Leveraging Syndemic Approaches to Eliminate Hepatitis C

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New York State Hepatitis C Elimination Annual Progress Report Virtual Meeting

May 14, 2025



Agenda

- Introduction to NASTAD
- Global Elimination of Viral Hepatitis
- Domestic Impact of Viral Hepatitis
- Domestic Efforts to Eliminate Hepatitis
- The Case for Eliminating Hepatitis C Using a Syndemic Lens

Introduction to NASTAD





NASTAD Serves 66 Jurisdictions

50 U.S. States

District of Columbia

Puerto Rico

U.S. Virgin Islands

7 Local Jurisdictions

Baltimore New York City Chicago Philadelphia Los Angeles County San Francisco

Houston

U.S. Pacific Island Jurisdictions

Federal States of Micronesia American Samoa Northern Mariana Islands Guam

Marshall Islands Palau







Global Elimination of Viral Hepatitis







The CDA Foundation. Hepatitis C – Global. Lafayette, CO: CDA Foundation, 2025. Available from https://cdafound.org/polaris/database-query/ (Accessed May 2025).



Global Hepatitis C Burden

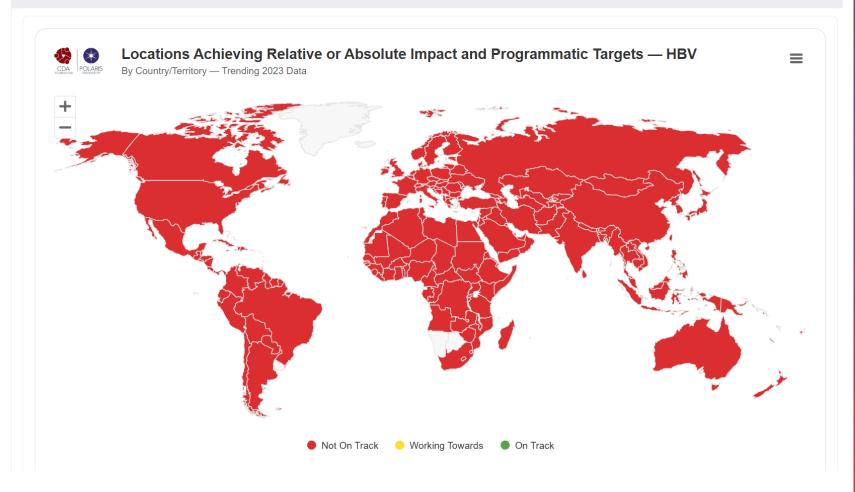
BY COUNTRY/TERRITORY Locations Achieving Relative or Absolute Impact and Programmatic Targets — HCV By Country/Territory — Trending 2023 Data Working Towards

Global
Hepatitis C
Elimination –
Status Update

The CDA Foundation. Elimination Map – Hepatitis C. Lafayette, CO: CDA Foundation, 2025. Available from https://cdafound.org/polaris/elimination-maps/ (Accessed May 2025)



BY COUNTRY/TERRITORY



The CDA Foundation. Elimination Map – Hepatitis B. Lafayette, CO: CDA Foundation, 2025. Available from https://cdafound.org/polaris/elimination-maps/ (Accessed May 2025)



Global Hepatitis B Elimination – Status Update

Hepatitis C Elimination – High-Income Countries

Since 2015 there has been a

REDUCTION IN CHRONIC

HEPATITIS C

in Georgia





GLOBAL HEALTH

Egypt Wiped Out Hepatitis C. Now It Is Trying to Help the Rest of Africa.

> nave made the disease curable have yet to ach most of the region.



AUSTRALIA CAN'T WAIT



This document provides some useful statistics and information for World Hepatitis Day communications, including some new data not previously available in the public domain. We encourage you to use this information and share it

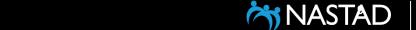
World Hepatitis Day held on 28 July is an opportunity to step up national and international efforts on hepatitis.

