

# Hepatitis C Treatment in People Experiencing Homelessness in NYC

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## Training Development and Funding

- This training is designed in collaboration NYC Department of Homeless Services (DHS)
- This training is funded by the NYC City Council

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- Type the question into the chat box and Meg will read them aloud to the presenter at the end

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- After the training, you will receive an e-mail with instructions, the course number, and the access code
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- Visit <https://empireliverfoundation.org/about-us/cme-accreditation/>

## Series Overarching Learning Objectives

1. Describe the importance of interprofessional collaboration in effectively meeting the healthcare, educational, and psychosocial needs of patients living with hepatitis B or C infection.
2. Describe the epidemiology of hepatitis B and C infections.
3. Describe the natural history of hepatitis B and hepatitis C infection.
4. Discuss updated guidelines to identify patients at risk for hepatitis B and/or hepatitis C infection.
5. Identify appropriate antiviral treatments for people living with hepatitis B or hepatitis C.
6. Explain the efficacy and safety of current and emerging therapies for hepatitis B and C.
7. Summarize how to counsel patients diagnosed with hepatitis B or C.

# Learning Objectives

By the end of this presentation, participants will be able to:

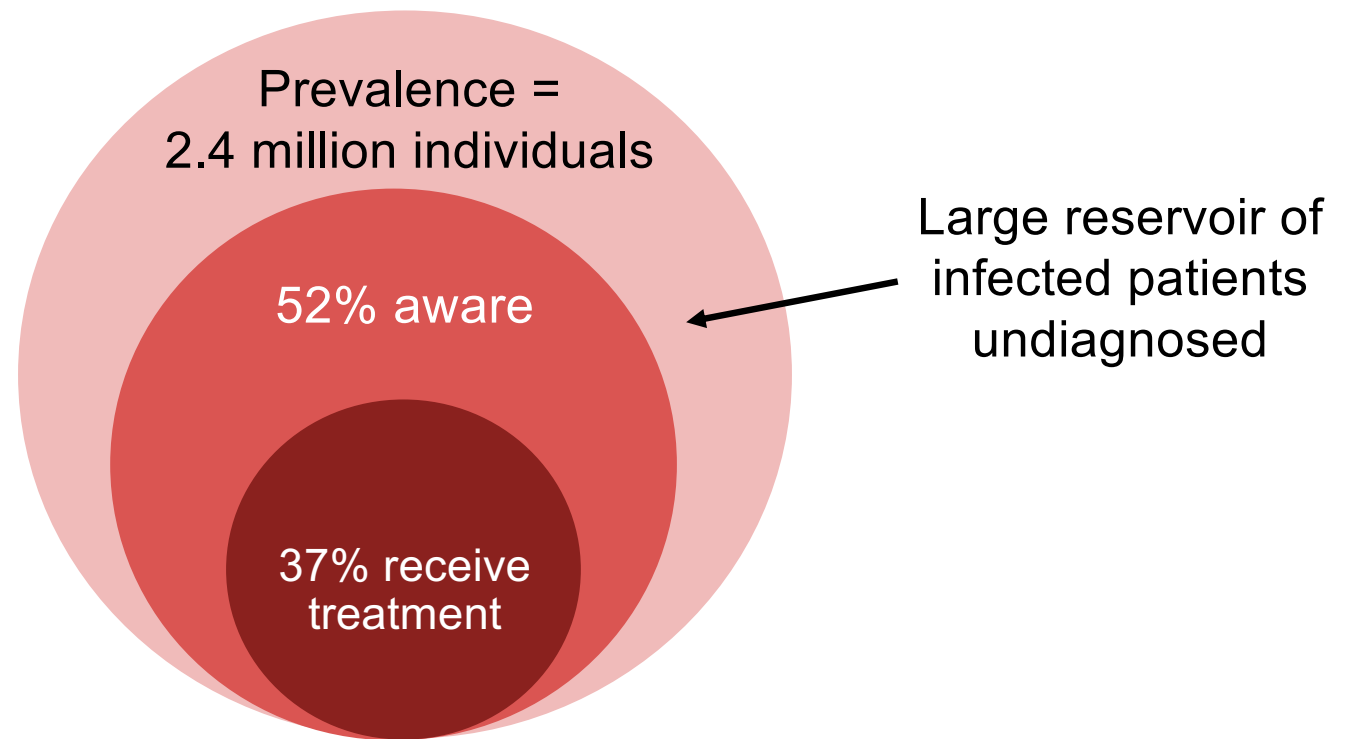
- Acquire a basic understanding of hepatitis C (HCV) screening and treatment.
- Learn how to support people experiencing homelessness to complete their HCV treatment.
- Hone their engagement practices with people facing multiple social, medical and emotional challenges.
- Remain engaged with people who are highly transient in the homeless service system in order to start and complete medication and return for SVR 12.

# Introduction to HCV

- Estimated 2.4 million infected in the USA
- Estimated 91,000 infected in NYC<sup>1</sup>
  - 40% undiagnosed
  - Highly infectious in blood, injection drug use very effective way to transmit
- Leading indication for liver transplantation
- Leading predisposing factor to development of hepatocellular carcinoma (HCC)

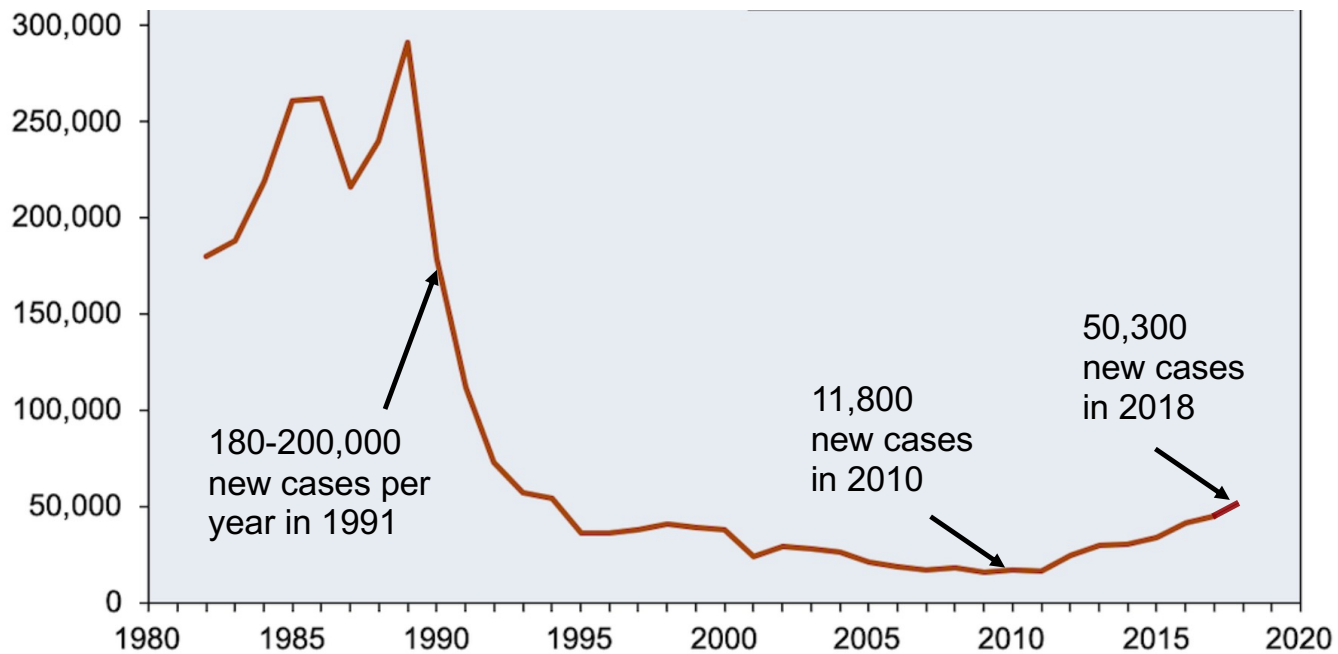
1. [NYC Health Department \(2020\)](#)

