

# Addressing the Emerging HCV and Opioid Use Disorder Epidemics

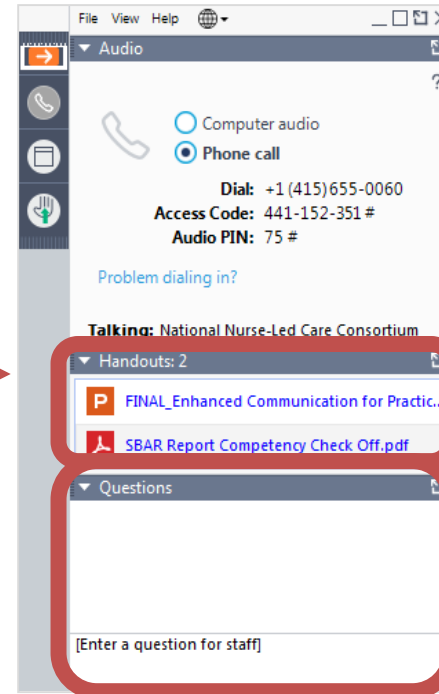
May 7, 2019 – 3:00 pm EST



# Housekeeping Items

To **download materials**, go to the Handouts section on your GoToWebinar control panel.

To **ask a question**, type it into the Question pane in the GoToWebinar control panel and it will be relayed to the presenter.



# National Nurse-Led Care Consortium

The **National Nurse-Led Care Consortium (NNCC)** is a membership organization that supports nurse-led care and nurses at the front lines of care.

NNCC provides expertise to support comprehensive, community-based primary care.

- Policy research and advocacy
- Technical assistance and support
- Direct, nurse-led healthcare services

# Presenters



Lauren Canary  
Project Officer and Epidemiologist  
Centers for Disease Control and Prevention



Wesley Klein, DO  
Primary Care Physician  
Duffy Health Center, Hyannis, MA



Alysse Wurcel, MD, MS  
Assistant Professor, Department of Medicine  
Tufts Medical Center



