HepVu 💌 🦄 NASTAD

2022 Viral Hepatitis Surveillance Status Report

An assessment of the status of viral hepatitis surveillance practices across U.S. jurisdictions in 2022.

Released November 2023

An estimated **2.4 million** people in the U.S. are living with hepatitis C infection, and up to **2.2 million** people could be living with hepatitis B in the U.S. The need for expanded, standardized, and reliable viral hepatitis surveillance continues to impact public health efforts, resources, and the response across the U.S. to this epidemic. A lack of robust surveillance data limits the ability to:



Monitor the disease burden and related disparities



Track changes in the epidemic



Mount effective public health responses



Eliminate the hepatitis C epidemic in the U.S.



In 2021, the Centers for Disease Control and Prevention (CDC) **released funding** for viral hepatitis surveillance across 59 jurisdictions. Prior to 2021, only 14 states received federal funding specifically for viral hepatitis surveillance. This 2022 update to the 2021 inaugural viral hepatitis surveillance status report builds on the benchmarked state of viral hepatitis surveillance in the U.S. prior to funding dissemination, monitors initial changes over time as additional resources were allocated, assesses how jurisdictions across the U.S. are measuring the impact of viral hepatitis on their communities, and highlights areas where additional resources are needed.

Why Surveillance?

Viral Hepatitis Surveillance Vision

Viral hepatitis surveillance programs need to be expanded to help ensure effective prevention and treatment of hepatitis infections. **Collecting information through surveillance can help us to answer questions like:**



How many people have current, diagnosed viral hepatitis infections?



What are the characteristics of people living with, and who have increased chances of getting, a viral hepatitis infection?

A robust viral hepatitis surveillance system can help us to understand:

- The burden of viral hepatitis
- Which groups of people have increased chances of getting viral hepatitis infections



How many people have received treatment for hepatitis C? How many people need treatment for hepatitis C? Which groups of people are most in need of treatment for hepatitis C? How many people have achieved sustained virologic response (SVR) or have been cured of their chronic hepatitis C infection?

- How many people need care and treatment for viral hepatitis
- Inequities in hepatitis care and treatment



Findings in this report reveal what kinds of viral hepatitis surveillance practices are happening in jurisdictions across the U.S., how practices are progressing over time, where gaps exist, and what resources are needed.

2022 Viral Hepatitis Surveillance Status Report

2022 Program Funding

HIV Surveillance & Prevention Funding

About \$400M*

*https://www.cdc.gov/hiv/pdf/funding/announcements/ps18-1802/cdc-hiv-ps18-1802-annual-funding-amounts.pdf **https://www.cdc.gov/hepatitis/policy/2103_CoAg-FundingAmounts.htm

The Findings

Overview

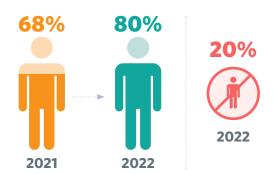
Funding and dedicated resources increase capacity to perform vital surveillance activities. In fact, jurisdictions with previous viral hepatitis funding and resources for a full-time employee (FTE) dedicated to viral hepatitis had much higher rates of basic surveillance activities, such as disseminating state and local information about viral hepatitis cases and linking viral hepatitis records with other databases to collect additional information.

While approximately half of survey respondents expect to see meaningful improvements in jurisdictional viral hepatitis surveillance programs in 2023, half also need supplemental

funding in addition to CDC's Integrated Viral Hepatitis Surveillance and Prevention Funding for Health Departments (IVHSP) funding to conduct basic viral hepatitis surveillance activities.

Jurisdictions with full-time employee dedicated to viral hepatitis surveillance

Though the number of jurisdictions with a full-time employee (FTE) dedicated to viral hepatitis surveillance increased from 68% in 2021 to 80% in 2022, 1/5 (20%) still did not have dedicated staffing in 2022.



Viral Hepatitis Surveillance

About \$25.7M

Staff and dedicated time

are needed to perform basic

level impacts the ability to

Who is at increased risk

😔 Who needs treatment

answer questions about:

Burden of disease

surveillance activities. Capacity

& Prevention Funding

Jurisdictions believe they need 3-5 FTEs to conduct viral hepatitis surveillance

To conduct viral hepatitis surveillance activities specified under CDC IVHSP, jurisdictions report that on average, they believe 3-5 full-time employees (FTE) are necessary.



