

HCV ECHO Launch

Curtis Barry and Laurel Banach
co-course directors

9/11/25



Learning Objectives

- Describe the structure of the Project ECHO Model
- Familiarize with course facilitators and participants



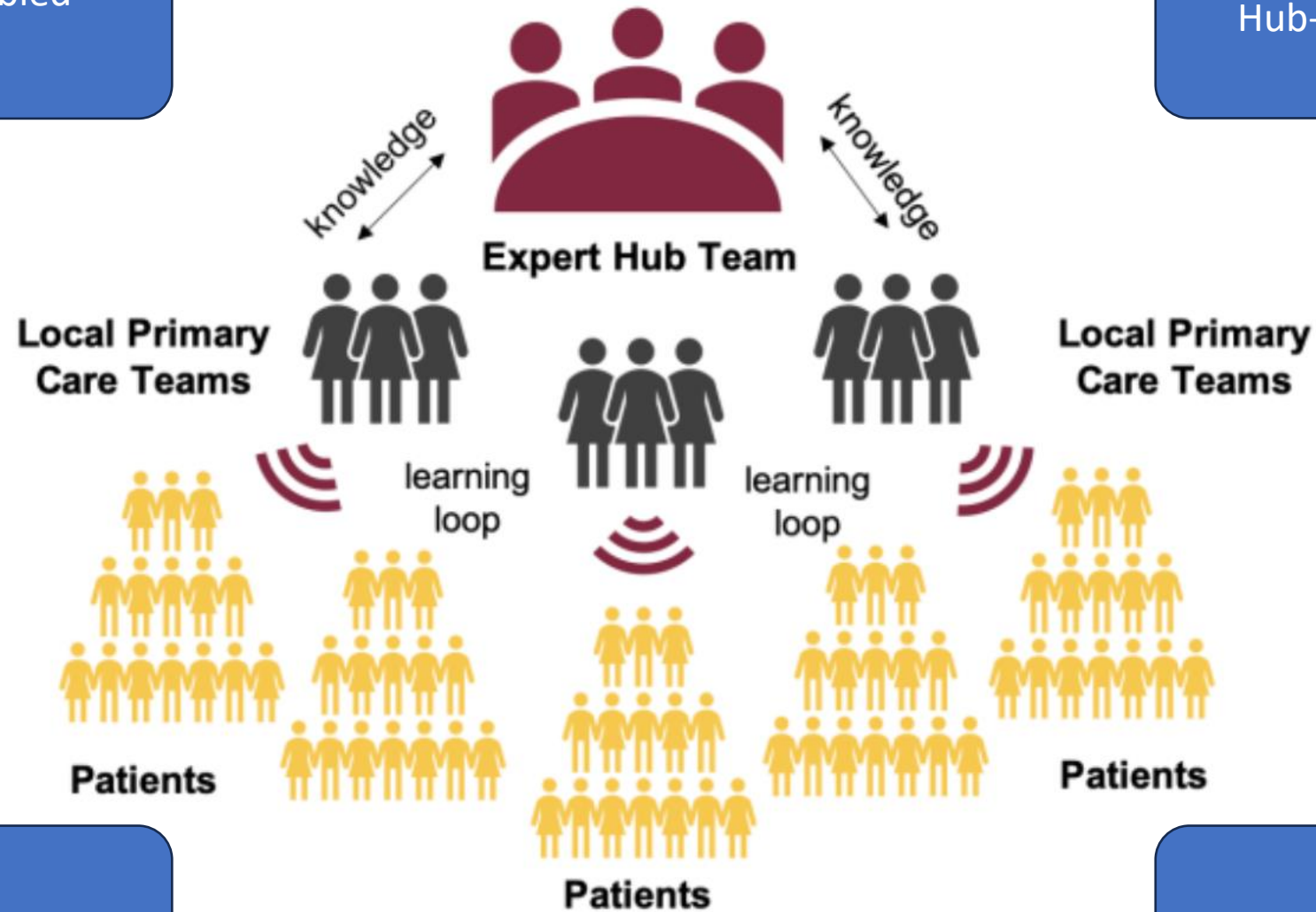
Project ECHO's Aspirations

At Project ECHO (Extension for Community Healthcare Outcomes), the mission is to democratize medical knowledge and dramatically improve access to best practice care to underserved people all over the world.

The goal is to improve the lives of 1 billion people by 2025.

Technology-enabled
platform

Hub-spoke framework



Case-based learning

Interactive mentorship

ECHO vs Webinar: What's the difference?