# Addressing the viral hepatitis burden associated with the opioid epidemic

**Lauren Canary, MPH**

Epidemiologist, Division of Viral Hepatitis

U.S. Centers for Disease Control and Prevention

National Nurse-Led Care Consortium

May 2019

# Presenter Disclosures

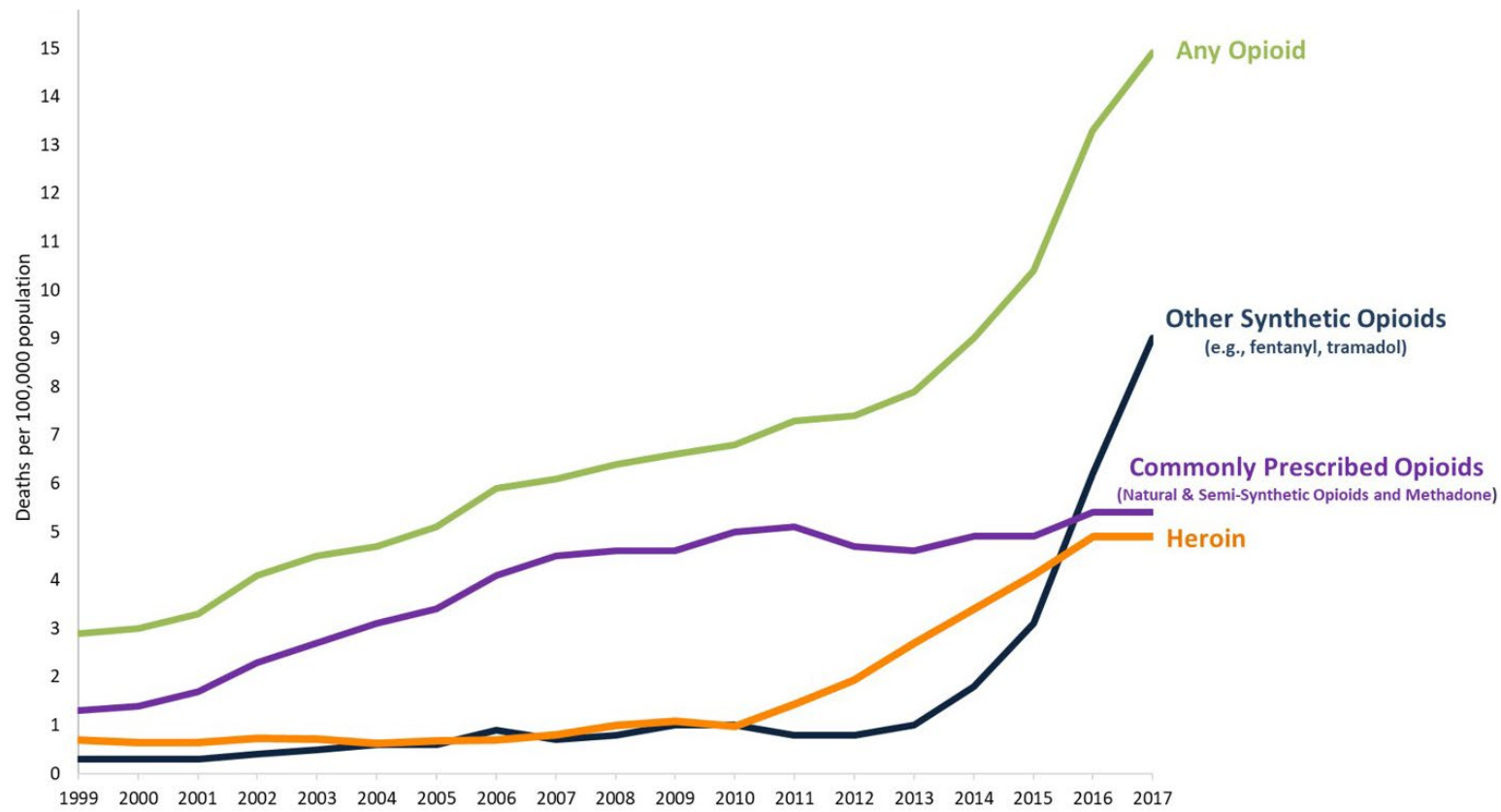
**Lauren Canary**

**The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

**No relationships to disclose**

# **The Syndemic of Overdoses and Viral Hepatitis in the U.S.**

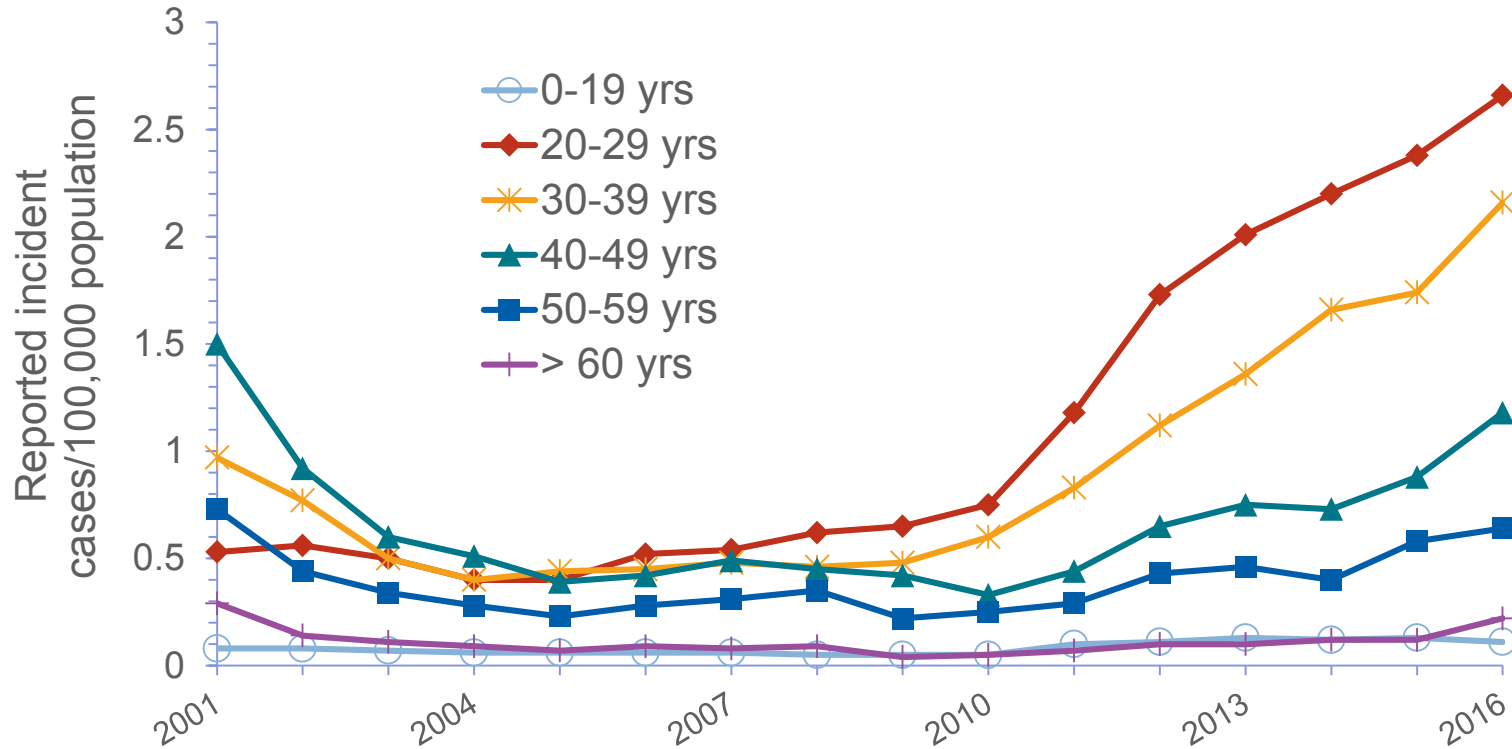
# Trends in overdose deaths



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2018.  
<https://wonder.cdc.gov/>.

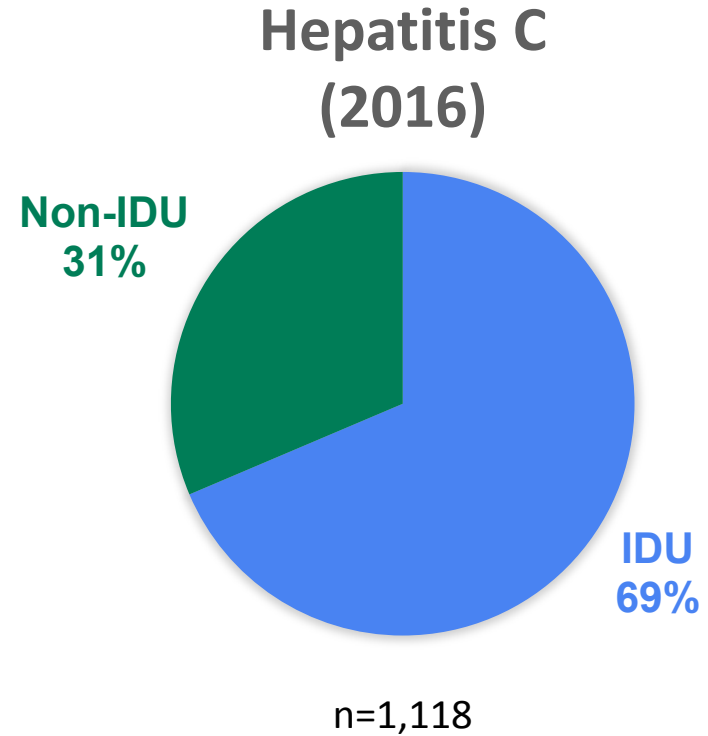
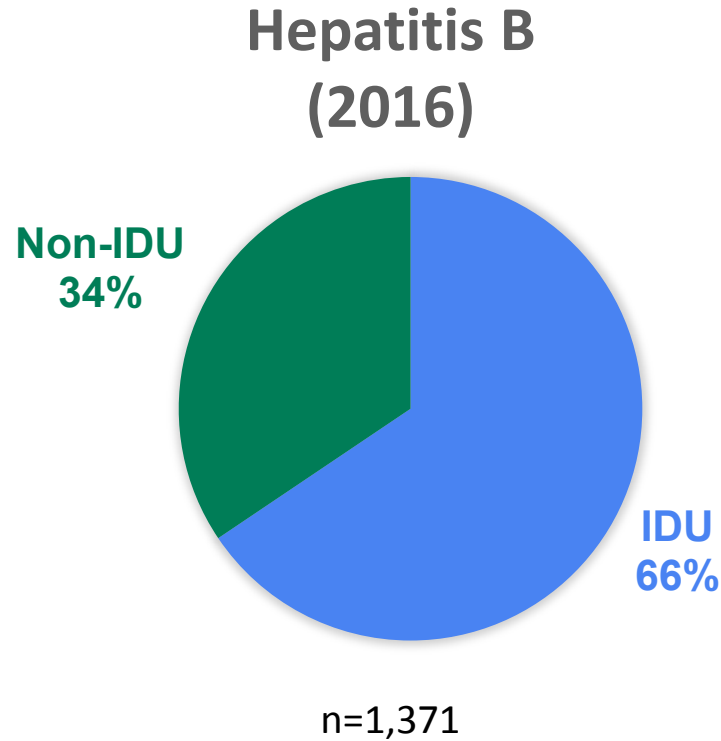


# Viral Hepatitis C incidence has been increasing this decade



Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)

# Most new hepatitis B & C cases report injection drug use



Among acute viral hepatitis B and C cases reported to CDC in 2016 with risk factor information recorded.