Australia is one of 194 World Health Organization member states who voted unanimously to adopt the Global Hepatitis Elimination Strategy to achieve elimination of hepatitis B and hepatitis C by 2030. This commitment has informed the development of our National Hepatitis B, Hepatitis C, and Aboriginal and Torres Strait Islander BBV/STIs Strategies 2018-2022, which provide national progress targets

The 2021 theme for World Hepatitis Day is 'Hepatitis Can't Wait', which recognises that ever in the current COVID-19 crisis, we can't wait to act on hepatitis B and hepatitis C. COVID-19 has significantly interrupted hepatitis screening and hepatitis B monitoring in Australia, but with concerted and unified effort we can turn that



even in the current COVID-19 crisis



Domestic Impact of Viral Hepatitis





Hepatitis B & C in the US

- Est. 2 million people in the US are living HBV
 - In 2023,
 - 2,214 reported acute hepatitis B cases
 - 14,400 estimated acute hepatitis B virus (HBV) infections
 - 1,769 reported HBV-related deaths
 - Rate of acute hepatitis B is highest among non-Hispanic Black persons
 - Rates of hepatitis B-related deaths highest among non-Hispanic Asian/Pacific Islander (A/PI) persons and non-Hispanic Black persons

- Est. 4 million people in the US are living with HCV
 - In 2023,
 - 4,966 reported acute HCV cases
 - 69,000 estimated acute hepatitis C virus (HCV) infections
 - 11,194 reported HCV-related deaths
 - Rate of acute hepatitis C is highest among non-Hispanic American Indian/Alaska Native (AI/AN) persons
 - Rate of hepatitis C-related deaths is highest among non-Hispanic AI/AN and non-Hispanic Black persons

Centers for Disease Control and Prevention. Viral Hepatitis Surveillance Report – United States, 2023. https://www.cdc.gov/hepatitis-surveillance-2023/about/index.html Published April 2025. (Accessed May 2025)

Perinatal Hepatitis C in the US

PERINATAL HEPATITIS C

SCREEN patients for hepatitis C during each pregnancy.

TESTall perinatally exposed infants for hepatitis C infection at age 2 – 6 months.

MANAGE infants with an HCV RNA+ test alongside a provider with pediatric hepatitis C expertise.



Hepatitis C Cure Outcomes

ADULTS DIAGNOSED AND CURED* OF HEPATITIS C IN THE U.S., 2013-2022









*Cured is defined as viral clearance, which is an undetectable hepatitis C virus ribonucleic acid (HCV RNA) after a prior test result of detectable HCV RNA.

**Referred to as Other (client or self-pay) in the analysis

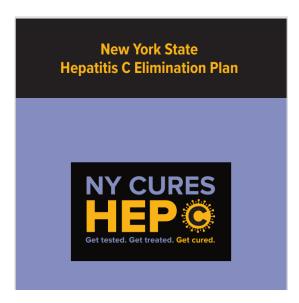
Source: Centers for Disease Control and Prevention

Domestic Efforts to Eliminate Hepatitis

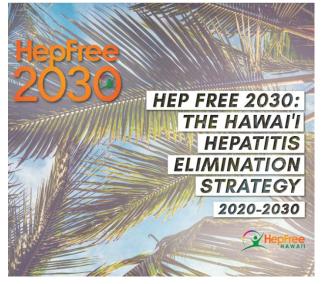


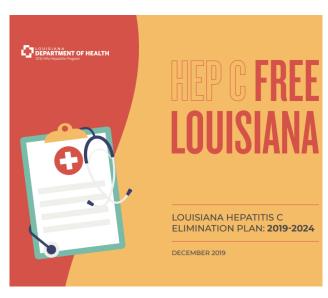


Jurisdictional Hepatitis Elimination Plans









New York State

Washington State

Hawaii

Louisiana

National Strategy

- 64-page roadmap to elimination released in January 2021
- Outlines a vision, goals, objectives, and strategies to eliminate hepatitis A, B, and C as public health threats in the U.S
- Separate Viral Hepatitis Federal Implementation Plan outlining federal plans and activities to implement the Strategic Plan's goals, objectives, and strategies



National Strategic Plan
A Roadmap to Elimination
for the United States | 2021-2025