## HCV is Underdiagnosed in the US



# HCV Incidence in the United States

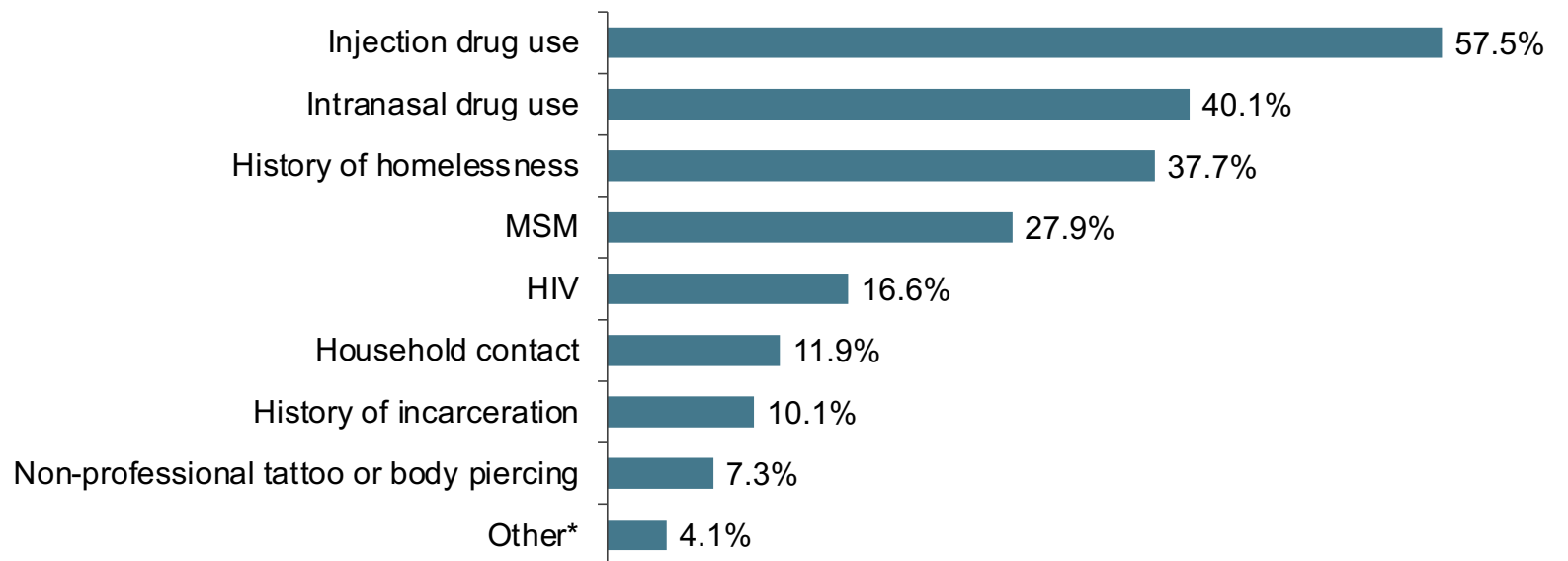
Estimated total new HCV infections



[www.hepatitis.c.uw.edu/go/screening-diagnosis/epidemiology-us/core-concept/all](http://www.hepatitis.c.uw.edu/go/screening-diagnosis/epidemiology-us/core-concept/all).  
As derived from CDC data, 2017. Ryerson AB et al. MMWR 2020;69:399.

# HCV Risk Factors

**Risk factors (not mutually exclusive) for HCV infection of people ages 18–34 years newly reported with chronic HCV in NYC in 2019, interviewed through enhanced surveillance (n=496)**



\*Other includes: transfusion or transplant before 1992 or outside of the U.S.; employed in the medical or dental field; and received dialysis

Source: NYC Health Department (2020)

# The Opioid Epidemic in the United States

10.3 million Americans misuse prescription opioids each year

2.0 million Americans have an opioid use disorder

808,000 Americans use heroin each year

81,000 new heroin users each year

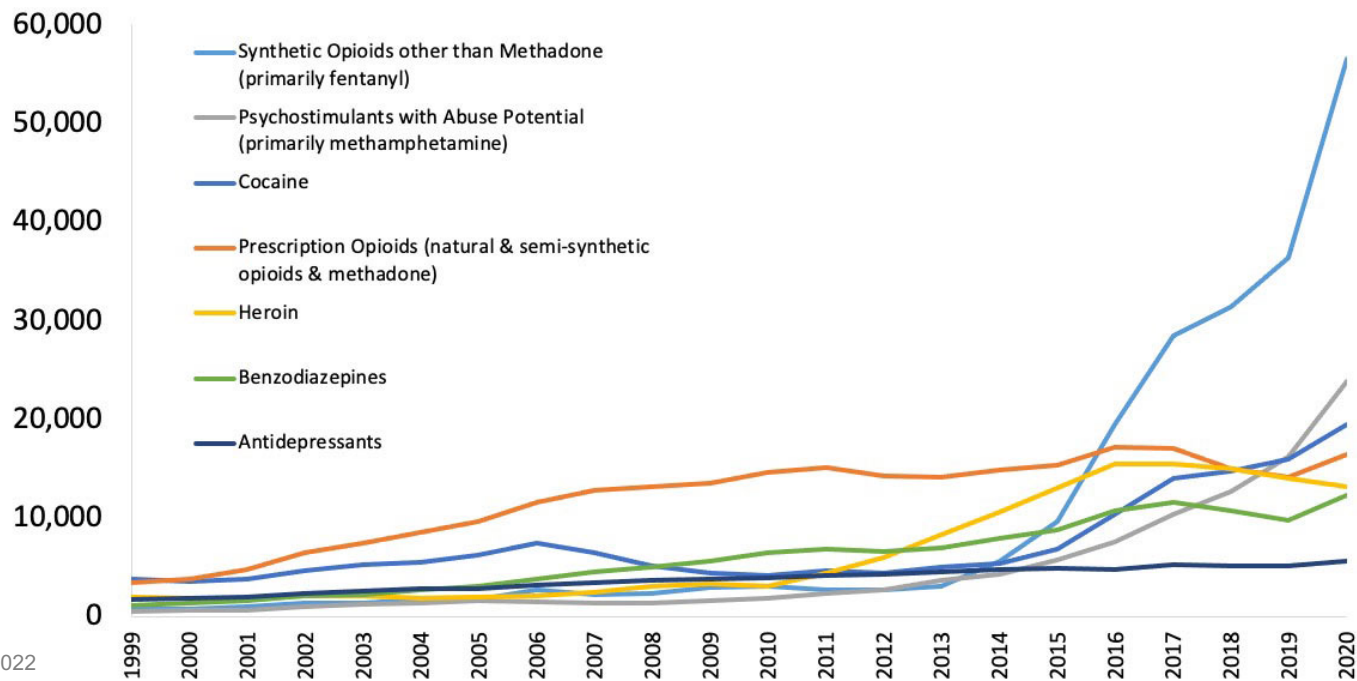
32,656 deaths from synthetic opioids each year

