Reducing Barriers and Improving Outcomes in HIV and Hepatitis C (HCV) Co-infection

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Division of Viral Hepatitis

CDC/HRSA Advisory Committee on HIV, Viral Hepatitis and STD Prevention and Treatment (CHAC)
October 24, 2023
Hepatitis C is a Public Health Crisis

Acute hepatitis C by year, 2014–2021

Source: Viral Hepatitis Surveillance – United States, 2021 | CDC
Declines in Hepatitis C-Related Deaths have Stalled and Disparities Persist

Hepatitis C-related deaths, by race/ethnicity, United States, 2012-2021

- Overall: 3.18
- Multi-race, NH: 2.81
- AI/AN, NH: 9.99
- Black, NH: 5.01
- Hispanic: 3.67
- White, NH: 2.98
- API, NH: 1.32

Source: Viral Hepatitis Surveillance – United States, 2021 | CDC
Hepatitis C Treatment Coverage is Insufficient

Number of Persons Treated for Hepatitis C with DAAs Using National Pharmacy Claims Data, United States, 2014–2020

Timely Hepatitis C Treatment by Insurance Type, 2019–2020

Source: Teshale et al, CID, 2022. DAAs = direct-acting antiviral agents
During an HIV Outbreak Among People Who Inject Drugs in Kanawha County, West Virginia during 2019–2021:

- 86% of cases had current hepatitis C virus infection
- Hepatitis C diagnosis preceded HIV diagnosis by a median of 46 months (IQR: 29–71 months)

Sources: Hershow et al., *MMWR*, 2022; Hudson et al., *Clinical Infectious Diseases*, 2023
## Interventions and Outcomes for PWID

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Outcomes</th>
<th>Overdose mortality</th>
<th>All-cause mortality</th>
<th>HIV transmission</th>
<th>HCV transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOUD</td>
<td></td>
<td>59%</td>
<td>53%</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Syringe services</td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
<td>74%</td>
</tr>
</tbody>
</table>

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

- **Component 1: Surveillance**
  - Improve surveillance of viral hepatitis, including outbreak detection and control

- **Component 2: Prevention**
  - Increase access to hepatitis testing, prevention, and treatment

- **Component 3: Special Projects**
  - Enhance services to people who inject drugs through outcome-focused activities
Developing Viral Hepatitis Surveillance Guidance

Source: Viral Hepatitis Surveillance Guidance

Laboratory-based Hepatitis C Virus Clearance Cascade
Program Guidance for Local and State Health Departments
July 29, 2021

Purpose
As the United States implements hepatitis C virus (HCV) elimination plans, jurisdictions will need tools to measure the impact of public health interventions and identify opportunities for improvement. An HCV clearance cascade can be developed using longitudinal HCV surveillance laboratory data and be used at a population level to quantify and identify opportunities to improve HCV clearance. Once developed, the HCV clearance cascade can be regularly updated to monitor changes over time and track progress toward established goals. Further analysis of the HCV clearance cascade can help identify disparities in progression through the cascade by population or geography.

The purpose of this document is to assist jurisdictions that have systematic reporting and processing of all positive hepatitis C virus (“positive”, “detected”, and negative “not detected”) results, such as the Florida General Antigen Test results, to develop a standardized, replicable, laboratory-based HCV clearance cascade. This information, in turn, can be used by viral hepatitis programs to identify barriers and develop strategies and interventions to improve outcomes.

Commentary

Development of a Standardized, Laboratory Result–Based Hepatitis C Virus Clearance Cascade for Public Health Jurisdictions

Source: Montgomery et al, PHR 2022.
Statewide Viral Clearance Cascade for Hepatitis C Among People With HIV and HCV Coinfection in Connecticut

Figure 2. Hepatitis C virus (HCV) clearance cascade for people with HIV (as of December 31, 2015) and HCV coinfection in Connecticut based on HCV laboratory data from January 1, 2016, through August 3, 2020. Bars show the number of people in each step of the Centers for Disease Control and Prevention HCV clearance cascade.