ECHO



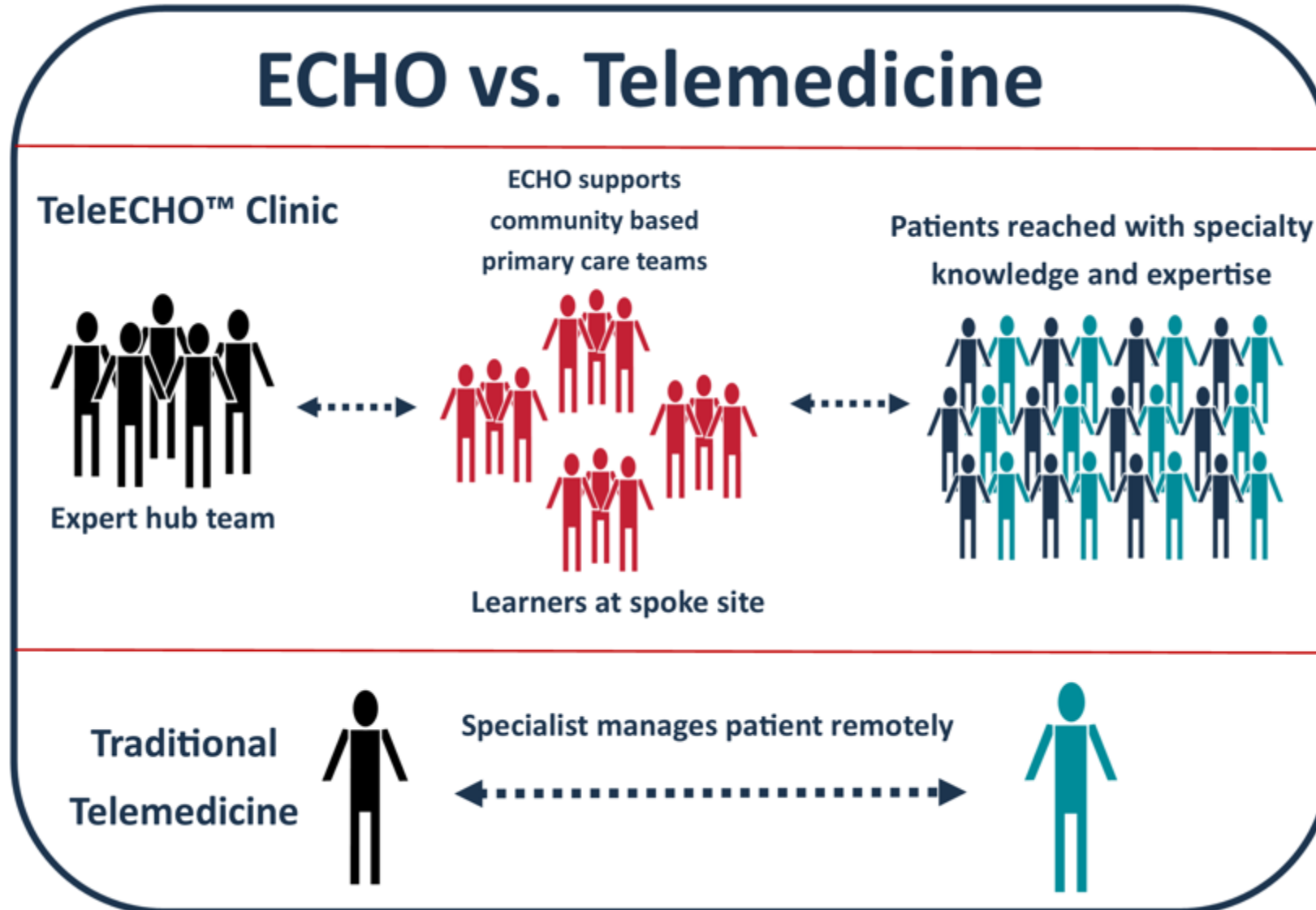
- Uses the ECHO model – participation is free
- Short didactics
- Case-based learning
- Interactive and participatory
- Learners are seen as experts in their context
- Regular, ongoing over a period of time, following a curriculum of interest to learner
- Participants engage visually and become a virtual community of practice
- Building community is a key aim
- Low Dose High Frequency learning
- Aims to present unbiased information
- Earn CE credits

Webinar



- Structure varies – may cost a fee to participate
- Long presentations/lectures as dominant pedagogical feature
- May be passive with no or minimal discussion
- Case based learning not essential part of webinar
- Information/knowledge is pushed out– one way teach/learn approach
- Often a one-time only learning event
- Participants often are not seen and remain strangers
- May have commercial bias

ECHO (telementoring) vs. Telemedicine



Session Format

- 10 minutes: Introductions and housekeeping
- 15-20 minute didactic session by an expert
- 30-35 minute case presentation and discussion

HCV Project ECHO
Case Presentation Form
This form will capture the data for the upcoming presentation

General Case Information

*1. Date for the presentation of this case

Date (mm/dd/yyyy)

***2. Presenter Information**

Presenter's Name

Presenter's Email

***3. Clinical Site**

If Clinical Site is not listed above please indicate in space provided below.

Hepatitis C ECHO – Course Details

- Course consists of 7 ECHO sessions
 - Launch/session 1 for participants (TODAY)
 - Seven sessions about every 2 weeks through beginning of Dec 2026
- Continuing Medical Education credit is offered to participants (1 credit per session)



In the U.S. and around the world, people are not getting access to the specialty care they need, when they need it, for complex and treatable conditions.

Moving Knowledge, Not Patients
Through technology-enabled collaborative learning, ECHO creates access to high-quality specialty care in local communities.



Hub and spoke knowledge-sharing networks create a learning loop:
Community providers learn from specialists.
Community providers learn from each other.
Specialists learn from community providers as best practices emerge.

You're invited to join an exciting virtual collaborative learning opportunity!

**Health Equity ECHO Initiative
Massachusetts Hepatitis C ECHO**
For Beginner AND Experienced Practitioners! Come join us!
Primary care interdisciplinary team members
(providers, nurses, social workers, community health workers, patient navigators, etc.)