# Widespread fatal hepatitis A outbreak associated with drug use and homelessness, 2017-present day

- >15,000 cases
- 8,500 hospitalizations
- 140 deaths

## Update: Widespread Outbreaks of Hepatitis A among People Who Use Drugs and People Experiencing Homelessness across the United States



Distributed via the CDC Health Alert Network  
March 25, 2019 1330 ET (1:30 PM ET)  
CDCHAN-00418



# Opportunities for addressing viral hepatitis among people who use drugs

# Viral hepatitis testing and vaccination recommendations for people who inject drugs

## Hepatitis A

- **Hepatitis A vaccination is recommended for users of injection and non-injection drugs**
- Pre-vaccination testing not indicated for adolescents (might be warranted depending on the type and duration of illicit drug use)
- Implementation strategies to overcome barriers and increase coverage, including use of standing orders (i.e., a note in the medical record) should be considered for patients with high risk behaviors

Sources: Belani H, Chorba T, Fletcher F, et al. Integrated Prevention Services for HIV Infection, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis for Persons Who Use Drugs Illicitly: Summary Guidance from CDC and the U.S. Department of Health and Human Services. MMWR Recomm Rep 2012;61(No. RR05)  
For up to date guidance, visit: <https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepa.html>

# Viral hepatitis testing and vaccination recommendations for people who inject drugs

## Hepatitis B

- **Persons who inject drugs illicitly, including persons in substance abuse treatment programs, should be offered screening and counseling for chronic HBV infection**
- Hepatitis B vaccination is recommended for all unvaccinated adults at risk of infection
  - health-care settings providing services to persons who inject drugs illicitly
  - Substance abuse treatment and prevention settings
  - STD clinics, HIV testing and treatment facilities, and correctional facilities
  - Standing order in high-risk settings can be used
- Persons who test positive should be linked to care

Sources: Belani H, Chorba T, Fletcher F, et al. Integrated Prevention Services for HIV Infection, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis for Persons Who Use Drugs Illicitly: Summary Guidance from CDC and the U.S. Department of Health and Human Services. MMWR Recomm Rep 2012;61(No. RR05); CDC, Routine Testing and Follow-up for Chronic HBV Infection, <https://www.cdc.gov/hepatitis/hbv/pdfs/ChronicHepBTestingFlwUp.pdf>; Recently updated guidance: <https://www.cdc.gov/mmwr/volumes/67/rr/rr6701a1.htm>

# Viral hepatitis testing recommendations for people who inject drugs

## Hepatitis C

- All persons who use or inject drugs illicitly should routinely be offered screening and counseling for HCV infection
- Those with a positive HCV antibody result should have an RNA test performed to confirm current infection
- Facilities should include services or referral for treatment for HCV-infected persons

# Recommended messaging for people who inject drugs

## BOX 3. Summary of recommended messages for persons who use drugs illicitly to reduce drug use and infectious disease–related risks

- Get tested for human immunodeficiency virus, hepatitis B, and hepatitis C.
- Get vaccinated against hepatitis A and hepatitis B.

### Provide Screening and Vaccination

- Stop injection drug use to eliminate the risk for bloodborne infections.
- Get counseling and treatment to stop or reduce drug use.
- Never reuse or share syringes or drug-preparation equipment.
- Use a new, sterile syringe from a reliable source (e.g., a pharmacy or syringe exchange program).
- Use sterile water to prepare drugs, if possible; otherwise, use clean water from a reliable source, such as fresh tap water.
- Use a new container (i.e., cooker) and a new filter (i.e., cotton) to prepare drugs.
- Clean the injection site with a new alcohol swab before injection.
- Dispose of syringes safely after using them.
- Participate in risk-reduction programs.

### Discuss safer drug use practices

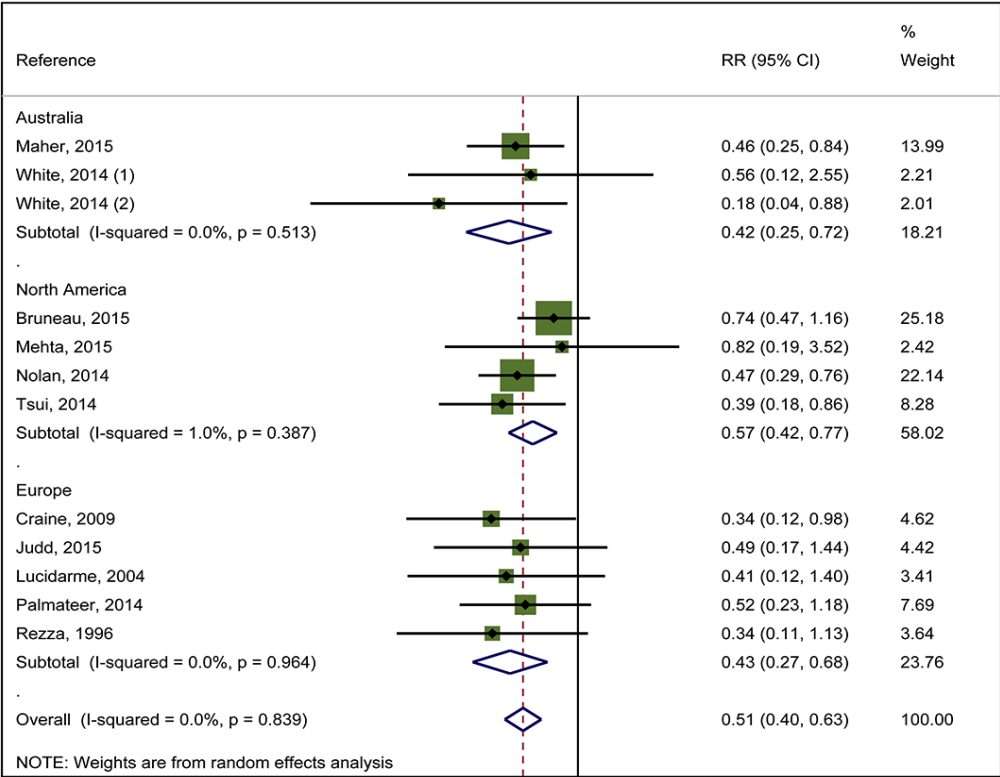
- Obtain medical treatment for infectious diseases.
- Obtain treatment for substance use and mental disorders.

### Link to treatment

This is also a great opportunity  
to discuss overdose prevention



# Syringe services and medication-assisted treatment programs play an essential role in reducing HCV transmission



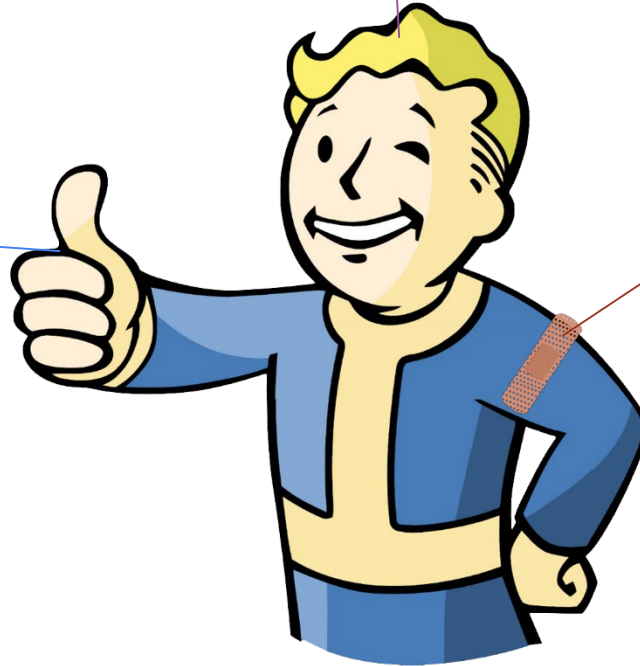
Platt, et al, *Addiction*, 2017

Combined use of MAT and high coverage of SSPs are associated with a 74% risk reduction in HCV acquisition

# Recommended messaging for people who inject drugs

Armed with knowledge  
about safer drug use  
practices

Linked to substance  
use and infectious  
disease treatment (if  
needed)



Tested and  
Vaccinated

# **Federal response to addressing viral hepatitis among people who use drugs**

# CDC leadership is committed to addressing the syndemic of overdose and viral hepatitis

“As we confront the epidemics of HIV, hepatitis C and opioids, we have to see the possible, use the power of science and lead the nation to act.”