15,349 deaths from heroin each year

About 40 percent of opioid users are infected with HCV

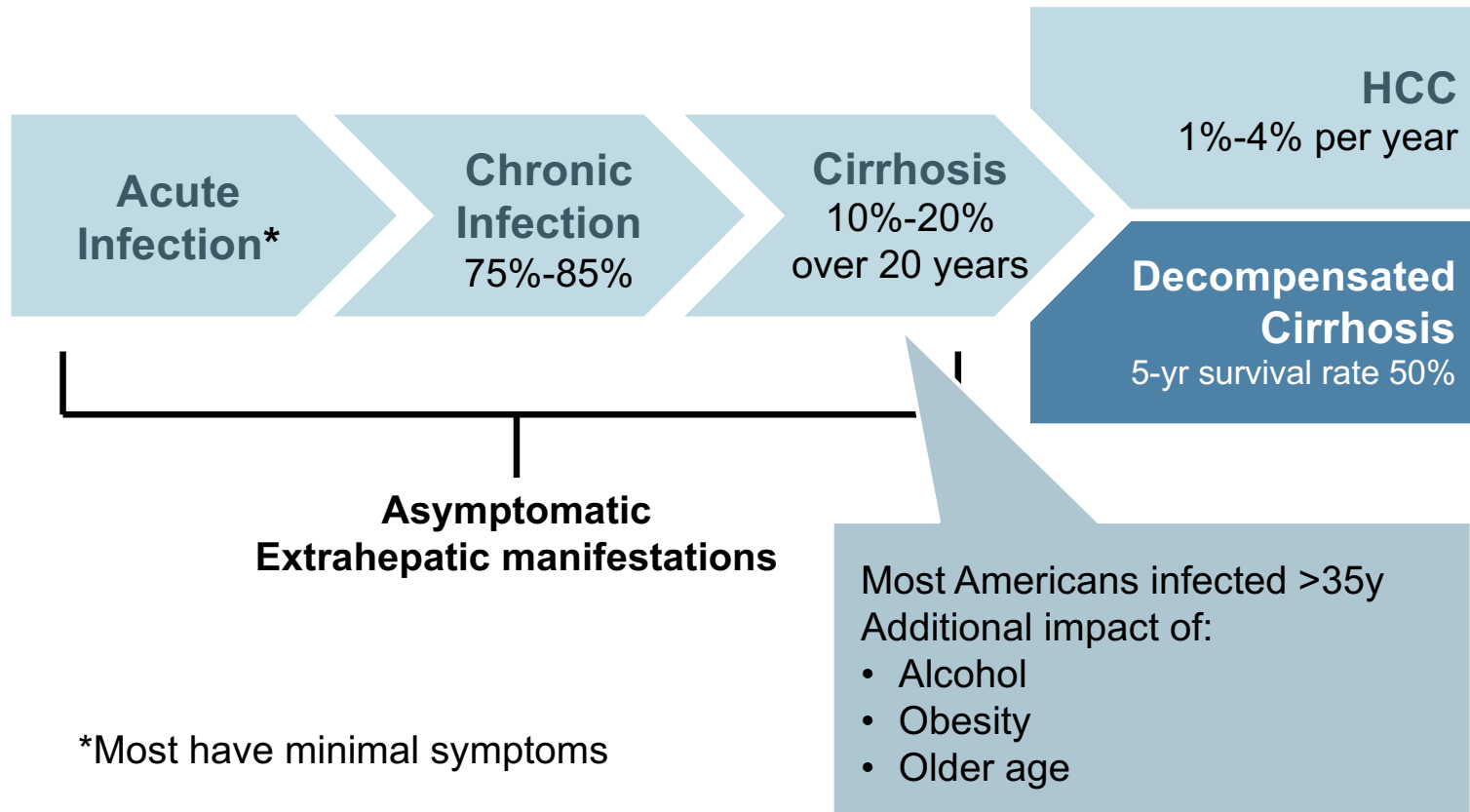
# National Drug-Involved Overdose Deaths by Specific Category—Number Among All Ages, 1999-2020

**Figure 2. National Drug-Involved Overdose Deaths\*, Number Among All Ages, 1999-2020**



Source: CDC WONDER, 2022

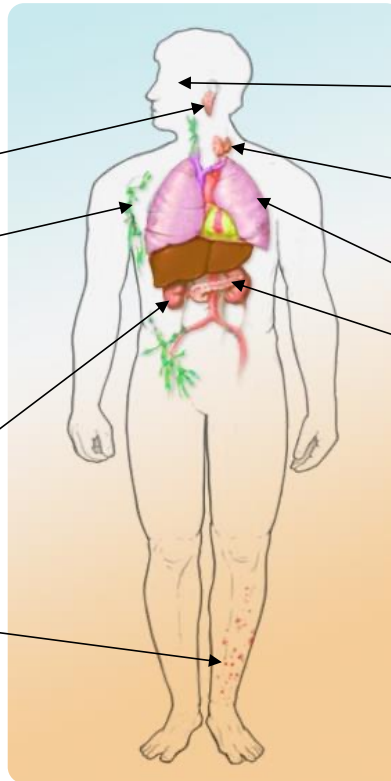
# Natural History of HCV



# Extrahepatic Manifestations of HCV

## Strongly associated

- Mixed cryoglobulinemia
- Sjögren (sicca) syndrome
- Lymphoproliferative disorders
- Porphyria cutanea tarda
- Neuropathy
- Membranoproliferative glomerulonephritis
- Cryoglobulinemic vasculitis



## Possibly associated

- Corneal ulcers (Mooren ulcers)
- Thyroid disease
- Lichen planus
- Pulmonary fibrosis
- Type 2 diabetes
- Systemic vasculitis (polyarteritis nodosa, microscopic polyangiitis)
- Arthralgias, myalgias, inflammatory polyarthritis
- Autoimmune thrombocytopenia

# HCV Epidemic Exists Among Several Marginalized Groups

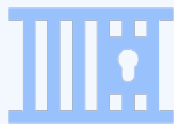
## Global HCV prevalence among high-risk patient groups:

PWID or  
former PWID<sup>2-4</sup>



~52%

Incarcerated<sup>2,3,5</sup>



~3-38%

Migrants from endemic  
countries<sup>2,3,6\*</sup>



~2-16%

Homeless<sup>7</sup>

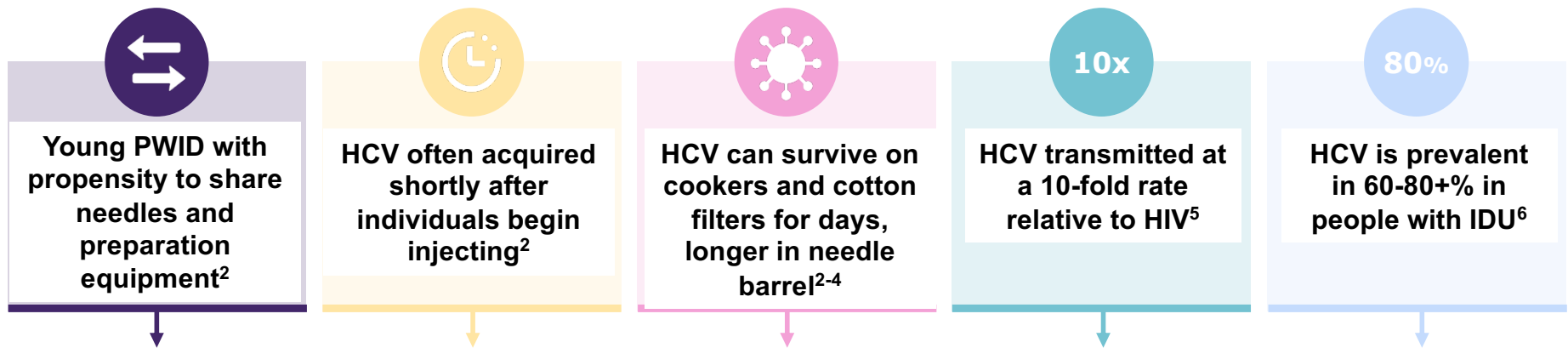


~4-36%

\*Romania, Russia, Morocco, Pakistan, Egypt, and Nigeria.  
PWID, people who inject drugs.

1. World Health Organization. Guidelines on hepatitis B and C testing, February 2017. Available at: <https://www.who.int/hepatitis/publications/guidelines-hepatitis-c-b-testing/en/> (Accessed May 10, 2021); 2. Lazarus JV, et al. *Semin Liver Dis* 2018;38:181-192; 3. Lazarus JV, et al. *J Hepatol* 2017;67:665-666; 4. Degenhardt L, et al. *Lancet Glob Health* 2017;5:e1192-e1207; 5. Zampino R, et al. *World J Hepatol* 2015;7:2323-2330; 6. Falla AM, et al. *BMC Infect Dis* 2018;18:42; 7. Beijer U, et al. *Lancet Infect Dis* 2012;12:859-870.