Source: Wegener et al., Public Health Rep, 2023
By completing Component 3 projects, funded jurisdictions will help **improve infectious disease outcomes** for PWID.

**Activities**

3.1. Improve **access to services** for PWID in settings disproportionately affected by drug use

- Developing and implementing a ‘PWID service bundle’
- In settings that serve PWID
  - e.g., SSPs, SUD treatment providers, hospital settings, correctional facilities

**Outcomes**

- Increased access to **high-coverage needle-syringe exchange** among PWID
- Increased **linkage to SUD treatment** (including MOUD for PWID with OUD)
- Increased **HCV, HIV, and HBV testing** among PWID
- Increased **hepatitis C cures among PWID** with hepatitis C
- Increased **receipt of hepatitis B and A vaccination** among PWID
- Decreased **new viral hepatitis, HIV and other infections** (e.g., bacterial, fungal) among PWID
**Purpose:** Increase access to harm reduction services for PWID and reduce incidence of infectious diseases and other complications of injection drug use

**Component 1:** Support a national network of Syringe Services Programs (SSPs) and oversee implementation and use of an annual survey of SSPs

**Component 2:** Support and strengthen SSP implementation

65 programs across 31 jurisdictions were awarded a total of $6 million.
Conclusions

- **Accelerated progress** is urgently needed to meet national viral hepatitis elimination goals. Several critical **surveillance infrastructure** and **policy gaps** remain (information systems, human resources, reporting policies, data sharing, etc.)

- Social and structural factors put **people** at risk for **multiple** viral hepatitides and other diseases. This negative interaction can potentially exacerbate the adverse health outcomes of the affected population.

- By **centering** our efforts on key **populations**, rather than pathogens, we can more effectively study the health outcomes and service gaps for populations, provide more **holistic** services, reduce **stigma**, and improve **efficiency** and **cost-effectiveness** of interventions.
Acknowledgements

Monica Adams
Dee Bixler
Ijeoma Ihiasota
Anne Moorman
Karina Rapposelli
Carolyn Wester

For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Professional Learning Communities: A Model to Support Integrating HCV, HIV, and STD Services into Opioid Treatment Programs

CDC/HRSA Advisory Committee on HIV, Viral Hepatitis, and STD Prevention & Treatment

October 24, 2023
Background

• SAMHSA provided supplemental funding to ATTC Network to address rising rates of Hepatitis C Virus (HCV), especially among people who inject drugs in 2017.

• ATTC Network Coordinating Office developed strategies and tools that go beyond training to increase diagnosis and treatment of HCV in Opioid Treatment Programs.

• Supplemental funding ended in 2020 and carry-over and Opioid Response Network funding have been utilized to bring this integration work to its current state.
The Addiction Technology Transfer Center Network
Opioid Response Network provides training and technical assistance (TA) via local experts across the country, focusing on applying evidence-based practices in prevention, treatment and recovery to meet locally identified needs. TA activities are designed to enhance efforts already underway throughout the United States and territories. ORN utilizes the infrastructure of the ATTC Network for TA delivery.

https://opioidresponsenetwork.org/
HCV and Opioids

• There has been a steep increase in HCV infection associated with opioid injection and injection drug use (IDU).

• Globally, the HCV prevalence among people who inject drugs (PWID) is estimated at 40%, with IDU accounting for 23% of new infections.

Why OTPs and HCV?

• OTPs help patients navigate and overcome barriers to care.
• OTPs see their patients regularly.
• In some cases, OTPs have onsite medical staff.
• OTPs have shown success in integrating HCV screening into initial and/or routine physical exams and blood work.
What does this mean for OTP patients?

• We met Riley early in our project work – a client at Athens Clinic, an OTP in Georgia (photo shared with permission).

• He had been living with HCV for more than 20 years and described his attempts to get treated as an “enormous amount of headache and heartache.”