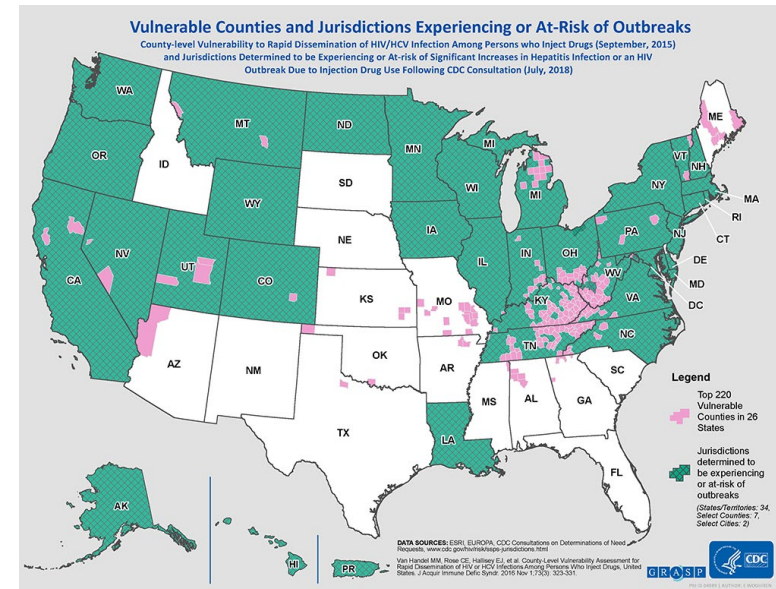
*-Dr. Robert Redfield, Agency Director (CDC)  
NIH/NIAID Kinyoun Lecture, January 2019*

“Opioids are a major public health problem in the U.S., not only because there were tens of thousands of overdoses last year, but also because the crisis is increasing infections of hepatitis A, B, and C, HIV, and STDs.”

*-Dr. Jono Mermin, Center Director (CDC/NCHHSTP)  
National HIV Prevention Conference, March 2019*

# Selected CDC programs to address the syndemic

- Provide resources to state and local jurisdictions to address identified infectious disease vulnerabilities
- Screening and linking people to treatment in high-impact settings such as healthcare systems, substance use treatment, permissible syringe services programs and correctional facilities ([CDC RFA-PS17-1702](#))
- Ensure that evidence-based and comprehensive preventive services are provided for people who use drugs ([CDC-RFA-PS19-1909](#))
- Increased active surveillance capacity to monitor infectious disease clusters across the nation to guide a faster and more targeted response ([CDC-RFA-PS17-1703](#))



# SAMHSA Addiction Technology Transfer Center Network

- HCV Current, National initiative among ATTC Regional Centers
- Increase HCV knowledge for medical and behavioral health professionals
- Free 90min [‘HCV Snapshot’](#) online course
- 6 hour face-to-face trainings available on request (contact your [regional ATTC](#))
- Other resources available
  - HCV testing [pocket tool](#)
  - Motivational interviewing for HCV [vignettes](#)
  - SAMHSA’s [TIP #53 Publication](#) for understanding HCV

# Thank you!

## Questions?

**LCanary@cdc.gov**

# Acknowledgements

## CDC

- Wentzel Mitchell
- Ruth Jiles
- Noele Nelson
- Karina Rapposelli
- Carolyn Wester
- Alice Asher

## UMKC HCV ATTC

- Kelly Reinhardt
- Holly Hagle
- Laurie Krom

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

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.



**Duffy Health Center:**  
**Shared Medical Appointment Model**  
**Wesley Klein, DO**



# The Syndemic of Opioid Misuse, Overdose, HCV, and HIV: Structural-Level Causes and Interventions ([Perlman DC](#)<sup>1,2</sup>, [Jordan AE](#)<sup>3,4</sup>)

## **Abstract: RECENT FINDINGS:**

Advances in multi-level theory and statistical methods allow sound ecologic and multi-level analyses of the impact of structural factors on the syndemic. Studies of opioid misuse, overdoses, hepatitis C virus, and HIV demonstrate that area-level access to healthcare, medication-assisted treatment of opioid use disorders, sterile injection equipment, and overdose prevention with naloxone, as well as factors such as opioid marketing, income inequality, intensity of policing activities, and health care policies, are related to the prevalence of substance misuse, overdoses, infection risk, and morbidity. Structural variables can predict area-level vulnerability to the syndemic. The implementation of combined prevention and treatment interventions can control and reverse components of the syndemic. Recognizing and monitoring potent structural factors can facilitate the identification of areas at risk of vulnerability to the syndemic. Further, many structural factors are modifiable through intervention and policy to reduce structural vulnerability and create health-enabling environments. Evidence supports the immediate implementation of broader HCV and HIV testing and substance use screening, medication-assisted treatment, needle/syringe exchange programs, naloxone programs, increased population-level implementation of HCV treatment, and further attention to structural-level factors predicting, and contributing to, area-level vulnerability, such as degrees of opioid marketing, distribution, and prescribing.

Evidence supports the immediate implementation of broader HCV and HIV testing and substance use screening, medication-assisted treatment, needle/syringe exchange programs, naloxone programs, increased population-level implementation of HCV treatment, and further attention to structural-level factors predicting, and contributing to, area-level vulnerability, such as degrees of opioid marketing, distribution, and prescribing.



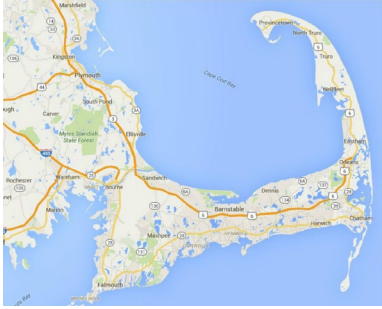
## RELENTLESS REINVENTION: Adopting Innovations in Care Delivery — The Case of Shared Medical Appointments

[Article](#) · May 19, 2017

Transformative innovations in care delivery often fail to spread. Consider shared medical appointments, in which patients receive one-on-one physician consultations in the presence of others with similar conditions.

Patients benefit from interacting with their peers and hearing answers to questions that may be relevant to them. Doctors avoid repeating common advice, which improves their productivity and enables higher-quality interactions with individual patients.

Shared medical appointments change the boundaries of health care services because fellow patients, rather than only the doctor, can provide information and support.