# IDU is the Most Important Risk Factor for HCV Infection<sup>1</sup>



**64%** of PWIDs in the United States are chronically infected<sup>1</sup>



**80%** of new infections in the United States are due to IDU

IDU, intravenous drug use; PWID, people who inject drugs.

1. US Department of Health and Human Services (DHHS). 2014–2016 action plan for the prevention, care, and treatment of viral hepatitis Available at: <https://www.hhs.gov/sites/default/files/viral-hepatitis-action-plan.pdf> (Accessed May 10, 2021). DHHS. Technical consultation: Hepatitis C virus infection in young persons who inject drugs. February 26–27, 2013. Available at: <https://hepfree.nyc/wp-content/uploads/2017/08/hcv-and-young-pwid-consultation-report.pdf> (Accessed May 10, 2021); 3. Paintsil E, et al. *J Infect Dis* 2010;202:984–990; 4. Doerrbecker J, et al. *J Infect Dis* 2013;207:281–287; 5. Clausen LN, et al. *World J Gastroenterol* 2014;20(34):12132–12143; 6. Nelson PK, et al. *Lancet* 2011;378(9791):571–583.

## Transmission of HCV



- Sharing supplies for injection or intranasal drug use
- Transfusion of blood/blood products prior to 1992

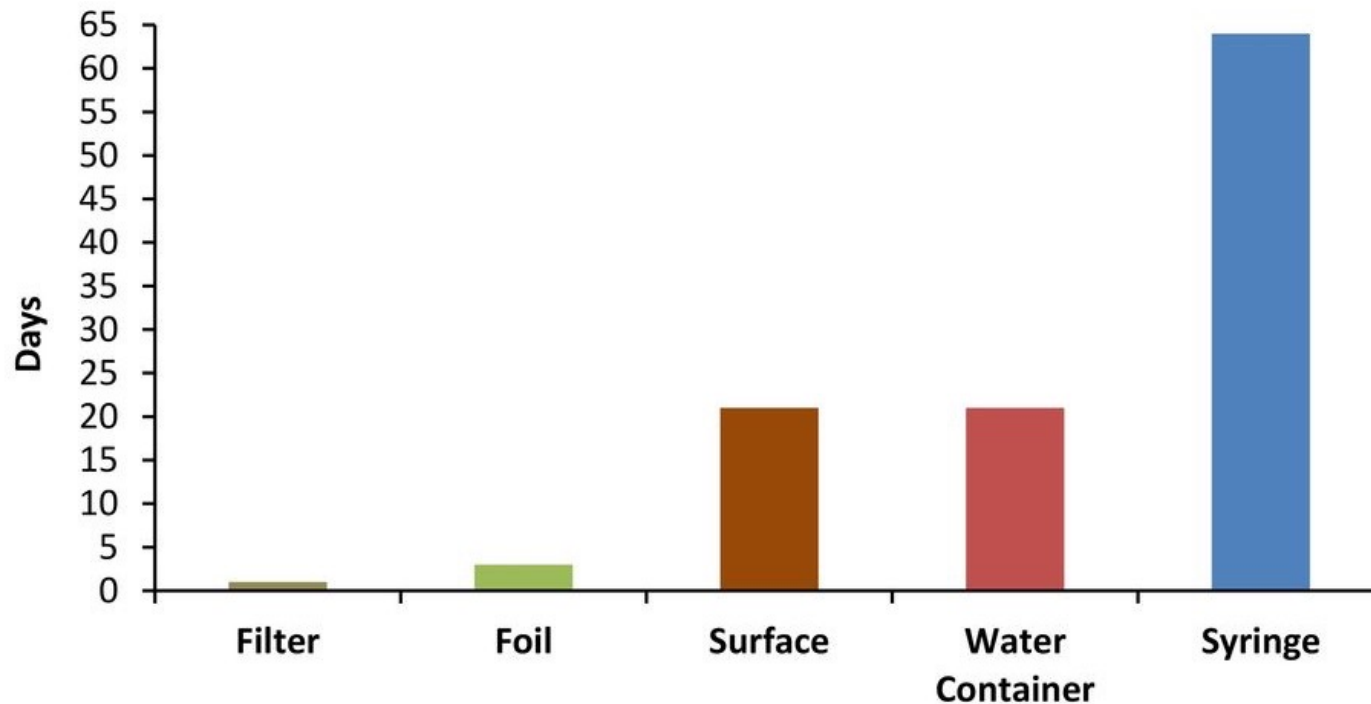


- Needle stick injury in health care
- Sharing personal care items (straight razors)



- Being born to a mother who has HCV
- Tattoos, body piercing in unlicensed setting
- Sex with an infected person (blood exposure)

# How Long Can HCV Survive on Inanimate Objects?



HCV-contaminated solution needs to be heated for almost **90 seconds** and reach temperatures of **144°F** for the virus to be at undetectable levels.

# NYS Hepatitis C Elimination Plan: Workgroup Recommendations

## Top 5 Priority Populations

- People who use drugs
- Currently or formerly involved in the justice system
- Baby boomers (born between 1945 and 1965)
- Homeless or at risk of becoming homeless
- HIV+ individuals (including HIV/HCV coinfection)

## Top 5 Priority Settings

- Correctional facilities, including jails, courthouses, prisons
- Harm reduction programs
- Drug/substance use treatment program sites
- Primary and routine health care offices, community health providers, and federally qualified health centers
- Settings serving the homeless

# 2020 CDC Recommendations HCV Screening Among Adults in the US



## **1. Universal Screening**

Screen at least once in a lifetime for **all adults  $\geq 18$  years**  
(except in settings where HCV RNA-positivity is  $< 0.1\%$ )



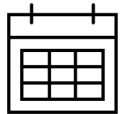
## **2. Pregnancy**

Screening **all pregnant women during each pregnancy**  
(except in settings where HCV RNA-positivity is  $< 0.1\%$ )



## **3. Exposure**

One-time testing among people with recognized conditions or exposures  
(more info on <https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm>), regardless of age or setting prevalence