Participate in 7 one-hour sessions with case discussions
Fridays at 12:30 pm ET

TOPICS COVERED:

- Intro to HCV & ECHO Model - Epidemiology, Screening & Diagnosis
- Staging of Liver Disease & HCV
- Initiating Treatment
- Addressing Barriers to Health Equity
- Monitoring During & After Treatment
- Managing of Co-occurring Conditions (HIV, HBV, SUDs)
- How to Incorporate HCV In your Practice?

2025 SESSION DATES:

- Sept 5
- Sept. 19
- October 3
- October 17
- October 31
- November 7
- November 21

 **REGISTER NOW**



UMass Memorial Medical Group

Project ECHO® (Extension for Community Healthcare Outcomes)
University of Massachusetts Memorial Medical Group / 55 Lake Avenue North, Worcester, MA 01655
Questions or Comments? E-mail: Susan.Foley@umassmed.edu / Phone: (508) 812-3675



Curriculum

- All sessions are on Fridays, 12:30pm-1:30pm

Session Number	Topic
Session 1 – 9/11/26	Intro to ECHO Model and HCV: Epidemiology, Screening, and Diagnosis
Session 2 – 9/25/26	Staging of Liver Disease and HCV
Session 3 – 10/9/26	Initiating Treatment
Session 4 – 10/23/26	Addressing Barriers to Care and Health Equity
Session 5 – 11/6/26	Monitoring During and After Treatment
Session 6 – 11/20/26	Management of co-occurring conditions (HIV, HBV, SUDs)
Session 7 – 12/4/26	How to incorporate HCV treatment in your practice

Moving Knowledge Instead of Patients & Healthcare Workers



Epidemiology, Screening, and Diagnosis

Curtis Barry & Laurel Banach, MD

HCV ECHO

9/11/26



Disclosure

- No financial disclosures related to this topic

Objectives

- a. Understand the burden and transmission of HCV in Massachusetts.
- b. Recognize the importance of early detection and treatment.
- c. Identify who should be screened, and how, based on CDC and USPSTF recommendations.
- d. Interpret diagnostic tests for hepatitis C.

Background

- HCV is a liver infection which can lead to liver damage, cirrhosis, HCC, and liver failure
- HCV most common chronic bloodborne pathogen in US
- Most important risk factor is past or current injection drug use as transmission occurs via blood contact
 - A smaller percentage of cases occur via sexual contact but often with practices increasing risk of bleeding during sex or co-use of substances
- Estimated 2.4 million with current infection (maybe closer to 4 million)
- More than 50% of all infected people are unaware
- Chronic HCV typically has no symptoms
- Shift from Baby Boomers (1946-64) to younger adults (20-39 years) due to injection drug use

CDC
2023

- 4,966 new cases of acute HCV reported
- 69,000 estimated acute HCV infections
- 101,525 cases of newly reported chronic HCV infections
- 11,194 HCV related deaths

RISK FACTORS

Using or sharing needles, syringes, or other drug use

Shared items like razors, toothbrushes, or straws for drug use

Blood transfusions or organ transplant before 1992

Tattoos or piercings done in unregulated settings

Exposure to blood at work (e.g. needlestick injuries)

Sexual contact with someone who has HCV (especially multiple partners or HIV)

Being born to a mother with hepatitis C

History of incarceration

RISK FACTORS

Risk Activities

- Injection drug use (current or ever, including those who injected only once)
- Intranasal illicit drug use
- Use of glass crack pipes
- Male engagement in sex with men
- Engagement in chem sex (defined as the intentional combining of sex with the use of particular nonprescription drugs in order to facilitate or enhance the sexual encounter [[Bourne, 2015](#)])

Risk Exposures

- Persons on long-term hemodialysis (ever)
- Persons with percutaneous/parenteral exposures in an unregulated setting
- Healthcare, emergency medical, and public safety workers after needlestick, sharps, or mucosal exposure to HCV-infected blood
- Children born to HCV-infected women
- Recipients of a prior transfusion or organ transplant, including persons who:
 - Were notified that they received blood from a donor who later tested positive for HCV
 - Received a transfusion of blood or blood components, or underwent an organ transplant before July 1992
 - Received clotting factor concentrates produced before 1987
- Persons who were ever incarcerated

Other Conditions and Circumstances

- HIV or HBV infection
- Sexually active persons about to start pre-exposure prophylaxis (PrEP) for HIV
- Chronic liver disease and/or chronic hepatitis, including unexplained elevated alanine aminotransferase (ALT) levels
- Solid organ donors (living and deceased) and solid organ transplant recipients

Massachusetts Department
of Public Health



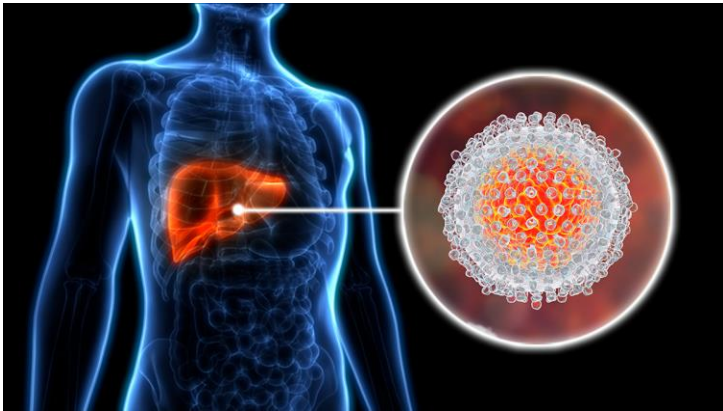
Epidemiology of Hepatitis C in Massachusetts