• When the clinic began offering HCV testing and treatment, Riley was first in line and became the first patient cured of HCV from the clinic.
Resources Developed

https://attcnetwork.org/centers/global-attc/hcv-current-initiative
Levels of Integration

• There is considerable variation within and across OTPs such as in size, capacity, treatment populations, state restrictions, funding, etc.

• Our tools recognize these variations and propose the use of tiered approach to integration.

• There is no rigid timeline to move from one tier to another.
Learning Communities as Technical Assistance

CULTURAL AND LINGUISTIC APPROPRIATENESS

UNIVERSAL TECHNICAL ASSISTANCE
- Mass mailings, publication of information (e.g., newsletters), untargeted presentations to heterogeneous groups, website, social media

TARGETED TECHNICAL ASSISTANCE
- Online courses, webinar series for specialized groups, focused knowledge-sharing, communities of practice, short-term training, replication guides

INTENSIVE TECHNICAL ASSISTANCE
- Ongoing consultation in specific communities, states & systems

OUTCOMES
- Increase Reach
- Increase Motivation to Use & Apply Interventions (in general and specific)

LEARNING COMMUNITIES
- Use or integration of intervention by the intended users into their practice
What is a Learning Community?

A Learning Community brings together a cohort of individuals or teams in a collaborative environment of learning, open communication, and peer support with opportunities for problem-solving, co-learning, and implementation of evidence-based strategies.
HCV/OTP Learning Community Session Topics

1. Integrated Care Model, HCV Testing, and Orientation to the Learning Community
2. Preparing for Organizational Change and Planning
3. Building Workforce Capacity and Change Indicator Review
4. Developing Protocols and Procedures
5. Ensuring Care Coordination and Linkages to Services
6. Change Indicator Sharing and Discussion
7. Assessing and Evaluating
8. Planning for Funding and Sustainability
9. Closing Ceremony
OTP Participation: A Team Approach

• Our learning community model uses a team approach. Participating OTPs must identify and engage a team of staff.

• Teams must have buy-in and support from the highest level of leadership (i.e., CEO, Executive Director), a crucial prerequisite.

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Leader</td>
<td>Serves as the point person from the OTP</td>
</tr>
<tr>
<td>Clinical Lead</td>
<td>Has decision-making authority and ability to impact clinical pathways and workflows</td>
</tr>
<tr>
<td>Finance Lead</td>
<td>Provide financing support for sustainable program implementation</td>
</tr>
<tr>
<td>Medical Lead</td>
<td>Oversees medical and prescriber initiatives - generally the OTP medical director</td>
</tr>
</tbody>
</table>
Data Collection

• Learning Community participants use their own data to gauge progress of integration over time.

• Ideally participants will report data three times during the Learning Community.
Change Indicators

1. Number of patients given an HCV antibody test
2. Number of patients who had no HCV antibody detected (nonreactive to antibody test)
3. Number of patients who had HCV antibodies (reactive to antibody test) and who had no HCV RNA (RNA not detected)
4. Number of patients who had HCV RNA detected and who were linked to care [this definition will vary by OTP: referral, treatment initiated on-site, etc.]

*Retest if the person has engaged in risky behavior within 6 months or if risky behavior occurs.
## Snapshot of a Learning Community – Cohort 1

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Served Annually</th>
<th>Tested at Baseline</th>
<th>Tested at Final</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottsdale, AZ</td>
<td>4,413</td>
<td>167</td>
<td>N/A – stopped testing due to lack of bloodborne pathogen training</td>
<td>N/A</td>
</tr>
<tr>
<td>Tucson, AZ</td>
<td>10,005</td>
<td>46</td>
<td>104</td>
<td>126%</td>
</tr>
<tr>
<td>Salinas, CA</td>
<td>114</td>
<td>9</td>
<td>13</td>
<td>44%</td>
</tr>
<tr>
<td>Des Moines, IA</td>
<td>753</td>
<td>40</td>
<td>90</td>
<td>125%</td>
</tr>
<tr>
<td>Greensboro, NC</td>
<td>269</td>
<td>4</td>
<td>17</td>
<td>325%</td>
</tr>
<tr>
<td>Raleigh, NC</td>
<td>663</td>
<td>0</td>
<td>unknown - withdrew</td>
<td>N/A</td>
</tr>
<tr>
<td>Pleasantville, NJ</td>
<td>1,324</td>
<td>165</td>
<td>182</td>
<td>10%</td>
</tr>
<tr>
<td>Milford, OH</td>
<td>727</td>
<td>unknown – they partnered with another org that was not tracking monthly data</td>
<td>20 (developed own tracking)</td>
<td>unknown</td>
</tr>
<tr>
<td>Allegheny, PA</td>
<td>300</td>
<td>unknown - withdrew</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Walla Walla, WA</td>
<td>94</td>
<td>unknown - withdrew</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
## Snapshot of a Learning Community – Cohort 2