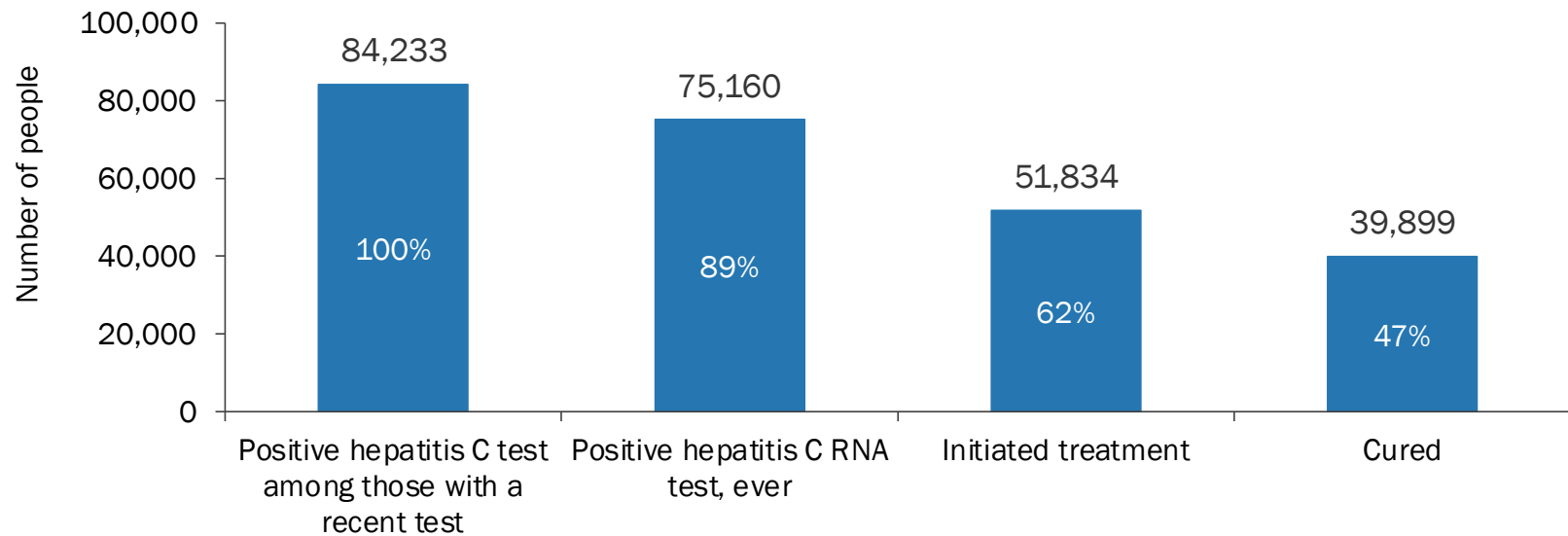


## **4. Periodic testing**

Routine periodic testing for people with on-going risk factors

# HCV Care Cascade in NYC, 2019

Care cascade for people in NYC with chronic hepatitis C recently reported (from July 1, 2014 to June 30, 2019) with a positive hepatitis C test, regardless of year of first report



Source: [NYC Health Department \(2020\)](#)

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# HCV Treatment Overview

## Simplified HCV Algorithm For Treatment-Naive Adults Without Cirrhosis

### Who is eligible for simplified treatment

Adults with chronic HCV (any genotype) who do not have cirrhosis and have not previously received hepatitis C treatment



### Who is *not* eligible for simplified treatment

Patients who have any of the following characteristics:

- Prior HCV treatment
- Cirrhosis (see simplified treatment for treatment-naive adults with compensated cirrhosis)
- HIV or HBsAg positive
- Current pregnancy
- Known or suspected hepatocellular carcinoma
- Prior liver transplantation

### Pretreatment Assessment

- **Calculate FIB-4 score.**
- **Cirrhosis assessment:** Liver biopsy is not required. For the purpose of this guidance, a patient is presumed to have cirrhosis if they have a FIB-4 score >3.25 **or** any of the following findings from a previously performed test.
  - Transient elastography indicating cirrhosis (eg, FibroScan stiffness >12.5 kPa)
  - Noninvasive serologic tests above proprietary cutoffs indicating cirrhosis (eg, FibroSure, Enhanced Liver Fibrosis Test, etc)
  - Clinical evidence of cirrhosis (eg, liver nodularity and/or splenomegaly on imaging, platelet count <150,000/mm<sup>3</sup>, etc)
  - Prior liver biopsy showing cirrhosis
- **Medication reconciliation:** Record current medications, including over-the-counter drugs, and herbal/dietary supplements
- **Potential drug-drug interaction assessment:** Drug-drug interactions can be assessed using the AASLD/IDSA guidance or the University of Liverpool drug interaction checker.
- **Education:** Educate the patient about proper administration of medications, adherence, and prevention of reinfection.
- **Pretreatment laboratory testing**
  - Within 6 months of initiating treatment:
    - Complete blood count (CBC)
    - Hepatic function panel (ie, albumin, total and direct bilirubin, alanine aminotransferase [ALT], and aspartate aminotransferase [AST])
    - Calculated glomerular filtration rate (eGFR)
  - Any time prior to starting antiviral therapy:
    - Quantitative HCV RNA (HCV viral load)
    - HIV antigen/antibody test
    - Hepatitis B surface antigen
  - Before initiating antiviral therapy:
    - Serum pregnancy testing and counseling about pregnancy risks of HCV medication should be offered to women of childbearing age.


## Simplified HCV Algorithm For Treatment-Naive Adults Without Cirrhosis

### Recommended Regimens

**Glecaprevir (300 mg) / pibrentasvir (120 mg)**  
taken with food for a duration of 8 weeks

**Sofosbuvir (400 mg) / velpatasvir (100 mg)**  
for a duration of 12 weeks

### On-Treatment Monitoring

- Inform patients taking diabetes medication of the potential for symptomatic hypoglycemia. Monitoring for hypoglycemia is recommended
- Inform patients taking warfarin of the potential for changes in their anticoagulation status. Monitor INR for subtherapeutic anticoagulation is recommended.
- No laboratory monitoring is required for other patients. 
- An in-person or telehealth/phone visit may be scheduled, if needed, for patient support, assessment of symptoms, and/or new medications.

### Post-Treatment Assessment of Cure (SVR)

- Assessment of quantitative HCV RNA and a hepatic function panel are recommended 12 weeks or later following completion of therapy to confirm HCV RNA is undetectable (virologic cure) and transaminase normalization.
- Assessment for other causes of liver disease is recommended for patients with elevated transaminase levels after achieving SVR.

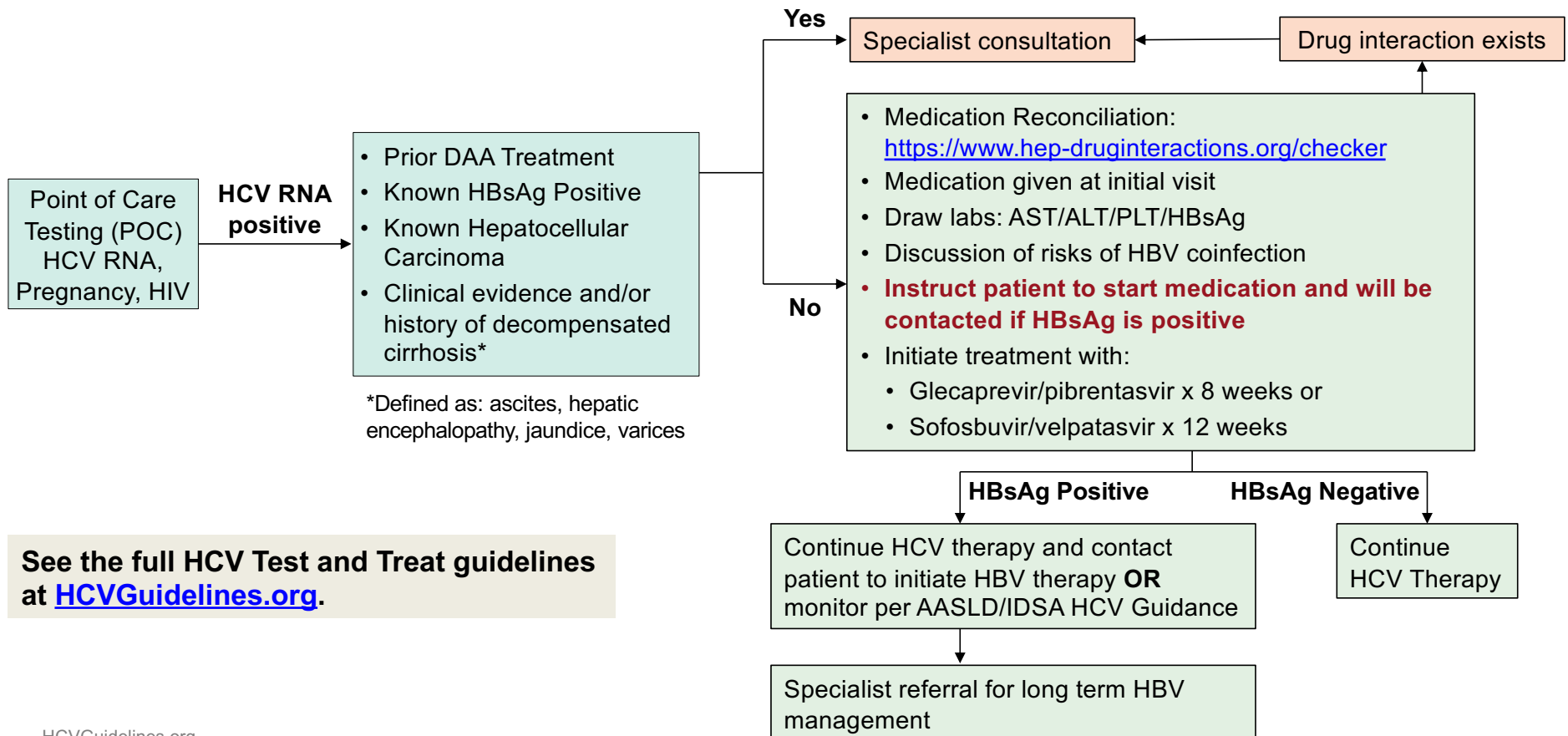
### Follow-up After Achieving Virologic Cure (SVR)