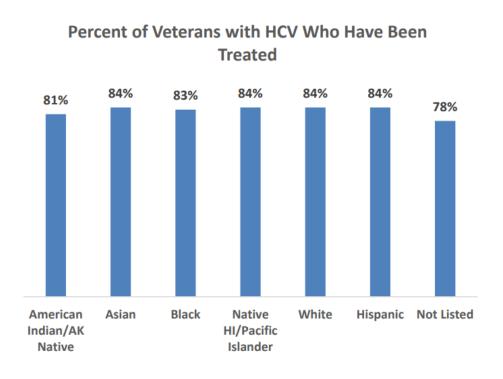


U.S. Department of Health and Human Services. 2020. Viral Hepatitis National Strategic Plan for the United States: A Roadmap to Elimination (2021–2025). Washington, DC.





Institutional & Population-focused Elimination





Cherokee Nation Health Services (CNHS) is making strides to protect American Indian and Alaska Native (AI/AN) people from hepatitis C

Al/AN people have the highest rates of hep C infection and death among all race and ethnicity groups in the United States



In 2015, CNHS implemented a comprehensive hepatitis C elimination program

By 2020*

- ★ 1,400+ people diagnosed
- * 86% linked to care
- 71% of those linked to care started treatment
- ★ 99% of those who completed treatment were cured



*Patient data for those who received a hepatitis C diagnosis during Nov 1, 2015-Oct 31, 2020

bit.ly/mm7222a2

JUNE 2, 2023





Integrated Viral Hepatitis Surveillance and Prevention Funding for Health Departments (CDC-PS21-2103)

- Focus: Support integrated viral hepatitis surveillance and prevention programs in states and large cities in the United States. Includes limited special projects focused on high impact settings.
- No. of Awards: 59 special district, city or township, state, and county governments
- Key Strategies:
 - Viral hepatitis outbreak planning and response
 - Surveillance for acute hepatitis A, B and C, and chronic hepatitis C. Recipients should
 - Develop jurisdictional viral hepatitis elimination plans
 - Increase comprehensive hepatitis B and C reporting
 - Improve HBV and HCV testing
 - Increase healthcare providers trained to treat hepatitis B and C.
- Total Award: over \$25 million
- Funding Start Date: Ending April 2026

National Hepatitis C Elimination Initiative

- 5-year initiative
- Pillars of the Plan
 - Point of Care Diagnostic Tests
 - Provide broad access to curative hepatitis C medications
 - Empower implementation efforts
- If implemented, projected to diagnose nearly 93% of all people living with HCV and cure about 90% of HCV infection in the U.S.



A National Hepatitis C Elimination Program in the United States A Historic Opportunity

MSc. PhD Executive Office of the President. Washington, DC.

Francis S. Collins, MD.

Executive Office of the President, The White House, Washington, DC.



Multimedia

Related article

One of the most dramatic scientific achievements of the last few decades has been the development of directacting antivirals (DAAs) that can cure hepatitis C in more than 95% of people infected. But 9 years after the first such treatment was approved in the United States, the simple 8- to 12-week oral cure is not reaching a significant fraction of the more than 2.4 million US residents chronically infected with hepatitis C. 1 More than 15 000 US residents die of hepatitis C every year unnecessarily. In its fiscal year 2024 budget proposal, the Biden-Harris administration has put forward a bold 5-year program to put the nation on course to eliminate hepatitis C in the United States.

The consequences of untreated hepatitis C can be severe: cirrhosis, liver failure, hepatocellular cancer, and death. Curative treatment stops transmission, prevents liver cancer and liver failure, and saves lives, It is even likely to be cost-saving, by avoiding expensive medical treatments for liver failure and liver cancer. So why is this not a public health success story? One major reason is that many people with hepatitis C have poor access to health care and experience other chronic health and social

It is rare to have the opportunity, using a simple and safe oral medication, to eliminate a lethal disease. But that is the situation facing the United States with hepatitis C.

tion goals. Only about one-third of people diagnosed with hepatitis C who have private insurance, Medicare, or Medicaid get treated, and the proportion is probably even lower for those without insurance.4 This is in part due to current restrictions, such as requirements for patient sobriety, requirements to document evidence of liver fibrosis, and the restriction of access to treatment only to those seen by specialists, that have been put in place by public and private insurers in reaction to the high cost of DAAs (\$90 000 per patient initially, still around \$20 000). Low rates of treatment may also reflect the complexity of traversing the full cascade of care in our health care delivery system.