Jurisdictions reported major challenges with hiring and retaining surveillance staff. Staff turnover was a significant impediment to conducting basic viral hepatitis surveillance activities in 2022.

Released November 2023

HIV: An Example of Robust Surveillance

National HIV surveillance provides an illustrative example of effective surveillance practices and how surveillance can be used for prevention and treatment.

HIV surveillance consists of complementary systems to capture information about people living with HIV or an increased chance of getting an HIV infection. These systems have capacity for data sharing and matching and provide information that allow us to understand characteristics of people that are:



Diagnosed with HIV



At increased risk for acquiring HIV



Receiving care and treatment for HIV



In need of prevention, care, and treatment for HIV

This information is compiled from multiple CDC-funded HIV data systems and other data sources. Summary data are disseminated to other federal, state, and local partners to inform policies, program planning, and resource allocation for preventing and treating HIV infections.

Fundamental Surveillance Activities

Elimination

Effective vaccines are available for hepatitis A and B, successful therapies for hepatitis B, and curative treatment for hepatitis C. These tools make it possible to eliminate viral hepatitis. According to the World Health Organization (WHO), viral hepatitis elimination is **defined** as a 90% reduction in new infections and a 65% reduction in hepatitis-related deaths. The <u>Viral</u> <u>Hepatitis National Strategic Plan for the United States: A Roadmap to Elimination (2021-2025)</u> outlines a plan for strategic coordination towards achievement of our nation's elimination goals.

Jurisdictional elimination plans and goals are important benchmarks for establishing localized approaches that support elimination.

Established elimination goals can increase political will for answering questions like:

- How many people need care or treatment?
- Which groups of people are most in need of care or treatment



Jurisdictions with viral hepatitis elimination plans increased from 24 (43%) in 2021 to 38 (70%) in 2022. However, only 35% have public elimination plans, and 54% are implementing elimination plans.



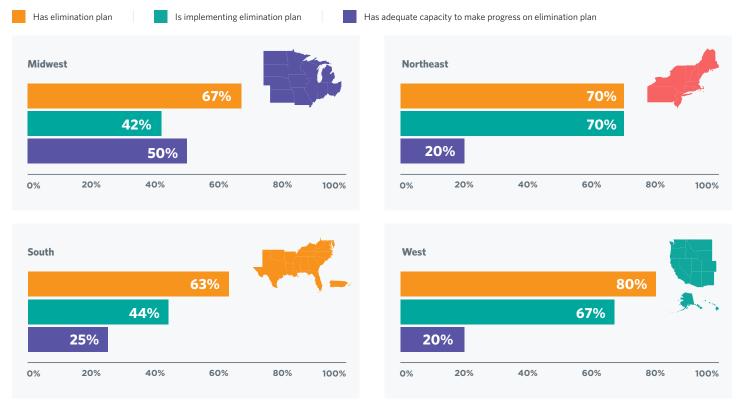
In 2022, only 30% of jurisdictions had capacity to make progress toward elimination goals, and 33% had capacity to measure progress toward those goals.



Only 3% of jurisdictions said they could make progress toward elimination goals at current levels of CDC funding for hepatitis surveillance.

Elimination by Region

While most regions have viral hepatitis elimination plans, implementation of and capacity* to make progress on those plans varies.

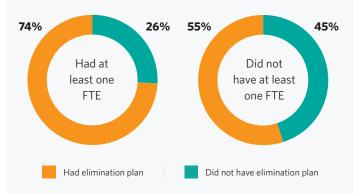


*Capacity is defined as enough resources through CDC IVHSP funding alone OR enough resources through CDC IVHSP funding in addition to other resources or funding mechanisms

Elimination by Staffing

Jurisdictions with funding and resources for at least one full-time employee (FTE) dedicated to viral hepatitis surveillance were more likely to have an elimination plan.





Elimination by Funding

Of funded jurisdictions, 100% with previous funding have viral hepatitis elimination plans. Meanwhile, only 61% of newly funded jurisdictions have viral hepatitis elimination plans.