September 11, 2026

Anthony Osinski, MPH

Hepatitis C Surveillance Coordinator

Key Characteristics of Hepatitis C



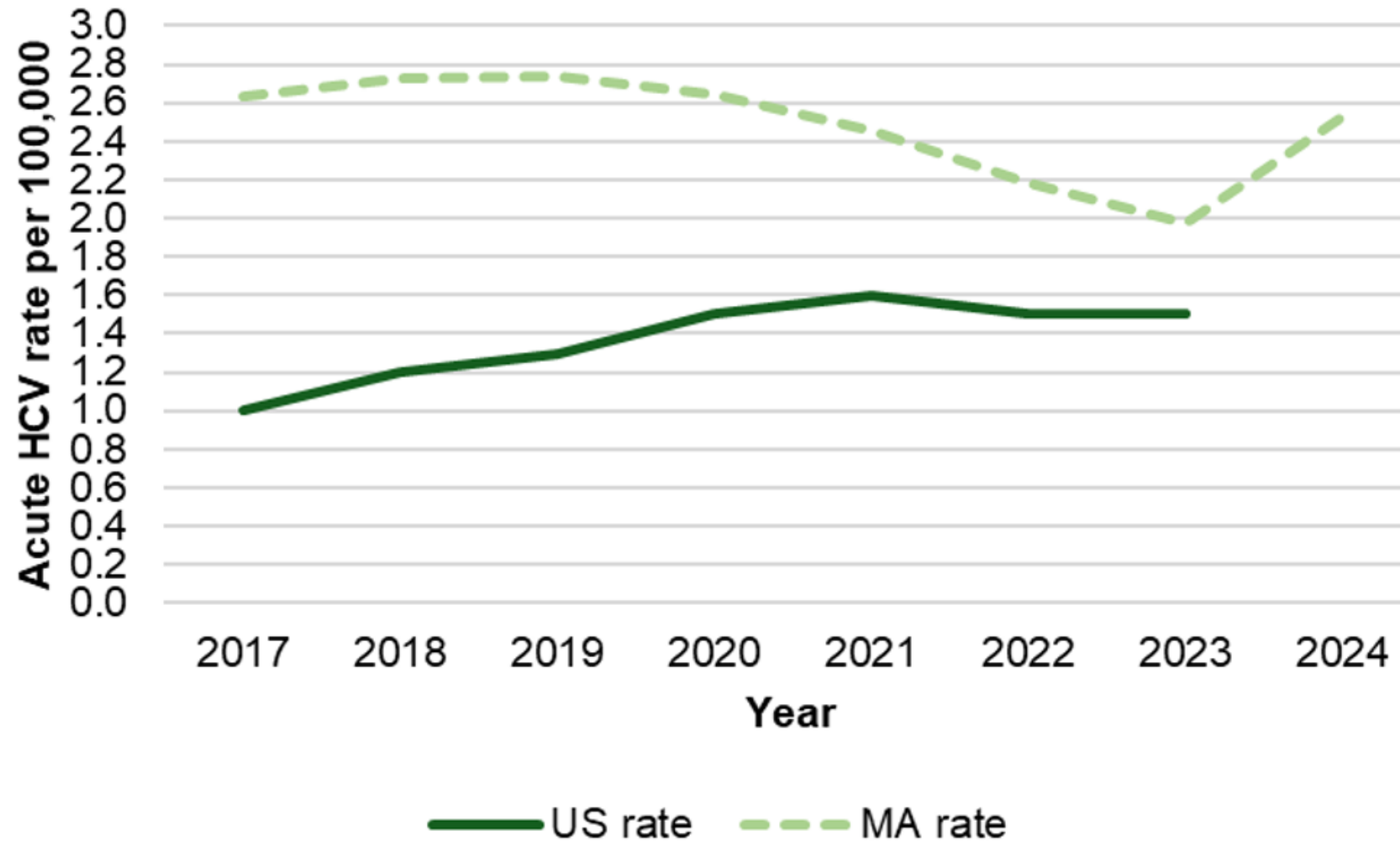
- Currently, there is no vaccine against hepatitis C infection
- Infection can be cured – highly effective courses of treatment, 8-12 weeks long
- Most people exposed go on to develop chronic infection
- Can lead to cirrhosis, liver cancer, and death
 - Deaths due to hepatitis C are increasing
- Two epidemics in the US
 - Baby boomers (born between 1945-1965)
 - Younger people who inject drugs