Addressing this missed opportunity can save both lives and money. A national effort can build on lessons from programs launched by jurisdictions such as the states of Louisiana and Washington, the Cherokee Nation, the Veterans Health Administration, and the Federal Bureau of Prisons. For example, the Veterans Health Administration has treated more than 92 000 veterans with hepatitis C virus since 2014, with cure rates exceeding 90%.5 A key lesson from these initiatives is

> that success requires both managing the cost of the medications and developing a comprehensive public health effort to identify persons with hepatitis C and link them to care.

To bring these efforts to a national scale, the Biden-Harris administration is calling on Congress to embrace its proposed 5-year program to eliminate hepatitis C in the United States. This program was developed through extensive con-

JAMA Published online March 9, 2023



Innovation is Critical, Regulatory Changes are Essential





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Hep B Press Releases

Lifesaving, economically critical research is threatened by what's happening in Washington, D.C.

Making a major investment to fight hepatitis B in Africa

Taiwanese scientist conducting influential hepatitis research to receive the 2025 Baruch S.
Blumberg Prize

 FDA action increases the prospect for bringing hepatitis B screening one step closer to those who lack access to care

FDA action increases the prospect for bringing hepatitis B screening one step closer to those who lack access to care

A potentially significant public health tool, POC testing has been used in Europe and Asia for years.

Doylestown, Pa., Oct. 4, 2024 – The U.S. Food and Drug Administration (FDA) recently posted a **proposed rule**, "Microbiology Devices; Reclassification of Antigen, Antibody, and Nucleic Acid-Based Hepatitis B Virus Assay Devices," down-classifying hepatitis B screening and diagnostic tests from class III to class II. This increases the likelihood that point-of-care (POC) testing for hepatitis B in the U.S. will be made available, which is instrumental to improving access to testing for the disease.

A related announcement came about the same time from the National Institute of Health (NIH) Rapid Acceleration of Diagnostics (RADx) Tech program. In collaboration with the FDA, the program is soliciting proposals "to accelerate the validation, regulatory authorization and commercialization of innovative point-of-care (POC) tests for hepatitis B virus surface antigen (HBsAg) detection," the announcement said.

Hepatitis B Foundation President Chari A. Cohen, DrPH, MPH, applauded these steps by the FDA and NIH. For nearly two years, the Foundation and its partners have been advocating for reclassifying screening tests for hepatitis B.

Defining Syndemic Approaches





"Histories of disease have long suffered from narrow approaches that consider epidemic and endemic illnesses in isolation."

Mendenhall E, Newfield T, Tsai AC. Syndemic theory, methods, and data. Soc Sci Med. 2022 Feb;295:114656.

Syndemic Definitions | Original & Disease-Specific

- Original (2003): Synergistically interacting epidemics
- Lancet Commission (2019): A syndemic is when two or more diseases that co-occur, interact with each other, and have common societal drivers.
- CDC/DHP (2022): Syndemics are epidemics of diseases or health conditions, such as viral hepatitis, sexually transmitted infections (STI), substance use, and behavioral health issues—that interact with each other and by that interaction increase their adverse effects on the health of communities that face systematic, structural, and other inequities. In addition, SDOH (racism, homophobia, poverty) interact with syndemic conditions/diseases to elevate them to syndemic-level.

Defining Syndemic Approaches

[A] syndemic approach examines why certain diseases cluster (i.e., multiple diseases affecting individuals and groups); the pathways through which they interact biologically in individuals and within populations, and thereby multiply their overall disease burden, and the ways in which social environments, especially conditions of social inequality and injustice, contribute to disease clustering and interaction as well as to vulnerability.