100% with previous funding have viral hepatitis elimination plans.



61% of newly funded jurisdictions have viral hepatitis elimination plans.

Data Dissemination

Alongside establishing elimination goals, publishing annual surveillance summaries for viral hepatitis and estimates for prevalence and numbers of hepatitis B and C cases are important for informing programmatic planning and resource allocation. Funding and staffing for surveillance allows jurisdictions to produce these important summaries and estimates.



Ability to disseminate data impacts the ability to answer questions about:

Current burden of disease

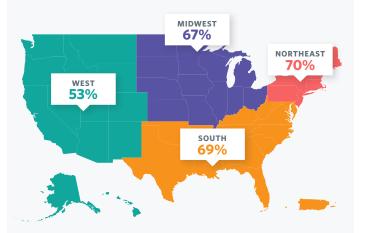
Surveillance Summaries

Though the number of jurisdictions that were able to produce viral hepatitis annual surveillance summaries increased from 55% in 2021 to 65% in 2022, almost 1/3 (35%) of jurisdictions still did not produce annual surveillance summaries in 2022.

Surveillance Summaries by Region

Capacity to produce annual viral hepatitis surveillance summaries varied by region with the West having the least jurisdictions producing summaries (53%) and the Northeast having the most (70%).

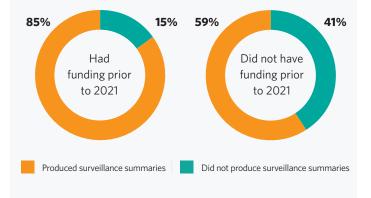
Capacity to produce viral hepatitis summaries by region



Surveillance Summaries by Funding

Funding also increased capacity to publish viral hepatitis surveillance summaries. In fact, previously funded jurisdictions were much more likely than newly funded jurisdictions to produce surveillance summaries.

Viral hepatitis surveillance summaries status by funding



Case Estimates* & Prevalence**



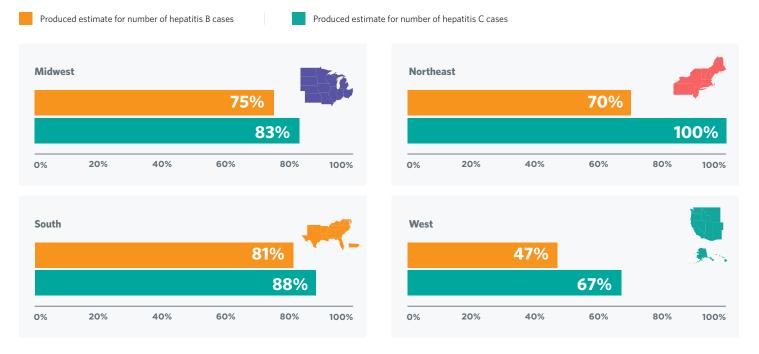
69% of jurisdictions produced annual estimates for the number of hepatitis B cases in 2022, but only 15% produced hepatitis B prevalence estimates.



83% of jurisdictions produced annual estimates for the number of hepatitis C cases in 2022, but only 20% produced hepatitis C prevalence estimates.

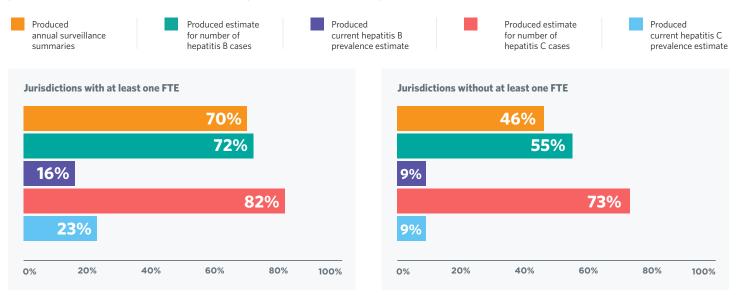
Case Estimates by Region

Capacity to summarize number of reported viral hepatitis cases varied by region with the West having the least number of jurisdictions producing estimates for the number of hepatitis B (47%) and hepatitis C (67%) cases.