Hepatitis C Transmission

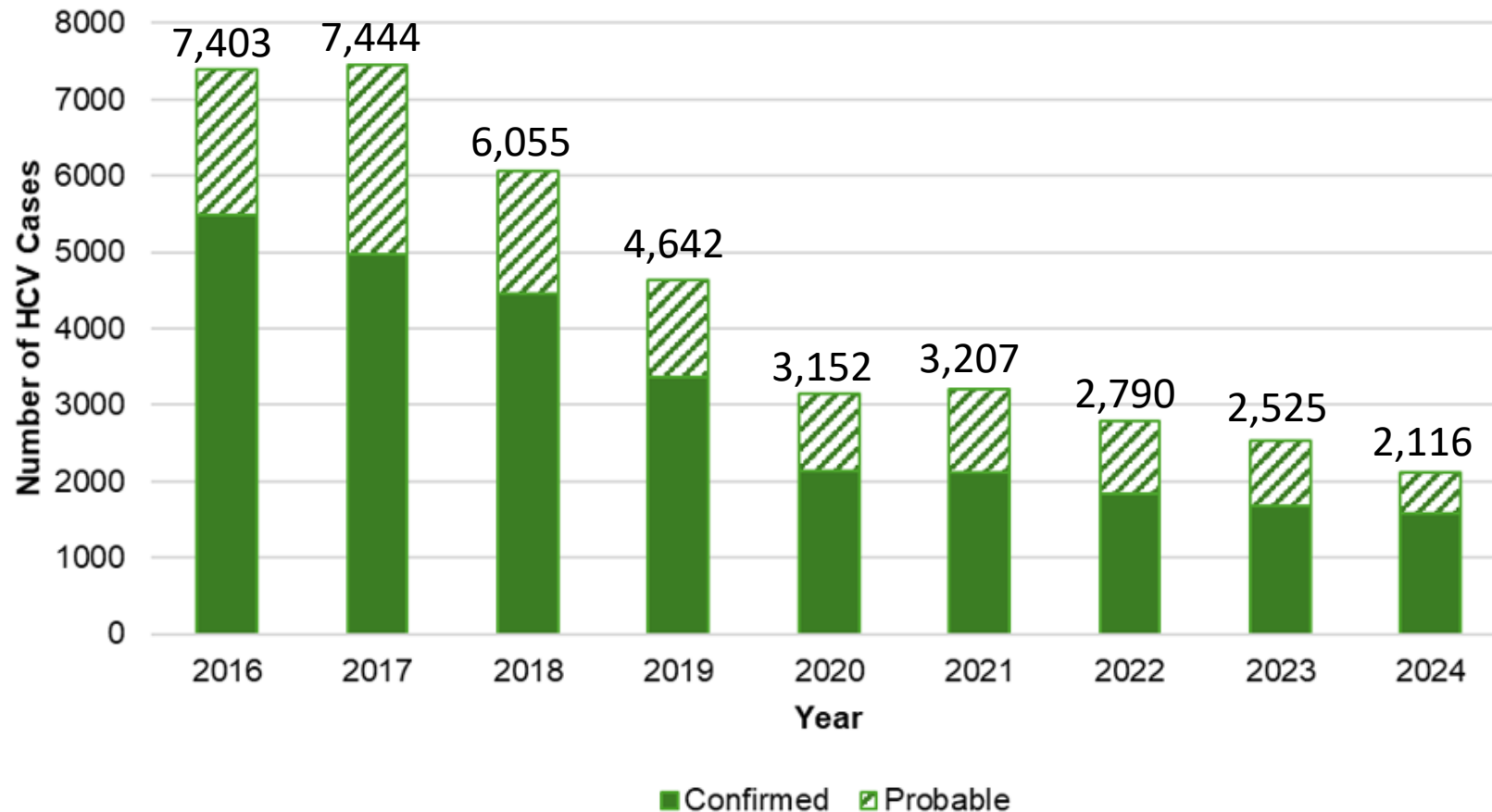
- Currently, the most common mode of exposure is sharing drug injection equipment
 - Not just the needle, but also syringes, cookers, cottons, rinse water, etc.
- Prior to 1992, many people were exposed through blood transfusions, clotting factors, and organ transplants
- Other modes of exposure:
 - Sexual transmission – inefficient, but does occur
 - Vertical transmission – occurs in 4-7% of births to infected gestational parents
 - More common if HIV co-infected
 - Sharing personal/household items contaminated with blood
 - Intranasal drug use
 - Tattoos and body piercings – nonsterile practices

Hepatitis C in Massachusetts

Rate of Acute Hepatitis C Cases in Massachusetts Compared to the United States, 2017-2024