- Merrill Singer, PhD, University of Connecticut (2017)

NASTAD's syndemic approaches center an equity-driven response to the epidemics of HIV, viral hepatitis, STIs and the infectious disease-related harms of drug use.

NASTAD's working statement on syndemic approaches (2023).

Syndemic Approaches: A Snapshot





Define the Syndemic | Federal



CALL TO ACTION:

Key Actions to Address Syndemics



Put People First



Focus on Equity



Put Money Where The Epidemic Is



Leverage Policy as a Public Health Tool

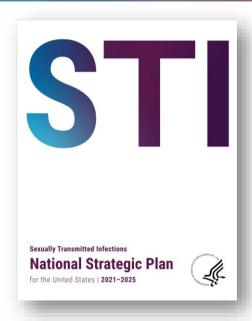


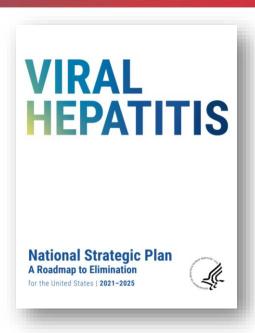
Prioritize Innovation

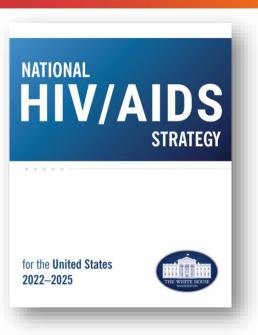
A Syndemic Approach to Public Health and Updates from NCHHSTP, Jonathan Mermin, MD, MPH RADM and Assistant Surgeon General, USPHS Director, National Center for HIV, Viral Hepatitis, STD, and TB Prevention, NASTAD Annual Meeting May 24, 2022



Syndemic Planning | Federal



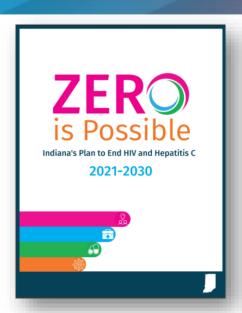




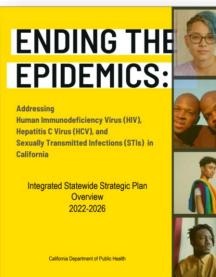




Syndemic Planning: Jurisdictional









Indiana

Tennessee

California

Connecticut





End the Syndemic in CT About

RFA Syndemic Approach to Infectious Disease Prevention & Linkage Services

Important Information

- Application due date: no later than 5:00 pm, June 5, 2023
- Contract timeframe: Initial contract beginning January 1, 2024
- Submit applications and questions to: ID.RFASyndemic@doh.wa.gov
- Upcoming application and information webinar April 12, from 10:00 a.m. 12:00 p.m. PST
- If you have guestions about this application, you can ask them until April 24, 2023, at 5:00 pm. (Please see the RFA schedule on the cover page; note that the question and answer period has been extended from the original ending date of April 18, 2023, to allow more time for interested parties to view the recordings of the pre-release webinars.)
- You must submit questions by email to the RFA Coordinator: ID.RFASyndemic@doh.wa.gov.

Summary

Washington State Department of Health Office of Infectious Disease is seeking applications from organizations interested in providing disease prevention and linkage services centering HIV, STI, viral hepatitis, and drug user health to individuals and communities in Washington state.

Eligible Program Activities V **How to Apply Application Materials - Syndemic**

Washington State Department of Health



Contracting/ Subcontracting: Syndemic Grantmaking

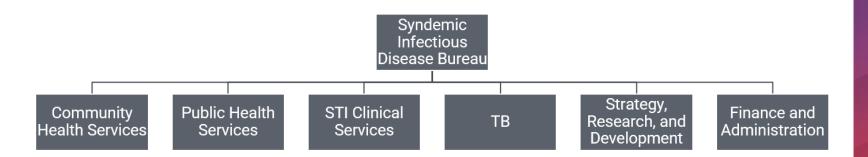


Expand all

V

CDPH Syndemic ID Bureau – Current State





Total FTE: ~140

Infrastructure/ Systems-level Change

Chicago Department of Public Health





The Case for Eliminating Hepatitis C Using a Syndemic Lens





Converging Public Health Threats

- Up to 25% of people living HIV are co-infected with HCV
- Up to 15% of people living HIV are co-infected with HBV
- Up to 80% of people who use drugs and are living with HIV are coinfected with HCV
- Est. 70% of new HCV infections are among people who inject drugs
- High burden of syphilis, HIV, HBV, and HCV; shared transmission routes
- Serious perinatal transmission risks across HIV, HBV, HCV, and syphilis