Case Estimates & Prevalence by Staffing

Jurisdictions with funding and resources for at least one full-time employee (FTE) dedicated to viral hepatitis surveillance were more likely to produce and disseminate information on viral hepatitis case estimates and prevalence.



*Case Estimates: The number of unique, positive case reports received by the jurisdiction.

**Prevalence: The number of currently active infections in the jurisdiction, as determined by the number of cases among people who are alive with a viral hepatitis infection that has neither been cleared nor cured.

Investigational Surveillance Activities

Case Investigation and Contact Tracing

Case investigation, which includes reviewing medical records or contacting the healthcare providers of people with recent viral hepatitis diagnoses, can provide information about patient risk factors and their needs for prevention, care, and treatment. Contact tracing, or interviewing people with recent diagnoses and reaching out to their contacts, can help public health programs to initiate testing and prevention for sexual or injection partners.



Data matching and contact tracing can help answer questions like:

- Disease burden distribution
- Solution what groups of people are at increased risk
- Who needs targeted intervention



Overall, case investigation capacity remained the same over time. In 2021, 80% of jurisdictions either reviewed medical records or contacted healthcare providers for suspected acute (new) hepatitis B infections, while 79% did so in 2022.

And although nearly half (49%) of jurisdictions reported doing any contact tracing for people with suspected or probable acute (new) hepatitis B cases, only 19% of jurisdictions contacted people potentially exposed for more than 50% of acute cases.



Overall, case investigation capacity remained the same over time. In 2021, 71% of jurisdictions either reviewed medical records or contacted healthcare providers for suspected acute (new) hepatitis C infections, while 72% did so in 2022.

And although nearly half (46%) of jurisdictions reported doing any contact tracing for people with suspected or probable acute (new) hepatitis C, only 11% contacted people potentially exposed for more than 50% of acute cases.

Targeted Surveillance Activities

Pregnancy Status Data

Collecting information about pregnancy status and connecting it to viral hepatitis case records allows providers to screen for hepatitis B and C in pregnancy and implement post-partum treatment plans for the parent and child in accordance with current recommendations.



About 40% of infants born to pregnant people living with hepatitis B will develop chronic hepatitis B, yet pregnancy status was considered a reportable condition for hepatitis B for only 71% of jurisdictions.



As of April 2020, CDC recommends prenatal care providers screen all pregnant persons for hepatitis C. However, pregnancy status was considered a reportable condition for hepatitis C for only 46% of jurisdictions.

Health Disparities Data

The Viral Hepatitis National Strategic Plan: A Roadmap to Elimination 2021-2025 outlines objectives and strategies to aid stakeholders—researchers, policy makers, health care providers, advocacy groups, and patients—in working together to eliminate viral hepatitis as a public health threat in the U.S. One of those core objectives is to reduce viral hepatitis-related disparities and health inequities.

Collecting information and data about health disparities informs better decision making, resource allocation, and programmatic interventions to reach those who need prevention and treatment interventions most.

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Percentage of jurisdictions that have adequate data to assess and address viral hepatitis disparities by:

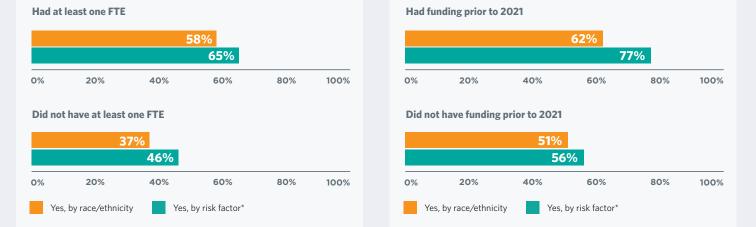


Health Disparities Data by Dedicated Staffing

Jurisdictions with funding and resources for at least one fulltime employee (FTE) dedicated to viral hepatitis surveillance were more likely to have adequate data to assess and address health disparities.

Health Disparities Data by Funding

Jurisdictions with funding prior to 2021 are more likely to have adequate data to assess and address health disparities.



