conduct data reconciliation annually for submission to the CDC

4.3 Conduct routine analysis of hepatitis B and C data and utilize findings to inform public health action

- Conduct routine time/space cluster analysis
- Conduct routine data-driven prevention meetings to tailor ongoing outreach efforts 🔍
- Utilize VSS reports to ensure all babies born to women diagnosed with HBV and HCV are identified and monitored by WDH CDU



The CDU will review biweekly epi-curve data and trends in exposure categories identified through routine case investigation every month. Insights will inform ongoing outreach efforts in priority counties, and the team will tailor prevention messaging through “outbreak ads” on social media outlets and provider outreach.



Case investigation and data completeness (including transmission route, race, ethnicity, and country of birth) continue to be the focus of hepatitis surveillance quality improvement efforts. Wyoming will utilize laboratory results and case investigation data to create a statewide HCV cascade of cure utilizing CDC guidelines.





Goal Five: Integrate Programmatic Efforts to Address Hepatitis B and C Holistically

5.1 Improve coordination between CDU and other WDH programs to address syndemic concerns such as substance use disorder, HIV, and STIs

- Establish internal collaboration and include staff from other WDH divisions and units in elimination planning and implementation efforts 🔍
- Increase hepatitis B and C prevention, testing, linkage to care, and treatment in all settings addressing syndemic concerns
- Align indicators across programs addressing syndemic concerns
- Integrate resources for programs addressing syndemic components

5.2 Establish and expand collaboration and coordination of CDU viral hepatitis programs and activities across public and private partners

- Increase hepatitis B and C presence in statewide strategic planning and CAPPA activities
- Develop public and private partnerships to expand education, vaccination, testing, linkage to care, and treatment



The CDU will collaborate with stakeholders across WDH divisions to align efforts to address the syndemic of substance use disorders, sexually transmitted infections, HIV, and viral hepatitis. By aligning program indicators and integrating resources, elimination efforts in Wyoming will reach a broader population across various high-impact settings.





Citations

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Appendix

Glossary

AASLD – American Association for the Study of Liver Diseases

anti-HCV – Hepatitis C virus antibody, the screening test for hepatitis C virus

BHD – Behavioral Health Division

CAPPA – Comprehensive Care and Prevention Planning Alliance

CDC – U.S. Centers for Disease Control and Prevention

CDU – Communicable Disease Unit

CHN – Colorado Health Network

DHHS – U.S. Department of Health and Human Services

ECHO – Extension for Community Healthcare Outcomes

EHR – Electronic Health Record

FDA – U.S. Food and Drug Administration

HBV – Hepatitis B virus

HCV – Hepatitis C virus

HIV – Human immunodeficiency virus

IDSA – Infectious Diseases Society of America

MVPS – Message Validation, Processing, and Provisioning System

NHRC – National Harm Reduction Coalition

OB/GYN – Obstetrics and Gynecology

PCP – Primary care provider

PHD – Public Health Division

RNA – Ribonucleic acid, the diagnostic test for hepatitis C virus

VSS – Vital Statistics Services

WDH – Wyoming Department of Health

WHO – World Health Organization

WPHL – Wyoming Public Health Laboratory

WY DOC – Wyoming Department of Corrections

WyHRC – Wyoming Harm Reduction Collective