# Duffy Health Center Hyannis, Massachusetts

- 3,187 pts and 31,000 visits
- 85% homeless; 15% 'at risk'
- 58% eligible for homeless health services due to 'doubled up' housing status
- Over 65% have an alcohol use disorder
- 45% have multiple disorders
- 70% under 100% FPL
- HCV – 20% of population



# Implementation of a Shared Medical Appointment Model for Hepatitis C Treatment at a Community Health Center

- Direct acting antiviral (DAA) therapy requires patients to adhere to 8–12 weeks of daily treatment, which can be challenging for some patient populations
- Primary endpoint is virologic response (SVR-12), or HCV RNA  $\leq$  15 IU/mL at 12 weeks post-treatment
- Could DAA therapy provided by non-specialist providers using the SMA model yielded comparable response rates to those achieved by specialist providers
- Could this model of care be replicated in other practices, increase access to HCV treatment for patient populations within high-risk communities

# Implementation of a Shared Medical Appointment Model for Hepatitis C Treatment at a Community Health Center

## Program Responsibilities

- Curriculum development
- Prior authorizations (PA)
- Referral process
- Patient monitoring
- Medication tracking
- Group presentations
- Medical visits (NP/PA)
- Scheduling
- Vaccinations
- Labs
- Coordination with MAT program
- Logistic supports
- Provide patient supports

## Team Members

- 1 – DO
- 2 - NPs
- 1 – RN (HCV coordinator)
- 1- MA
- 1 – BH therapist
- 1 – SUD peer navigator

# HCV Shared Medical Appointment Structure:

## *First Visit/ Information Session*

- Patients referred to program are invited to information session
- Schedule 4 to 6 per year
- Discussed HCV basics
- Review program structure
- Discuss MAT/HCV coordination while in program
- Meet with provider
- Draw any needed labs
- Administer needed vaccine(s)

## *Second Visit/ Medication Distribution*

- Usually 4 weeks after info session
- Pharmacist usually leads discussion
- Discuss meds including interactions and adverse effects
- Discuss need to speak with speciality pharmacy so meds will be shipped
- Meet with provider where med is distributed
- Review med interactions and adverse effects
- Update vaccination if needed

## *Third Visit/ Refill Meeting*

- Group visit focuses on reinfection prevention/risk reduction and discuss importance of getting SVR12 lab
- Usually led by RN
- Review any adverse effects and possible remedies
- Meet with provider to receive refill
- Patient is given a 'reinfection prevention kit' with toothbrush, nail clips and other personal care items that could be contaminated with blood
- Draw HCV VL and other labs as needed



## ***Fourth Visit/ 2<sup>nd</sup> Refill***

- Some patient do not need 2<sup>nd</sup> refill but are strongly encouraged to attend
- Discuss importance of getting SVR12 lab
- Give patient “golden ticket’ (If patient gets lab drawn within 1 week of SVR12 date he/she recieves a \$15 gift card)
- Patient meets with provider to receive 2<sup>nd</sup> refill if on 12 week course of treatment
- Labs as needed (If nondetectable at 4 weeks do not usually need additonal lab till SVR12)
- Vaccinations as needed

# Date Tracking

MAT	Med	Rx sent	Rx In	Tx wks	Start	End	SVR12	Tx Hx	HIV infx	HBV infx	HB core AB	HBV VL	Geno	FIB4	F score	CTP Stage	PreTx VL	HAV immu	HBV immu
DHC	Harvoni	3/3/2019	Yes	8				Naïve	No	No	NR		1a	0.56			4.88E+06	Reactive	Reactive
Habit Opco	Harvoni	3/3/2019	No	8	3/27/2019	5/22/2019	8/14/2019	Naïve	No	No	Reactive	ND	1a		0 - 1		1.90E+06	NR	NR
No	Epclusa	3/8/2019	Yes	12	3/27/2019	6/19/2019	9/11/2019	Naïve	No	No	Reactive	ND	1a		4	A	1.48E+06	Reactive	Reactive
DHC	Vosevi			12				Reinfx (Detect.	No	No	NR		1a		0		6.41E+06	NR	Reactive
	Epclusa		No	12				Naïve	Yes	No	NR		1a	1.01			7.24E+06	NR	Reactive
DHC	Epclusa	3/6/2019	Yes	12	3/27/2019	6/19/2019	9/11/2019	Naïve	No	No	NR		3		0		3.89E+05	Reactive	NR
No	Harvoni	3/3/2019	Yes	8				Naïve	No	No	NR		1a		2		5.47E+04	Reactive	Reactive
Gitlo	Harvoni		No	8				Naïve	No	No	NR		1a	1.5			6.68E+05	Reactive	NR
DHC	Harvoni	3/6/2019	Yes	8	3/27/2019	5/22/2019	8/14/2019	Naïve	No	No	NR		1a		0		7.86E+05	Reactive	NR
No	Harvoni	12/31/2018	Yes	8	3/27/2019	5/22/2019	8/14/2019	Naïve	No	No	NR		1a		1 -- 2		1.48E+04	NR	NR
No	Harvoni	3/3/2019	Yes	8				Naïve	No	No	Reactive		1a	0.82			5.19E+06	NR	Reactive
No	Harvoni	3/12/2019	Yes	8	3/26/2019	5/21/2019	8/13/2019	Naïve	Yes	No	NR		1a		0		5.99E+03	Reactive	NR
DHC	Mavyret	3/8/2019	Yes	8	4/4/2019	5/30/2019	8/22/2019	Naïve	No	No	NR		1a		2		1.42E+07	Reactive	Reactive
Dr. Waugh	Epclusa	3/14/2019	No	12	3/27/2019	6/19/2019	9/11/2019	Naïve	No	No	NR		2		0		2.04E+06	NR	Reactive
Habit Opco	Harvoni	3/8/2019	Yes	8	3/27/2019	5/22/2019	8/14/2019	Naïve	No	No	NR		1a		0		1.64E+05	Reactive	Reactive
DHC	Harvoni	3/12/2019	Yes	12	3/27/2019	6/19/2019	9/11/2019	Naïve	No	No	NR		1a		0		7.01E+06	NR	NR
DHC	Epclusa	3/8/2019	Yes	12	3/27/2019	6/19/2019	9/11/2019	Naïve	No	No	NR		2		4	A	3.86E+06	Reactive	Reactive

# Intersection of MAT with HCV, HIV and STIs

- The development of a team-based approach to care has resulted in additional benefits beyond treating HCV
- Integrating services moves care from disease focused to more wholistic, patient centered care which including:
  - Trauma history and mental health
  - Increase access to risk reduction services (needle access, Narcan, etct)
  - Intensify screening for and treating STIs including syphilis, GC, and chlymadia
  - Developing an HIV treatment program in clinic
- Goal of this approach is to provide wrap around services reducing the need for outside referrals and all the patient to become more engaged with his/her treatment team and view DHC as a real Medical Home.