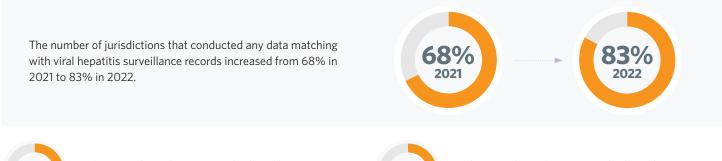
*e.g. people who inject drugs

ΗΙΥ

Syndemic Data Matching

A syndemic refers to two or more interrelated epidemics that are mutually reinforcing and interact in a way that amplifies the overall burden of disease. Hepatitis C and HIV are an example of syndemic infections, and both can be transmitted by sharing needles, syringes, water, alcohol swabs, and other equipment used to inject drugs. **Co-infection with HIV and hepatitis C is common**.

By identifying new infections and matching with other related epidemic data, not only can patients be treated for HIV or cured of hepatitis C, stopping additional infections from occurring, but disease states and burden, prevention, and interventions can be better aligned to address multiple epidemics more efficiently and effectively.



only 60% of jurisdictions matched viral hepatitis case reports with HIV surveillance data.

STD

Only 37% of jurisdictions matched viral hepatitis case reports with STD surveillance data.

Syndemics Data Matching by Staffing

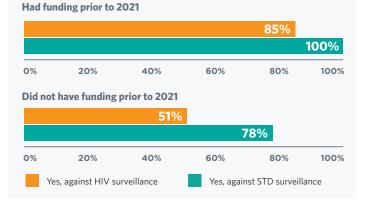
Jurisdictions with funding and resources for at least one full-time employee (FTE) dedicated to viral hepatitis surveillance were more likely to do any data matching between viral hepatitis case reports and HIV surveillance.

Had at least one FTE

| | | | 65 % | | |
|--------|-----------------------|---------|-------------|-----|------|
| 0% | 20% | 40% | 60% | 80% | 100% |
| Did no | t have at least 36 | one FTE | | | |
| 0% | 20% | 40% | 60% | 80% | 100% |
| | | | | | |

Syndemics Data Matching by Funding

Jurisdictions with funding prior to 2021 were more likely to do any data matching for viral hepatitis case reports.



Recommendations to Improve U.S. Viral Hepatitis Surveillance

Expanded, standardized, and reliable viral hepatitis surveillance is necessary to promote effective public health efforts, identify resource needs, and support response across the US. to this epidemic. While public health professionals are doing commendable surveillance work with currently available resources, this report showcases the need for additional funding and resources. **Based on the state of viral hepatitis surveillance in the U.S. it is recommended to:**

1 Invest in infrastructure needed for viral hepatitis surveillance, including data systems and staff trained in data science.

- 2 Increase federal and state funding for viral hepatitis surveillance.
- **3 Target surveillance resources** toward monitoring populations with highest viral hepatitis risk, such as people who inject drugs.
- Prioritize dedicating resources toward health disparities data collection and analysis. Data are not currently adequate to have an equitable viral hepatitis surveillance program despite the <u>Viral Hepatitis National Strategic Plan: A Roadmap to Elimination 2021-2025</u> core objective of reducing viral hepatitis-related disparities and health inequities.

About the Survey

HepVu and NASTAD collaborated to create the first-ever viral hepatitis surveillance status report in 2022. This year's update builds and expands upon the inaugural report with year over year trends, deeper dives into capacity by dedicated staffing and funding, availability of health equity data, and more.

HepVu is an interactive online mapping tool that visualizes the impact of the viral hepatitis epidemics on communities across the United States to promote data-driven public health decision-making. **NASTAD** is a

leading non-partisan non-profit association that represents public health officials who administer HIV and viral hepatitis programs in the U.S. to end HIV/AIDS, viral hepatitis, and intersecting epidemics. We worked with a <u>steering committee</u> comprised of state and local health department representatives, national policy/ advocacy organizations, and researchers to develop a set of indicators for survey measurement, determine process, develop a survey, and disseminate results.

In March 2023, a survey requesting information on hepatitis B and C surveillance practices in 2022 was sent to state, local, and territorial jurisdictions across the U.S., and 92% of jurisdictions responded. Data were processed by Emory University and compared to additional indicators like prior viral hepatitis funding, dedicated staffing, and other factors. Moving forward, HepVu and NASTAD will continue to collect data from jurisdictions on these indicators each year, analyze the results, and prepare a status report describing findings nationally and by jurisdiction.