- No liver-related follow-up is recommended for noncirrhotic patients who achieve SVR.
- Patients with ongoing risk for HCV infection (eg, intravenous drug use or MSM engaging in unprotected sex) should be counseled about risk reduction, and tested for HCV RNA annually and whenever they develop elevated ALT, AST, or bilirubin.
- Advise patients to avoid excess alcohol use.

### Follow-up For Patients Who Do Not Achieve a Virologic Cure

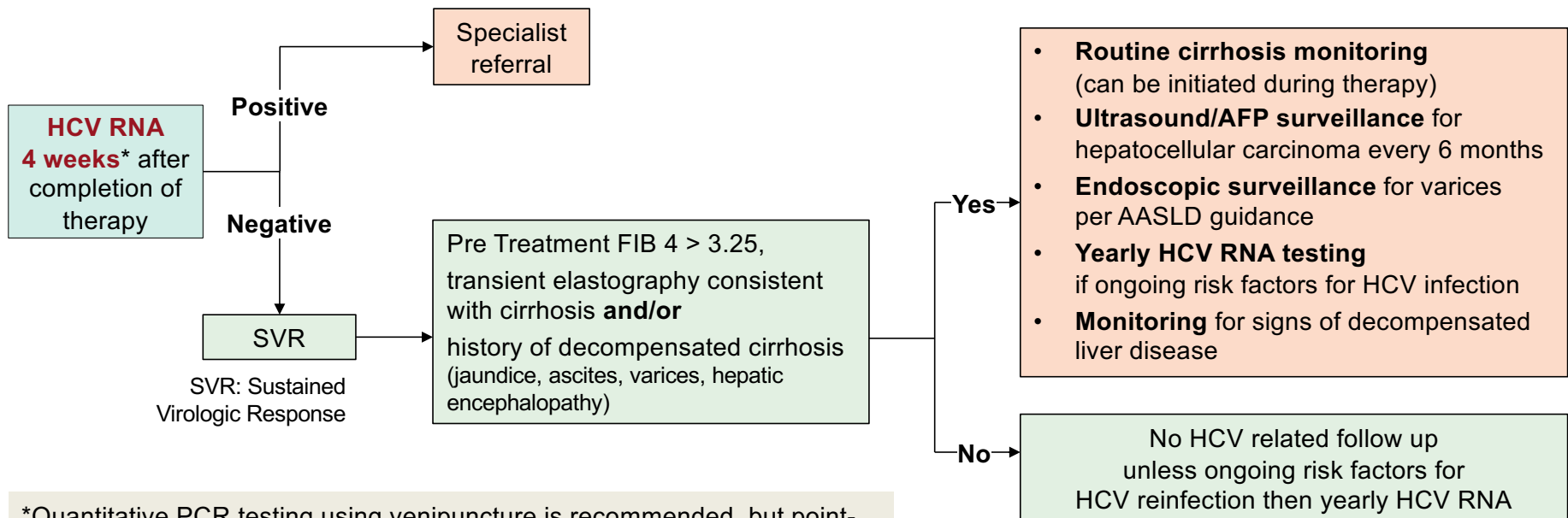
- Patients in whom initial HCV treatment fails to achieve cure (SVR) should be evaluated for retreatment by a specialist, in accordance with AASLD/IDSA guidance.
- Until retreatment occurs, assessment for disease progression every 6 to 12 months with a hepatic function panel, CBC, and INR is recommended.
- Advise patients to avoid excess alcohol use.

# AASLD/IDSA HCV Guidance Update for Simplified Treatment: HCV Test and Treat Initial Visit



See the full HCV Test and Treat guidelines at [HCVGuidelines.org](https://www.hcvguidelines.org).

# AASLD/IDSA HCV Guidance Update for Simplified Treatment: HCV Test and Treat Follow-Up Visit



\*Quantitative PCR testing using venipuncture is recommended, but point-of-care qualitative tests can be used to determine sustained virologic response (SVR) in certain settings where venipuncture may be unavailable. Evaluation of SVR at 12 weeks (SVR 12) by HCV RNA testing should be performed as measure of HCV cure among people with cirrhosis.

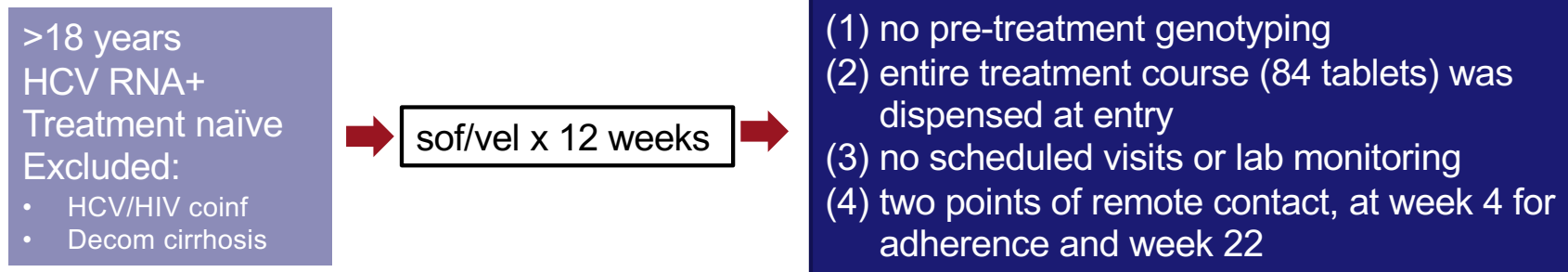
See the full HCV Test and Treat guidelines at [HCVGuidelines.org](https://www.hcvguidelines.org).

## AASLD/IDSA HCV Guidance Update for Simplified Treatment: Takeaways

- Initiate HCV treatment same day, don't wait for HBV result, contact pt if positive to manage HBV
- Sustained virologic response testing at 4 weeks
- SVR can be confirmed via venipuncture for quant or POCT for qualitative

## A Minimal Monitoring Approach For The Treatment Of HCV Infection (ACTG A5360 [MINMON]): A Phase 4, Open-label, Single-Arm Trial

- 38 sites in Brazil, South Africa, Uganda, Thailand, and USA



- Primary endpoint: sustained virological response (SVR) at least 22 weeks post-treatment initiation

## A Minimal Monitoring Approach For The Treatment Of HCV Infection (ACTG A5360 [MINMON]): A Phase 4, Open-label, Single-Arm Trial

- Overall, 379 of the 399 who initiated treatment had an **SVR (95·0%, 95% CI 92·4-96·7)**
- 14 (4%) of 397 participants reported serious adverse events between treatment initiation and week 28; none were treatment related or led to treatment discontinuation or death
- 15 (4%) of 399 participants had unplanned visits; none were related to treatment