### Table of Testing Data

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Served Annually</th>
<th>Tested at Baseline</th>
<th>Tested at Final</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver, CO</td>
<td>575</td>
<td>0</td>
<td>0</td>
<td>0% - anticipated beginning testing soon</td>
</tr>
<tr>
<td>Stratford, CT</td>
<td>930</td>
<td>unknown - withdrew</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Three Sites in MD</td>
<td>1195</td>
<td>55</td>
<td>unknown – withdrew</td>
<td>N/A</td>
</tr>
<tr>
<td>North Wilkesboro, NC</td>
<td>578</td>
<td>unknown - withdrew</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Binghamton, NY</td>
<td>400</td>
<td>48</td>
<td>51</td>
<td>6%</td>
</tr>
<tr>
<td>Glen Oaks, NY</td>
<td>420</td>
<td>10</td>
<td>8</td>
<td>-20%</td>
</tr>
<tr>
<td>Rochester, NY</td>
<td>935</td>
<td>unknown - withdrew</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Syracuse, NY</td>
<td>1022</td>
<td>48</td>
<td>31</td>
<td>-35%</td>
</tr>
<tr>
<td>Watertown, NY</td>
<td>280</td>
<td>5</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>Two Sites in OR</td>
<td>2204</td>
<td>60</td>
<td>117</td>
<td>95%</td>
</tr>
<tr>
<td>Lansdowne, PA</td>
<td>250</td>
<td>79</td>
<td>65</td>
<td>-18%</td>
</tr>
<tr>
<td>Sequim, WA</td>
<td>unknown - just opened</td>
<td>0</td>
<td>20</td>
<td>2000%</td>
</tr>
<tr>
<td>Three Sites in WA</td>
<td>4122</td>
<td>0</td>
<td>3</td>
<td>300%</td>
</tr>
<tr>
<td>Vancouver, WA</td>
<td>640</td>
<td>46</td>
<td>24</td>
<td>-48%</td>
</tr>
</tbody>
</table>

**Anecdotal reasons shared about decrease in testing:**
Fewer untested patients, pauses for additional staff training or formal policy creation
Anticipated Barriers to HCV Testing

- Funding/reimbursement: 22%
- Staffing: 14%
- Time: 13%
- Education: 8%
- Patient retention: 8%
- Resources: 8%
- Patient engagement: 8%
- Buy-in: 3%
- Communication/collaboration: 4%
- Regulations: 3%
- Other: 6%
- Staff ownership: 3%
Closing & Next Steps

1. We are responding to the national movement toward syndemic approaches.
2. Expanding from single infectious disease testing and treatment in the OTP setting to multi-disease testing and treatment.
3. Modifying our resources for the field to reflect this expanded scope and pilot testing new resources with OTPs.
4. Pilot testing resources with one Certified Community Behavioral Health Center to determine if this model could be expanded to include treatment settings beyond OTPs.
Addressing Gaps in Public Health
HCV Surveillance Data Systems

Kelsa Lowe, MPH
Hepatitis C Epidemiologist

Wisconsin Department of Health Services, Bureau of Communicable Diseases
Acknowledgments