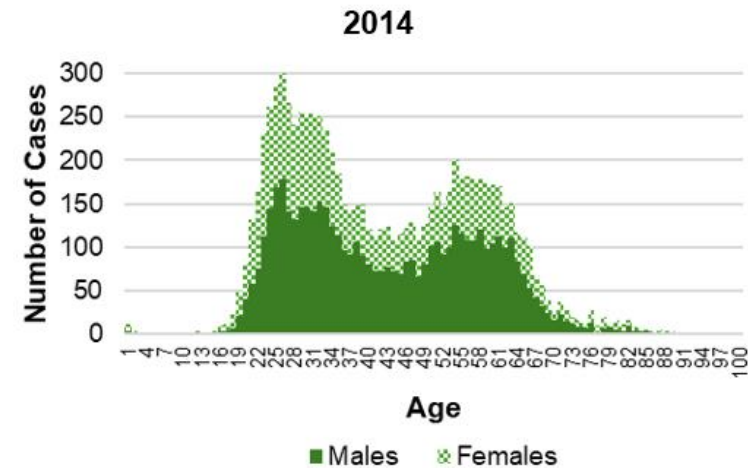
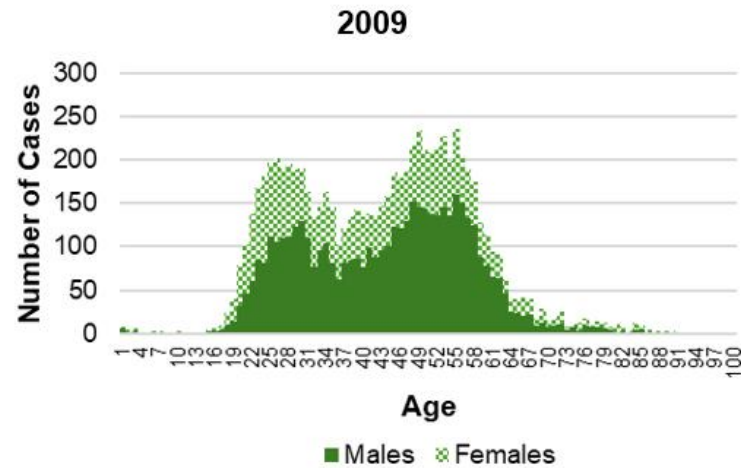
Confirmed and Probable Hepatitis C Cases by Year Massachusetts – 2016-2024



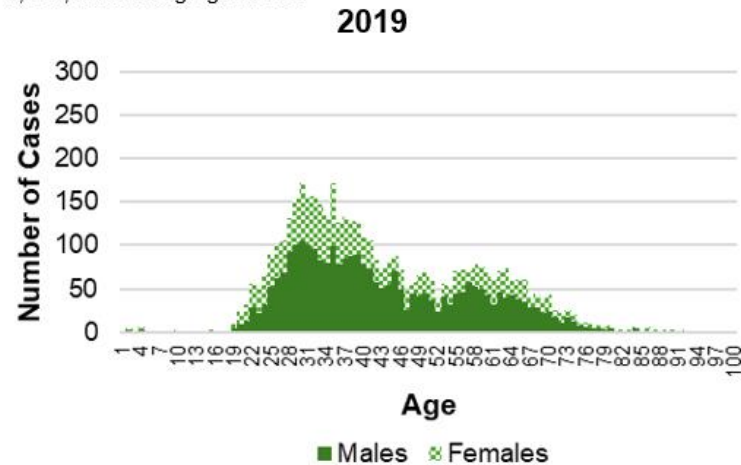
Newly reported cases down
72% from 2017 to 2024

N=39,334

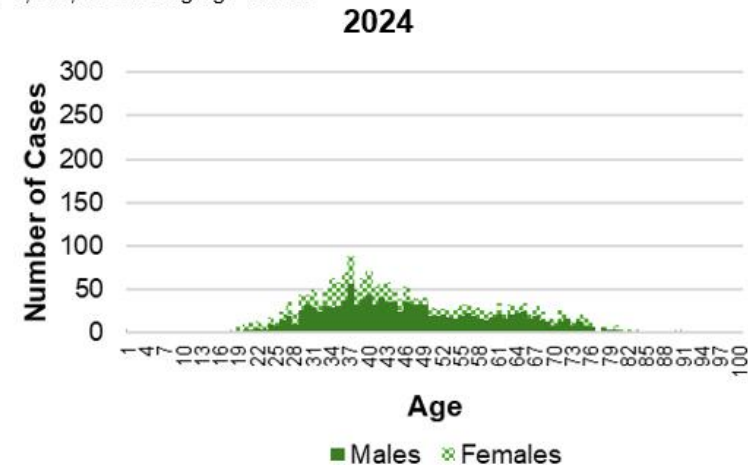
Confirmed and Probable Hepatitis C Cases by Age and Recorded Sex or Gender