# Criminal-Legal Involved Populations: Opportunities for Prevention, Testing Treatment and Empowerment

**Alysse G. Wurcel, MD MS**  
**Infectious Diseases Physician**  
**Tufts Medical Center**

**May 7, 2019**

**[awurcel@tuftsmedicalcenter.org](mailto:awurcel@tuftsmedicalcenter.org)**

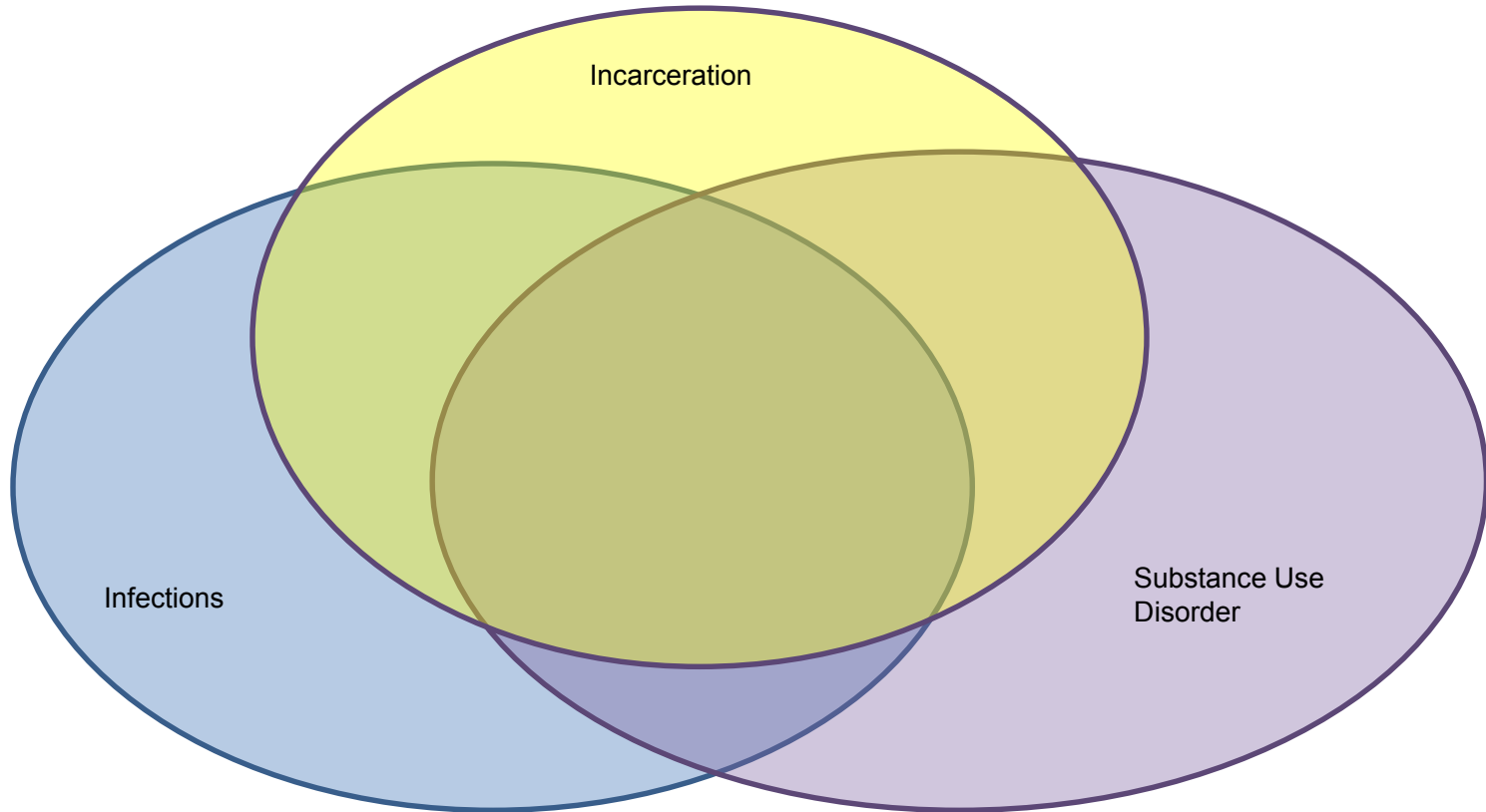
# Criminal Legal Involved People

- Examples of Detention
  - Juvenile Detention
  - Jail
  - Prison
  - Probation
  - Parole
  - ICE Detainees

# Criminal Legal Involved Populations

- High rates of homelessness, food insecurity, unemployment
- High rates of substance use disorder and other psychiatric illnesses
- Limited access to primary preventative care
- Increased risks for infectious diseases
- High rates of post-release mortality

**Syndemic:** A set of linked health problems involving two or more afflictions, interacting synergistically, and contributing to excess burden of disease in a population (developed by Professor Merrill Singer)



# Opportunities for Engagement

- Time spent detained in jail or prison can be an opportunity for
  - Education
  - Positive clinical interactions
  - Vaccination
  - Screening
  - Treatment initiation
  - Harm Reduction



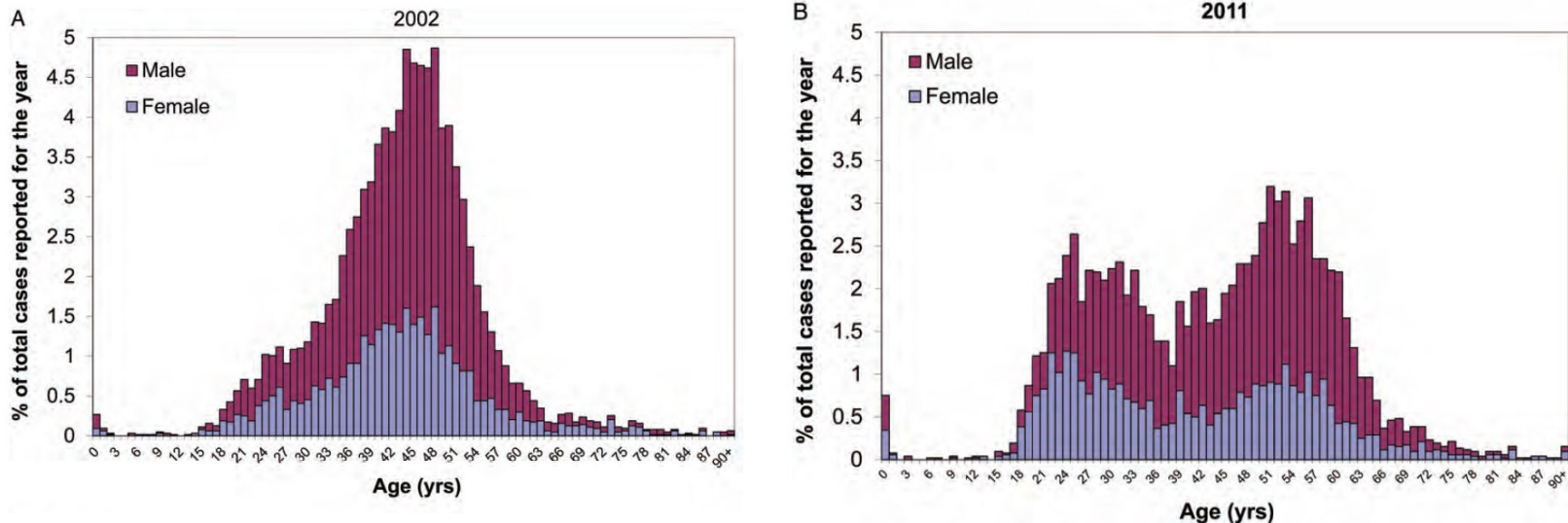
# Infectious Diseases in Criminal Legal Populations

- Hepatitis A, B, C
- HIV
- Skin and Soft Tissue Abscesses, Endocarditis, Osteomyelitis
- Dental Infections
- Sexually Transmitted Infections
- Tuberculosis

# Massachusetts Experience: Syndemic

- Hep A Outbreak Across the State 2017
- Hep B Outbreak Bristol County 2018
- HIV Outbreak: 2 counties confirmed (2018), 2 counties potentially with new outbreaks (2019)
- What about Hep C?