Abby Winkler, MPH
HIV Care Services Epidemiologist
Wisconsin Department of Health Services, Division of Public Health
• Efforts to improve HCV data surveillance systems
• Successes/challenges experienced
• How these efforts have helped get more co-infected individuals treated for HCV
Wisconsin Electronic Disease Surveillance System (WEDSS)

- WEDSS Support Team
  - 4 system administrators
  - Provide updates
  - TA and meet needs of disease-specific reporting
  - Implementation of automation

- WEDSS trainers
  - Train Local and Tribal Health Departments (LTHDs) and other WEDSS operators

- Informaticists
  - Data system connections
  - Reporting to CDC
  - System maintenance
  - Electronic Case Reporting (eCR) implementation – 2024

- Additional staff positioned at Wisconsin State Lab of Hygiene (WSLH) coordinating ELR
  - WEDSS staff at WSLH communicate with lab partners across the state to increase quality of reporting and provide TA
HIV/HCV Co-diagnosis Process

For Discussion
Number of Newly Detected HCV-HIV Coinfections
(Per eHARS currently living with HIV in WI; Per WEDSS ever had HCV+ test)

Filter by Date of Most Recent Diagnosis
1/1/2019 to 6/28/2023 and Null values

Filter by risk

Total cases by quarter

By risk

By age

By race

By gender

HIV/HCV Co-diagnosis Dashboard
### Wisconsin Coinfection Care Cascade, 2020-2022

#### All Positive Reported HCV Results, 2020 – 2022

<table>
<thead>
<tr>
<th>HCV antibody or RNA positive</th>
<th>Had RNA test</th>
<th>RNA result was positive</th>
<th>Had another RNA test</th>
<th>Most recent RNA result was negative</th>
</tr>
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<tr>
<td>10,279</td>
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<td>54</td>
<td></td>
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**Source:** Wisconsin Electronic Disease Surveillance System, newly reported hepatitis C cases 2020-2022.
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<tr>
<td>10,279</td>
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<td>85%</td>
<td>4,221</td>
<td>2,443</td>
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<tr>
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<tr>
<td>54</td>
<td>45</td>
<td>83%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### HIV/HCV New Detection, 2020 – 2022

- **HCV antibody or RNA positive**: 54
- **Had RNA test**: 45
- **RNA result was positive**: 83%
- **Had another RNA test**: 28%
- **Most recent RNA result was negative**: 58%

**Source**: Wisconsin Electronic Disease Surveillance System, newly reported hepatitis C cases 2020-2022.
### Wisconsin Coinfection Care Cascade, 2020-2022

#### All Positive Reported HCV Results, 2020 – 2022

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Wisconsin Coinfection Care Cascade, 2020-2022

**All Positive Reported HCV Results, 2020 – 2022**

- **HCV antibody or RNA positive**: 10,279
- **Had RNA test**: 8,716
- **RNA result was positive**: 4,221
- **Had another RNA test**: 2,443
- **Most recent RNA result was negative**: 80%

**HIV/HCV New Detection, 2020 – 2022**

- **HCV antibody or RNA positive**: 54
- **Had RNA test**: 45
- **RNA result was positive**: 45
- **Had another RNA test**: 36
- **Most recent RNA result was negative**: 21

**Source:** Wisconsin Electronic Disease Surveillance System, newly reported hepatitis C cases 2020-2022.
### Wisconsin Coinfection Care Cascade, 2020-2022

#### All Positive Reported HCV Results, 2020 – 2022

- **HCV antibody or RNA positive**: 10,279
- **Had RNA test**: 8,716
- **RNA result was positive**: 4,221
- **Had another RNA test**: 2,443
- **Most recent RNA result was negative**: 1,182

**Percentage Distribution**:
- 85% had an RNA test
- 48% had an RNA result positive
- 58% had another RNA test
- 28% had the most recent RNA result negative

#### HIV/HCV New Detection, 2020 – 2022

- **HCV antibody or RNA positive**: 54
- **Had RNA test**: 45
- **RNA result was positive**: 45
- **Had another RNA test**: 36
- **Most recent RNA result was negative**: 21