## Treatment Summary

- DAA therapy is safe and effective among people who inject drugs and are experiencing homelessness
- We need to acknowledge and accept that hepatitis C reinfection will occur when treating people who inject drugs who are experiencing homelessness
- Testing, diagnosis and linkage to care remain significant barriers
- Act regionally, but think globally (micro-elimination)
  - One size does NOT fit all
  - Make treatment accessible for people who inject drugs
- Simplification of models of care will be essential to achieving hepatitis C elimination among people who inject drugs experiencing homelessness



# **Barriers, Challenges & Opportunities**

# Barriers to HCV Treatment Uptake

## Patient



- Lack of HCV-related knowledge that treatment cures
- Stigma
- Feelings of not deserving treatment
- Mistrust of health care system
- Competing priorities

## Provider



- Concern regarding adherence, reinfection
- Management of coexisting mental health diagnoses
- Lack of support to coordinate care

## Systems



- Insurance
- Discrimination
- Fragmented Care
- Drug User Health Expertise across disciplines (e.g. phlebotomy)

# HCV Therapeutic Divide

## HCV Treatment

- Almost universal efficacy of DAAs
- Minimal side effects
- Short treatment duration
- All oral medication



## HCV Disease State

- HCV infections continue to rise due to ongoing opioid epidemic
- Up to 50% unaware of HCV infection
- Shortage of treatment providers

## Challenges Treating People Experiencing Homelessness

- HCV is often low on client priority list (housing instability, food insecurity, substance use) and not overcome by providing incentives
- Clients are often not engaged in medical care and have distrust of health care providers
- Challenges associated with integrating medical approach into Syringe Service Programs or other low threshold settings
- Clients often have no stable phone number or address, but if they are in the DHS system, contact can be made to plan treatment, support adherence and return to care

## Treatment Schedule Flexibility in the Homeless Population

- Pretreatment labs are required
- SVR 12 labs are necessary to assess for cure
- Allow for a very flexible schedule of visits/bloodwork in between these two periods
- If the person is in the DHS system, there is a way to contact them to plan treatment, support adherence and assist them to return to care

## Stigma Challenges

- Validate previous bad experiences with medical providers
- Provide non-judgmental care
- Thank them for their visit today
- Provide food, drink and MetroCards if possible
- If you have a peer worker, have them sit with the person until the provider is ready for the visit

# Food Challenges

- Food insecure?
- 12 week treatment that does not have food requirements?

OR

- 8 week treatment that you must take with food?
- Refer to pantry/soup kitchen
- Assist with benefit acquisition
- Provider can submit Reasonable Accommodation to DHS to request specific food access to support treatment
  - <https://www.nyc.gov/site/dhs/about/applicants-and-clients-with-disabilities.page>

## Lost to Follow Up Challenges

- Intake form should ask about hang out areas, permission to contact programs, emergency contact, social media contacts, etc.
- Contact DHS to see if a person has had recent contact with the shelter system.
- Use EMR to look for contact with other health systems (care everywhere, regional health information organizations, healthix).
- Connect to a Patient Navigation Program:
  - Check Hep C: <https://hepfree.nyc/check-hep-c-patient-navigation-program/>
  - Hep C Peer Navigation at SSPs: <https://hepfree.nyc/nyc-hep-c-peer-navigation-program/>

## Mental Health Challenges

- Use non-judgmental and supportive language
- Validate their lived experience
- Discuss the trauma and substance use connection
- Provide trauma informed care
- Support, support, support
- Offer referral to mental health services

## Substance Use Challenges

- Offer a referral to a low threshold harm reduction program
- Offer naloxone and discuss safer sniffing/injection practices
- Offer referral to an MOUD program
- Always use non-judgmental and supportive language
- Encourage them to refer people in their network to services

# HCV Medication Storage Challenges

No safe place to store medication?

- Offer a place at your facility to keep medication
- Fill a weekly pill box with medication, store the rest
- Bring medication to person on an agreed upon schedule
- All shelters have space to securely store medication which can be accessed 24/7
- Most shelters offer a safe medication storage service

Provider can assist client to submit a request for access to a refrigerator in shelter: <https://www.nyc.gov/site/dhs/about/applicants-and-clients-with-disabilities.page>

## HCV Medication Resistance Worries

- DAA's are very forgiving in reference to resistance
- Don't worry (too much) about missed days
- People can be cured with a lot less than recommended medication (8 or 12 weeks). Don't advertise this fact.
- Encourage people to keep taking their medication if they have a gap. AASLD has new guidelines for missed doses.

## Recommended Management of DAA Treatment Interruptions For Treatment-Naive Patients, Without Cirrhosis or With Compensated Cirrhosis, Receiving Glecaprevir/Pibrentasvir or Sofosbuvir/Velpatasvir

### Interruptions During First 28 Days of DAA Therapy

#### Missed $\leq 7$ days

- **Restart** DAA therapy immediately. Complete therapy for originally planned duration (8 or 12 weeks).

#### Missed $\geq 8$ days

- **Restart** DAA therapy immediately. Restarting DAA takes precedence over obtaining HCV RNA level.
- Obtain HCV RNA test as soon as possible, preferably the same day as restarting the DAA therapy.
  - If HCV RNA is negative (undetectable), complete originally planned DAA treatment course (8 or 12 weeks). Recommend extending DAA treatment for an additional 4 weeks for patients with genotype 3 and/or cirrhosis.
  - If HCV RNA is positive ( $>25$  IU/L) or not obtained, extend DAA treatment for an additional 4 weeks.

### Interruptions After Receiving $\geq 28$ Days of DAA Therapy

#### Missed $\leq 7$ days

- **Restart** DAA therapy immediately. Complete DAA therapy for originally planned duration (8 or 12 weeks).

#### Missed 8-20 Consecutive Days

- **Restart** DAA therapy immediately. Restarting DAA takes precedence over obtaining HCV RNA level.
- Obtain HCV RNA test as soon as possible, preferably the same day as restarting the DAA therapy.
  - If HCV RNA is negative (undetectable), complete originally planned course (8 or 12 weeks). Recommend extending DAA treatment for an additional 4 weeks for patients with genotype 3 and/or cirrhosis.
  - If HCV RNA is positive ( $>25$  IU/L), or not obtained, **stop** treatment and retreat according to recommendations in the Retreatments Section.

#### Missed $\geq 21$ Consecutive Days

- **Stop** DAA treatment and assess for SVR12. If SVR12 not achieved, retreat according to recommendations in the Retreatments Section.

DAA, direct-acting antiviral; HCV RNA, hepatitis C virus ribonucleic acid; SVR12, sustained virologic response 12 weeks after end of treatment.

# Harm Reduction

A set of practical strategies that reduce the negative consequences of drug use and other risk behaviors (e.g. sexual risk) in relation to drug use:

- Syringe Service Programs
- Overdose prevention centers
- Naloxone
- MOUD (methadone, buprenorphine, naltrexone)
- PrEP/Doxy PrEP
- Mental Health and Substance Use Treatment

## Benefits of getting treated

- People often feel much better after getting treated for HCV
- Increased energy, increased positive affect, improved appetite
- Have an opportunity to experience an achievement
- Removes a stressor, positive impact on mental health
- Eliminates risk of transmission to others
- Decreases risk of liver damage with alcohol use disorder

## Reduce Stigma – Words Matter

Instead of .....	Use .....
Addict	Person with substance use disorder
User	Person with OUD
Substance or drug abuser	Patient
Junkie	Person in active use
Alcoholic	Person with AUD
Drunk	Person who misuses alcohol
Former addict	Person in recovery
Clean (toxicology)	Testing negative
Clean	Abstinent from drugs
Dirty (toxicology)	Testing positive
Addicted baby	Newborn exposed to substances

## Summary of Key Messages

- People are used to having their needs not met, assure them that you will see them through the HCV treatment process.
- Make sure to have people who have experience with drug use and homelessness on your team. (And pay them well with benefits).
- Provide supervision and training to peer workers with lived experience.
- Measure success by the participants yard stick, not your own.
- HCV treatment success is possible with people experiencing homelessness.
- HCV treatment can lead to other needs being met. (substance use treatment, housing, mental health, etc).