The People and Populations Impacted

Population Group	HIV	Hepatitis B (HBV)	Hepatitis C (HCV)	Syphilis	Gonorrhea	Injection Drug Use (IDU)
Men who have sex with men (MSM)	✓	▽ †	V	<u> </u>	<u>~</u>	\checkmark
People who inject drugs (PWID)	~	~	V V	~	~	V V
Black/African American communities	✓	▽	▽	V	✓	~
Latino/Hispanic communities	~	~	V	<u> </u>	~	~
Transgender individuals	<u>~</u>	<u>~</u>	~	~	~	✓
People experiencing homelessness	~	~	\checkmark	✓	<u>~</u>	V V
Incarcerated individuals	~	\checkmark	V V	\checkmark	~	✓ ✓
Infants (perinatal exposure)	/ †	/ †	/ †	> †	* †	_
Sex workers	✓	✓	<u> </u>	~	✓	<u>~</u>
American Indian/Alaska Native (AI/AN)	✓	~	\checkmark	\checkmark	\checkmark	
Asian/Pacific Islander	~	V V	✓	<u> </u>	<u>~</u>	✓

Key:

- **■** = Disproportionately affected
- ✓ † = Primarily affected via perinatal transmission
- •— = Not directly applicable



NASTAD's Syndemic Portfolio





NASTAD's Syndemic Technical Assistance Center

- First-of-its-kind technical assistance center designed to support the HIV, VH, STI, and harm reduction workforce at health departments
- Assess priority TA needs and deliver useful and effective products and capacity building assistance supports specific to syndemic planning and implementation
- Designed to develop and maintain a strengthened workforce in governmental HDs through the provision of CBA to establish or enhance cross-cutting skills and competencies necessary to be responsive across syndemics—while prioritizing the individual and overall well-being of the ID workforce. NASTAD's SynTAC will
- Employ a range of training and TA strategies and activities, including a learning community, peer-to-peer consultation, and resource repository based on existing models and best practices
- Formal launch in late 2025; cooperative agreement with the Centers for Disease Control and Prevention





Syndemic Approaches | Federal



CDC. Turning the Tide on STIs: Integrating Services to Address the Syndemic of STIs, HIV, Substance Use, and Viral Hepatitis. Available at https://www.cdc.gov/sti/media/pdfs/2024/11/Syndemic-Infographic-11-08-2024.pdf (Accessed May 2025)



Syndemic Approaches | National



State Syndemic Approaches and Congenital Syphilis

NGA State Learning Collaborative:

Strategies to Address the Infectious Disease Consequences of the Opioid Crisis through a Syndemic Approach

Background

Governors and their teams are responding to a rapid rise in syghilis and congenital syphilis cases. The National Governors Association Center of Best Practices (NGA Center) is working to support states and territories in implementing a "syndemic" approach to this and other infectious diseases, recognizing that these outbreaks are intertwined with substance use. A syndemic refers to intersecting epidemics that are not only concurrent or sequential, but also have synegistic relationship, with overlapping or interactiver inkt factors, and other a content of shared social and behavioral risk factors and healthcare access gaps. One condition may exacerbate or increase risk for other, as with on-infection of syphilis and HVI in pregnant patients increasing the risk of HVI transmission to the child." Congenital syphilis, along with other syndemic-involved health conditions, clusters in and burdens certain racial and ethnic populations more than others and aligns with disparties in health-related social factors.

In July, the NGA Center closed out a six-month State Syndemic Learning











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