**Percentage Distribution**:
- 83% had an RNA test
- 100% had an RNA result positive
- 80% had another RNA test
- 47% had the most recent RNA result negative

### Source
Wisconsin Electronic Disease Surveillance System, newly reported hepatitis C cases 2020-2022.
Wisconsin Coinfection Care Cascade, 2020-2022

- HCV antibody or RNA positive
- Had RNA test
- RNA result was positive
- Had another RNA test
- Most recent RNA result was negative

- 10,279
- 85%
- 8,716
- 48%
- 4,221
- 58%
- 2,443
- 28%
- 1,182

- HCV antibody or RNA positive
- Had RNA test
- RNA result was positive
- Had another RNA test
- Most recent RNA result was negative

- 54
- 83%
- 45
- 100%
- 45
- 80%
- 36
- 47%
- 21

Coinfection Cases on ADAP, March 2020

- March 2020: 55 cases HIV/HCV Co-diagnosed on ADAP
  - 3 clients had ever filled HCV medications
- In 2019, WI expanded ADAP formulary
  - AIDS Drug Assistance Program (ADAP) Formulary (wisconsin.gov)
- National HCV Formulary for ADAP clients
  - Hepatitis C Treatment Medications | NASTAD
Questions?

Thank you!

Kelsa Lowe, Hepatitis C Epidemiologist
Kelsa.lowe@dhs.wisconsin.gov
Implementing STIRR-IT Among Vulnerable Individuals at High Risk for HCV & HIV: Results from two SAMHSA Programs

Seth S. Himelhoch, M.D., M.P.H
Professor and Chair, Department of Psychiatry
University of Kentucky

Wendy L. Potts, M.S.
Program Director, Department of Psychiatry
University of Maryland
WHAT DOES STIRR-IT MEAN?

Screening & Testing for HIV/HCV, Immunization for HBV/HAV Risk Reduction Counseling Integrated Treatment
STIRR-IT DELIVERY MODEL

- Integrated staff
- Accessible office
- Blood drawing facilities on-site
- Vaccines stored and delivered on-site
- Connected to Electronic Medical Record
How to AVOID getting or spreading Hepatitis and HIV

- Don’t use intravenous drugs
- If a person can’t stop using drugs, don’t share needles with other people
- If a person feels that they have to share needles with other people, sterilize the works by immersing it in bleach for 30 seconds at least 3 times
- Don’t have sex unless you are sure your partner has been tested and doesn’t have any infectious diseases
- Always use a latex condom when having sexual relations
- Don’t share personal items such as a razor, toothbrush, nail file, or nail clippers with others.

How do you KNOW if you could have gotten Hepatitis or HIV?

- Some of the ways people get exposed to the contaminated blood of other people and get infections/disease, are listed below.

- Sharing injection needles with other people
- Sharing a straw for snorting cocaine, amphetamines, or heroin with others
- Having unprotected sex (without a condom) with more than 2 partners over your life or with people you don’t know well
- Having a blood transfusion, hemodialysis, or organ transplant from an infected source before 1987 for Hepatitis B virus or Hepatitis C virus before 1985 (for HIV)
- Having a body piercing or tattoo from improperly sterilized needles
- Using personal articles such as a razor, toothbrush, nail file, or nail clippers from someone else with the infection
- Being born to a mother with the infection

If you checked off any of these items, talk with your case manager, nurse, or doctor about getting a test to see if you have been infected.

Hepatitis B, Hepatitis C, and HIV can not be spread or using public toilet seats, unless there is direct contact of the blood to the seat.
Demographics of *STIRR -IT Participants*

- 270 participants
- > 80% self-identify as African-American
- Average age 53 years (range: 18-69 years)
- Gender - 50% male and 50% female
- >70% diagnosis of serious mental illness
- Vast majority history of substance use
STIRR-IT OUTCOMES

- Successfully implemented model
- Total of 270 participants
- Nearly all clients attend all 4 sessions of 234/270

Outcome Measures:
- 25% HCV positive
- 8% HIV positive
- 100% referred to care
“Why Me?” Understanding the HCV Care Continuum Among People With Serious Mental Illness

Rachel M. Arnold, B.A., Hana Machover, B.S., Megan E. Wall, B.S., Ida Ahmadizadeh, B.S., Wendy Potts, M.S., Seth Himelhoch, M.D., M.P.H.