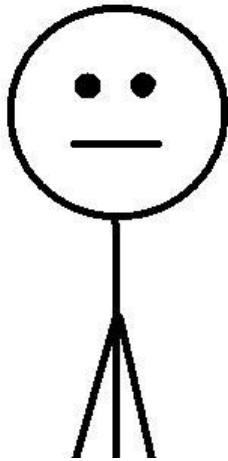
# Hepatitis C In Massachusetts



**Figure 1:** Age distribution of newly reported confirmed cases of hepatitis C virus (HCV) infection in Massachusetts for 2002 (A,  $n=6368$ ) and 2011 (B,  $n=5194$ ). The data confirm the shift previously reported [13] from a unimodal to a bimodal age distribution over this decade. Data are based on case report forms by reporting clinicians, triggered by a positive HCV antibody or HCV viral load test.

# Why Test and Treat for HCV in Incarcerated Populations?

## Personal Health




## Public Health



# Personal Health


- Testing often leads to decreased risk behaviors
- Testing is an opportunity for discussions about vaccines, PrEP, and other evidence-based ways to prevent infection
- Diagnosis is the first step in the cascade of care to treatment.
- We have medications that can cure people of Hep C, preventing liver damage and extrahepatic manifestations of Hep C.

# www.hcvguidelines.org



AASLD  
AMERICAN ASSOCIATION FOR  
THE STUDY OF LIVER DISEASES

HCV Guidance: Recommendations for  
Testing, Managing, and Treating  
Hepatitis C



IDSA  
Infectious Diseases Society of America

Home ▾


Test, Evaluate, Monitor ▾

Treatment-naïve ▾

Treatment-experienced ▾

Unique Populations ▾

About ▾



Search the Guidance

Enter your keyword:

Recent Announcements

31  
Aug

Glecaprevir/pibrentasvir and sofosbuvir/velpatasvir/voxilaprevir have been approved by the FDA- update coming soon.

In addition to updates

Start Here: Choose a patient profile from the menu above. ↑

Welcome to the New HCVGuidelines.org

The AASLD and IDSA in partnership with the panel have created an updated web experience to facilitate easier and faster access to this important resource. Please select a patient profile from the menu above, click on a Guidance section below, or use the search box to begin.

Contents and Introduction - *Select a Page*

Testing, Evaluation, and Monitoring of Hepatitis C - *Browse Topics*

Initial Treatment of HCV Infection - *Choose Patient Genotype*

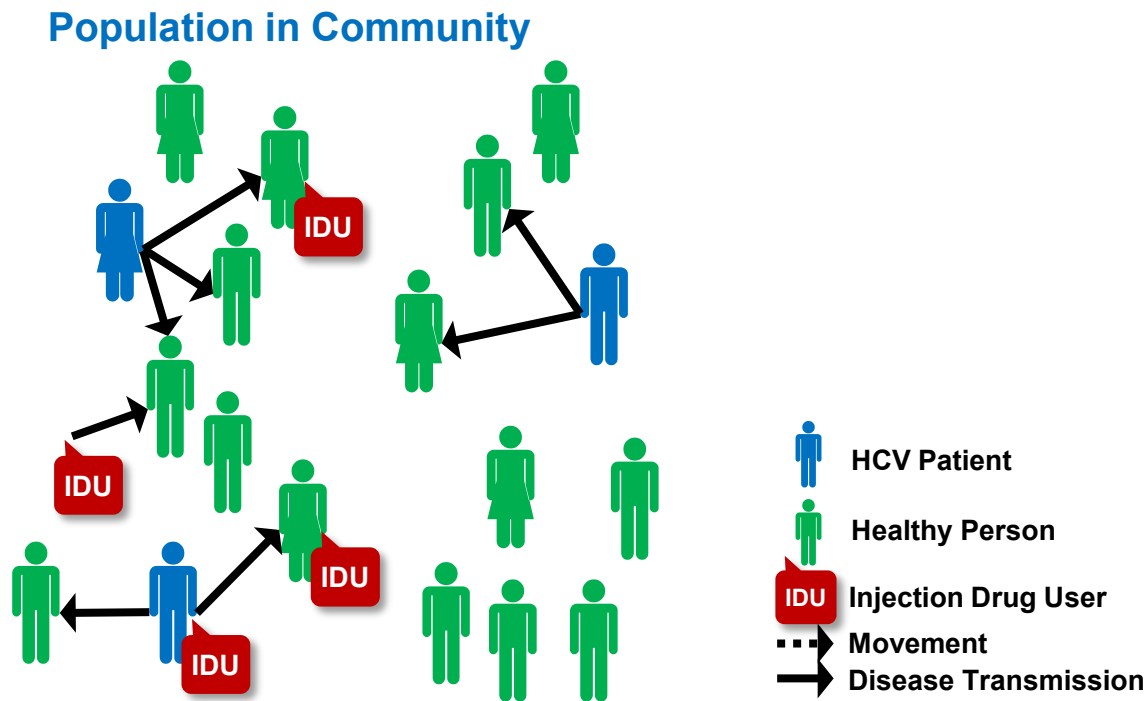
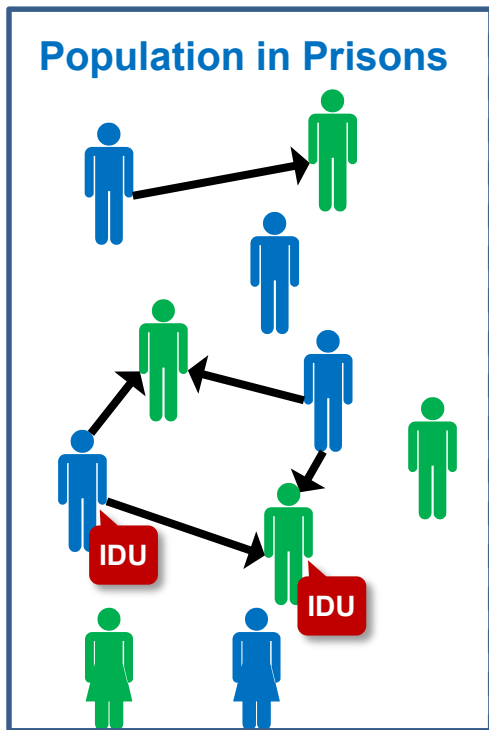
Retreatment of Persons in Whom Prior Therapy Has Failed - *Choose Patient Genotype*

Management of Unique Populations - *Review Recommendations*

# Public Health

- World Health Organization wants to eradicate Hep C by 2030.
- Several countries (Iceland, Netherlands, Georgia) are on their way towards eliminating Hep C.
- **We must test and treat people in jail and prison to reach this goal.**