# Case Study

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## Case Study

- 39 year-old cisgender male
- HCV tested at VOCAL-NY by healthcare team
- Treatment naïve, no medical comorbidities
- Injects heroin/fentanyl daily, shares injection equipment with others
- Receives injection supplies from VOCAL-NY
- Living on the street
- Does not have a phone

## Case Study Outcome

- Referral and escort by peer to a local Brooklyn hospital for pre-treatment blood work, substance use treatment and primary care. Not happy with care at local hospital. NP used pre-treatment blood work for first HCV medical visit and ordered medication.
- Peer worker escorted participant to REACH program at Mount Sinai for primary care and buprenorphine initiation.
- One week (at a time) of HCV medication was given by peer worker to participant in a pill organizer. Taking medication regularly.
- Peer worker reached out to DHS staff to assist with shelter placement.
- Participant was placed in a shelter close to VOCAL-NY location.
- Treatment blood work indicates that he has been cured.

## Case Study Opportunities

- Participant was connected to VOCAL-NY staff members Peer worker escorted participant to REACH program at Mount Sinai for primary care and buprenorphine initiation.
- Participant bonded to one peer worker who facilitated all referrals/connections to care.
- Received a referral for primary care and MOUD treatment. Transitioned to buprenorphine treatment. Reduced opiate use.
- Participant was housed in a shelter near VOCAL-NY. Still able to be part of his social community.
- HCV cured and still taking buprenorphine

# Hepatitis C Treatment Guidelines and Resources

- Treatment Guidelines - [HCVguidelines.org](https://www.hcvguidelines.org)
  - Includes a simplified treatment algorithm for use by primary care providers
- Drug-Drug Interactions - <https://www.hep-druginteractions.org/>

## Hepatitis C Resources in NYC

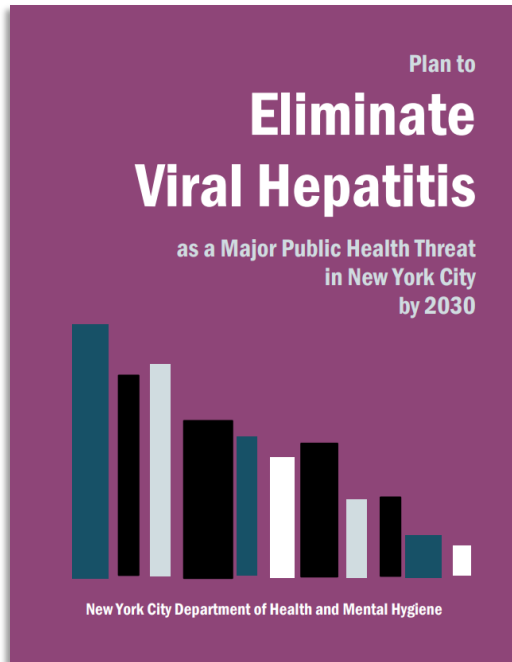
- NYS HCV CEI Clinical Consultation Hotline:  
(866) 637-2342 (leading hepatologist will answer questions)
- [www.HepFree.NYC](http://www.HepFree.NYC)
  - [Hep C Task Force](#)
  - [Clinical Resources](#)
  - [Capacity building tools](#)
  - [Advocacy Committee](#)
- Hepatitis C patient information page: [www.nyc.gov/health/hepc](http://www.nyc.gov/health/hepc)
  - Free or low-cost testing and treatment

## Coordinating Health Care with NYC DHS

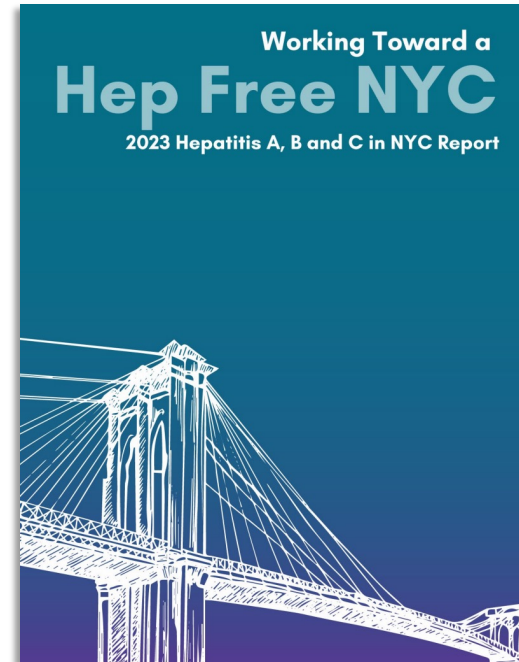
- Providers can call (212) 361-5590 or email [DHSHRDS@dhs.nyc.gov](mailto:DHSHRDS@dhs.nyc.gov) to find a client's current shelter contact info
- Reasonable Accommodation request: [Applicants and Clients with Disabilities - DHS \(nyc.gov\)](#)
- Other questions? Email [harmreduction@dss.nyc.gov](mailto:harmreduction@dss.nyc.gov)

# Elimination Plan and Annual Report

Find on NYC.gov website [here](#)



Find on NYC.gov website [here](#)



# HCV Counseling and Treatment Guidance For Providers Working With People Experiencing Homelessness

## Hepatitis C Counseling and Treatment Guidance for Medical Providers Working With People Experiencing Homelessness

### Guidance for Speaking About Hepatitis C With Patients

Hepatitis C (Hep C or HCV) is a viral infection that causes liver swelling and can lead to severe liver damage.

- Hep C spreads through contact with infected blood such as by sharing needles, syringes, or other items used to prepare drugs.
- If left untreated, Hep C can cause severe and life-threatening health issues, such as cirrhosis, liver failure, or liver cancer.
- **Hep C can be cured! Getting tested and treated promptly can reduce health risks.**

Many people with Hep C may not know they're infected, since the first phase of the infection rarely causes symptoms.

Symptoms of chronic Hep C can include:

- Jaundice (yellowing of skin)
- Fatigue
- Nausea
- Fever
- Muscle aches
- Bleeding / bruising easily
- Loss of appetite / weight loss
- Swelling in feet and legs
- Itchy skin
- Dark urine
- Memory / concentration issues
- Spiderlike blood vessels on the skin

### Resources for Medical Providers

- **HCV Treatment Guidelines:** [hcvguidelines.org](http://hcvguidelines.org)
- **HCV Drug Interactions:** [hep-druginteractions.org](http://hep-druginteractions.org)
- **National Clinician Consultation Center:** (844) 437-4636
- **CEI Line for Clinician Consult:** (866) 637-2342
- **CEI On-Demand Clinical Education:** [ceitraining.org](http://ceitraining.org)
- **Syringe Service Programs (SSPs):** Provide Hep C prevention services such as sterile supplies, as well as testing, navigation and treatment. Find locations and phone numbers by calling or texting **988** and [here](#).

- Includes key messages for HCV patient education
- Lists treatment guidelines and clinical education/consultation resources for medical providers
- Provides referral information, including syringe service programs and HCV navigation services

# Contact Us

**For CMEs or educational opportunities, contact:**

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[megchappell@empireliverfoundation.org](mailto:megchappell@empireliverfoundation.org)  
[www.empireliverfoundation.org](http://www.empireliverfoundation.org)

**For questions about resources, contact:**

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Director, Training, Viral Hepatitis Program  
New York City Health Department  
[mbresnahan@health.nyc.gov](mailto:mbresnahan@health.nyc.gov)  
[www.hepfree.nyc](http://www.hepfree.nyc)

**For information and resources related to people experiencing homelessness, contact:**

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Director of Special Populations  
NYC Department of Homeless Services  
[njohnson@dhs.nyc.gov](mailto:njohnson@dhs.nyc.gov)

**For CEI related educational opportunities, contact:**

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