N=7,688, 52 missing age or sex



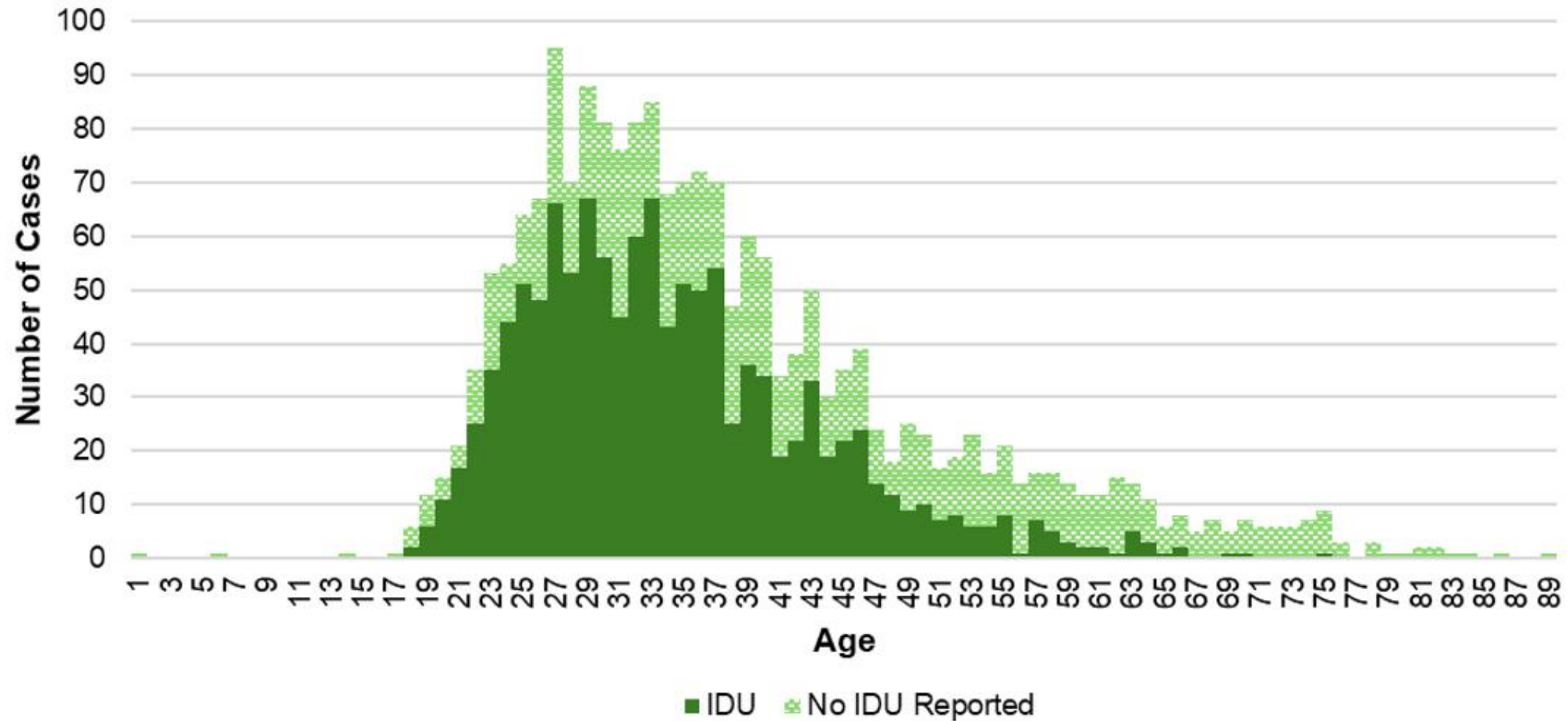
N=8,645, 40 missing age or sex



N=4,523, 119 missing age or sex

N=2,025, 91 missing age or sex

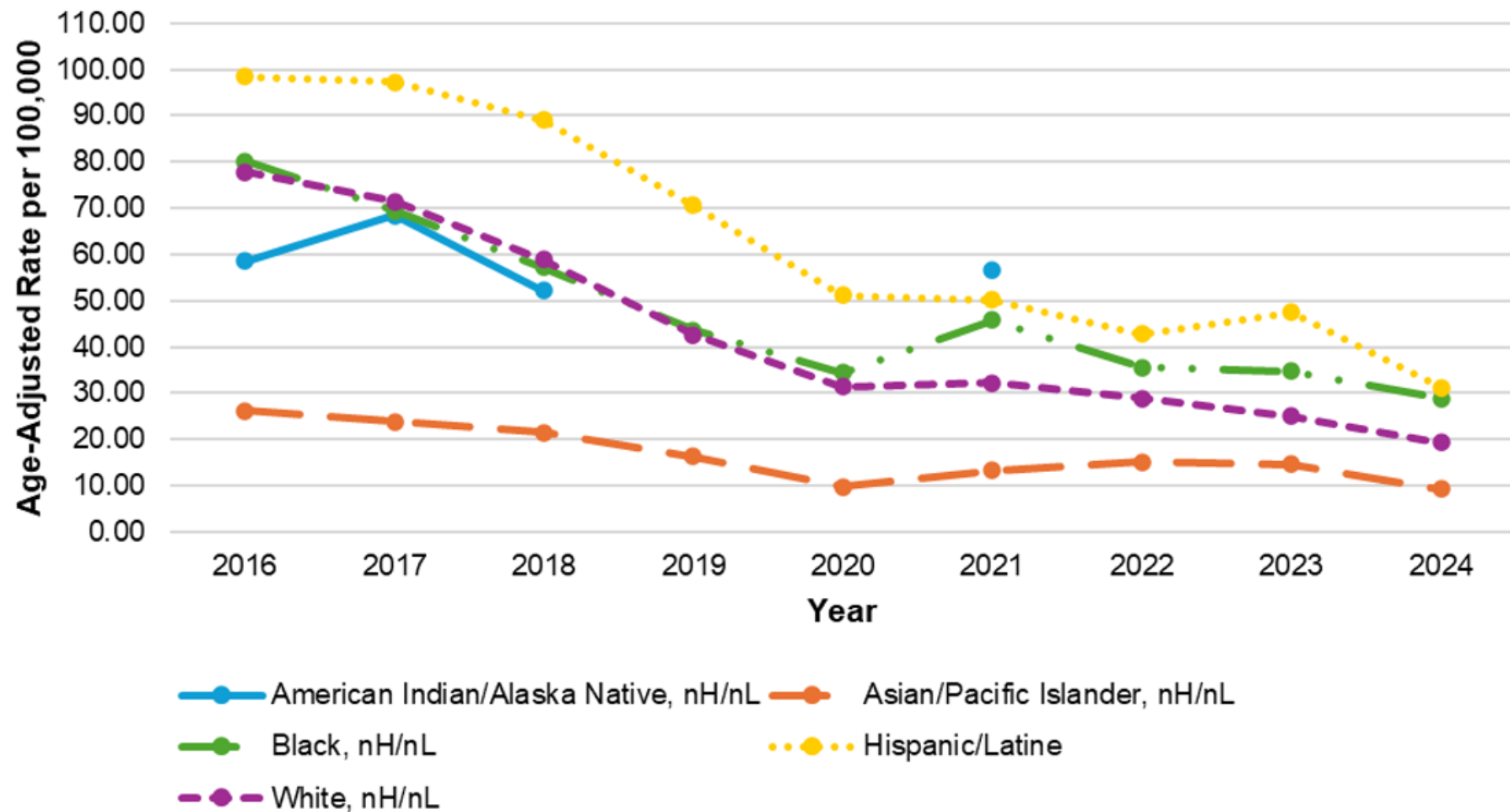
Number of Acute Hepatitis C Cases Reported by Age and Injection Drug Use Risk, MA, 2016-2024