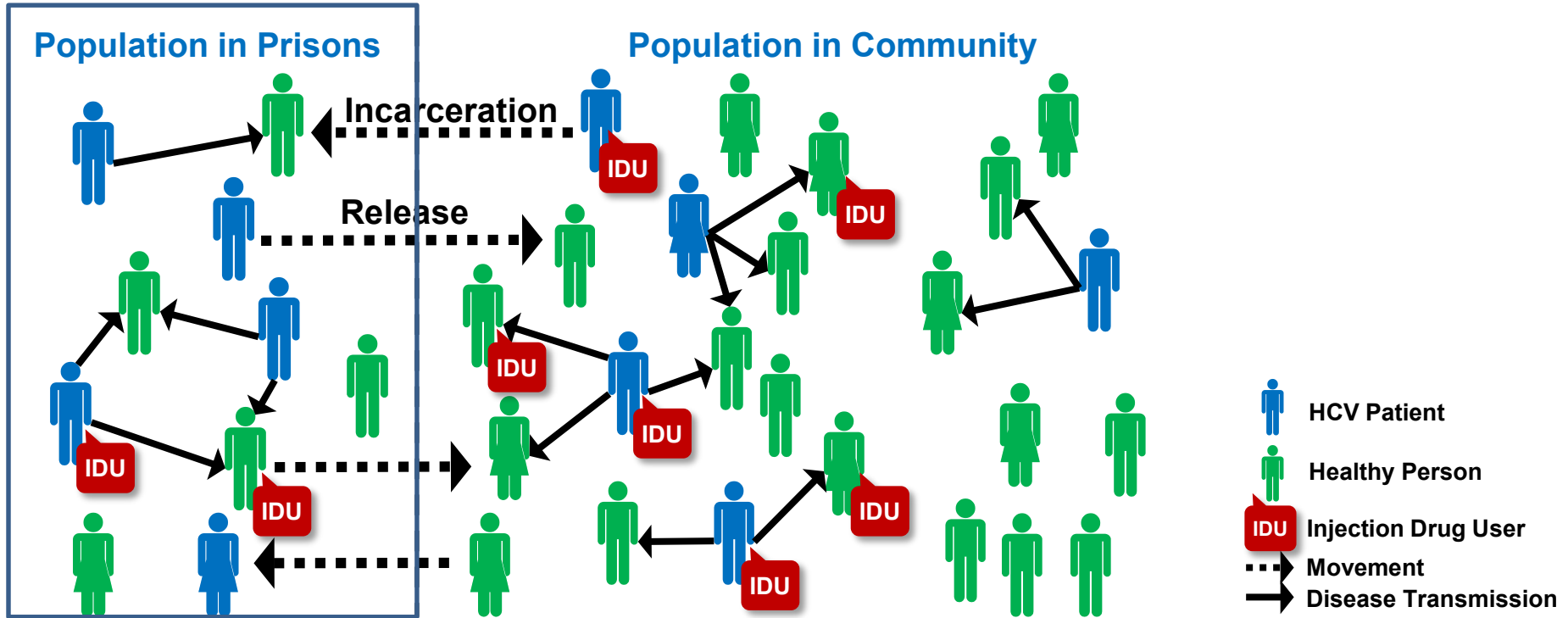
# Micro-Elimination Requires Testing and Treatment of People in Jail and Prison



A microsimulation model of transmission and progression of HCV. Image adapted from He T, et al. *Ann Int Med.* 2016;164(2):84-92.



# Micro-Elimination Requires Testing and Treatment of People in Jail and Prison



A microsimulation model of transmission and progression of HCV. Image adapted from He T, et al. *Ann Int Med.* 2016;164(2):84-92.

# Infectious Diseases Testing in Jails and Prisons

- Barrier to testing:
  - Highly variable policies and protocols
  - Cost of tests, time to draw and process the blood, deliver test results
  - Transient population (what happens if they leave before the test results are back?)
  - What if you can't offer Hep C treatment in jail → why test?

# Infectious Diseases Testing in Jails and Prisons

## Barrier to testing:

- Highly variable policies and protocols
- Cost of tests, time to draw and process the blood, deliver test results
- Transient population

## Facilitators to testing:

- Nursing intake is a mandated clinical interaction
- Partnership with local and national public health groups may help with costs of tests, help deliver results if people leave before test results back
- Mutually beneficial deals with industry that lower cost of treatment
- Testing can be the first step and linkage to Hep C care in the community can be the second step

# Linkage to Care to ID Care After Release

- Testing, education, empowerment and linkage to care in the community is the next best option.
- When working on linkage to care for infections, do not forget to address substance use disorder
- Partnership between jails/prisons and local providers is crucial

JOURNAL OF HEPATOLOGY

The Home of Liver Research

[in](#)
[Follow](#)
3,088

[f](#)
[t](#)
[v](#)

[RSS Fe](#)

[Login](#)
[Register](#)
[Claim Subscription](#)
[Subscribe](#)

[Articles and Issues](#)
[Collections](#)
[International Editions](#)
[Manuscript](#)
[Journal Info](#)
[News and Mec](#)

All Content

Search

[Advanced Search](#)



< Previous Article


May 2019 Volume 70, Issue 5, Pages 839–846


Next Article >


To read this article in full, please review your options for gaining access at the bottom of the page.

Outcomes of treatment for hepatitis C in prisoners using a nurse-led, statewide model of care

[Timothy Papaluca<sup>1</sup>](#),
[Lucy McDonald<sup>1</sup>](#),
[Anne Craigie<sup>1</sup>](#),
[Annabelle Gibson<sup>1</sup>](#),
[Paul Desmond<sup>1</sup>](#),
[Darren Wong<sup>1</sup>](#),
[Rebecca Winter<sup>2,3</sup>](#),
[Nick Scott<sup>2,3</sup>](#),
[Jessica Howell<sup>1,4</sup>](#),
[Joseph Doyle<sup>2,4</sup>](#),
[Alisa Pedrana<sup>2</sup>](#),
[Andrew Lloyd<sup>5</sup>](#),
[Mark Stooze<sup>2,3</sup>](#),
[Margaret Hellard<sup>2,3</sup>](#),
[David Iser<sup>1,4</sup>](#),
[Alexander Thompson<sup>1</sup>](#)



 PlumX Metrics

DOI: <https://doi.org/10.1016/j.jhep.2019.01.012>
 Check for updates

 Article Info

Abstract

Full Text

Images

References

Supplemental Materials

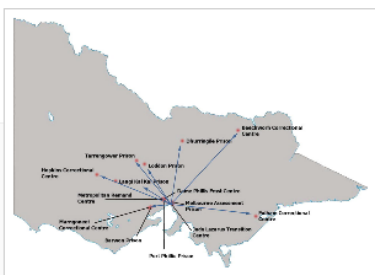
Highlights

- Nurse-led care was associated with SVR12 rates of >95% in large numbers of prisoners.
- <20% of prisoners required specialist input.
- >80% of prisoner had never pursued specialist hepatitis C care in the community.

Background & Aims

Treatment programs for people who inject drugs (PWID), including prisoners, are important for achieving hepatitis C elimination targets. There are multiple barriers to treatment of hepatitis C in prisons, including access to specialist physicians, testing and antiviral therapy, short prison

Graphical abstract



# HOT OFF THE PRESSES!



[https://www.journal-of-hepatology.eu/article/S0168-8278\(19\)30024-8/fulltext](https://www.journal-of-hepatology.eu/article/S0168-8278(19)30024-8/fulltext)

## What can you do!

- If you work in the community and treat HepC, reach out to local jails and prisons to see if they need a spot to refer people.
- If you work with people in jail, see if there are ways to improve linkage to post-release medical care.
- Increase treatment of people in the community.

# Thank you for your time!

Contact info:

[awurcel@tuftsmedicalcenter.org](mailto:awurcel@tuftsmedicalcenter.org)

**HEPATITIS C TREATMENT:**  
149.75 MILLION PEOPLE  
STILL WAITING...







# Questions



**Thank you!**

- 1. Follow up NNCC survey if you want to join our newsletter**
- 2. Survey from CDN within 1-2 days for CNE or CME credit**

**Contact Information:**

Christine Simon

Public Health Project Manager

Email: [csimon@nncc.us](mailto:csimon@nncc.us)

Phone: (215) 731-2177