Objective: Despite possible cure rates of >90% with new treatment, people with serious mental illness are rarely screened for hepatitis C virus (HCV). A colocated approach may help patients navigate the care continuum.

Methods: This study used a mixed-methods approach to increase understanding of the HCV care continuum for people with mental illness (N=170). Quantitative data included laboratory testing, risk assessments, and chart reviews. Qualitative interviews (N=9) were conducted to gain a broader understanding.

Results: Thirty-one (18%) patients tested positive for HCV; 13 were cured of HCV, and 10 are still receiving treatment. Qualitative interviews revealed that fear of the diagnosis may be an important treatment barrier.

Conclusions: Those with serious mental illness who were diagnosed as having HCV and received the colocated prevention and treatment program were able to navigate the continuum of care for HCV treatment. Fear of diagnosis may be an important consideration for future efforts.

Psychiatric Services 2018; 69:1188–1190; doi: 10.1176/appi.ps.201700542
Taking Care of Yourself
By Women, For Women.

**IMPLEMENTATION**

4. What can I do to lower my risk of, treat, or cure infection?

<table>
<thead>
<tr>
<th></th>
<th>Hepatitis A</th>
<th>Hepatitis B</th>
<th>Hepatitis C</th>
<th>HIV</th>
<th>HPV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cure</em></td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Vaccine</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preventative steps</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Preventative Steps**
Although this chart summarizes what can be done to treat a positive test result for infectious diseases (i.e., Hepatitis, HIV, and HPV), it is also important to remember that preventative steps can be taken to avoid testing positive for these diseases. Some of these steps are:
- Wearing protective sex with a condom
- Not sharing toothbrushes, nail clippers, nail files, or other personal items
- Not sharing needles, cotton/socks, or water when using drugs

**Hepatitis A & Hepatitis B**

**Prevention**
There is a vaccine to prevent Hepatitis B infection. A blood test can determine if a person needs the vaccine. If a person gets a vaccine before exposure to Hepatitis B, they will be protected. The vaccine is free and safe. A person will need 3 shots over 6 months to be fully protected.

There is also a vaccine for Hepatitis A. If you use drugs or have Hepatitis B, Hepatitis C, or HIV, you should also have a vaccine for Hepatitis A. A person will need 2 shots over 6 months to be fully protected.

**Actions to Take**

From the list of actions in the left-hand column below, place a checkmark in one of the columns next to it depending on if it’s something you’re already doing, will do, or need help to do:

**Taking Care of Yourself**

- Regularly use a condom or other barrier method if you are sexually active
- Regularly test for STDs
- Take medication(s) as prescribed
- Get enough rest
- Eat healthy foods
- Avoid alcohol and street drugs* 

**Avoiding Setting or Spreading the Viruses**

- Be aware of your own health and prevent the spread of all diseases
- Avoid risky behaviors that could introduce the virus into the body
- Avoid sharing personal items that could introduce the virus into the body
- Avoid alcohol and street drugs* 

*Alcohol and other drugs are toxic. These may be especially toxic to the liver. Because of this, people infected with Hepatitis B or Hepatitis C need to avoid drinking alcohol or drugs as long as possible.
Demographics: ATHENA Participants

- 181 participants
- 79% self-identify as African American
- Average age 54 years (range: 24 - 75 years)
- Gender – 100% Female
- >65% with a diagnosis of mental illness
- 100% with history of substance abuse
ATHENA OUTCOMES (To Date)

- Successfully implemented model
- Total of 181 participants
  - As of 10/1/2023
- Nearly all clients attend all 4 sessions of STIRR-IT (66% 120/181)

Outcome Measures:
- 14.4% HCV positive
- 6.4% HIV positive
- 100% referred to care