N=1,975

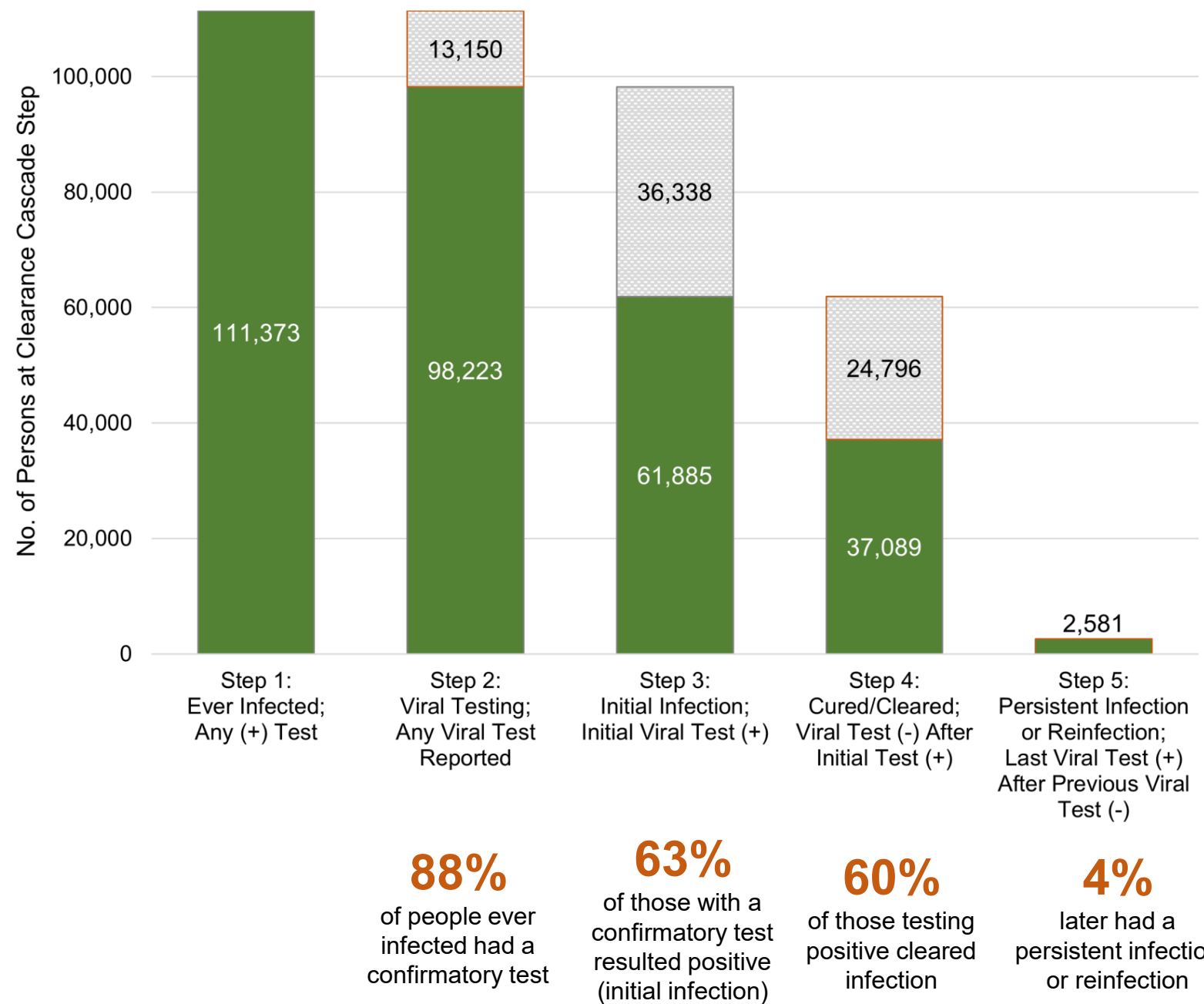
4 cases not included due to missing age, the "No IDU Reported" category includes cases with unknown IDU status.

Age-Adjusted Rate of Confirmed and Probable Hepatitis C Cases by Race/Ethnicity and year, MA, 2016-2024

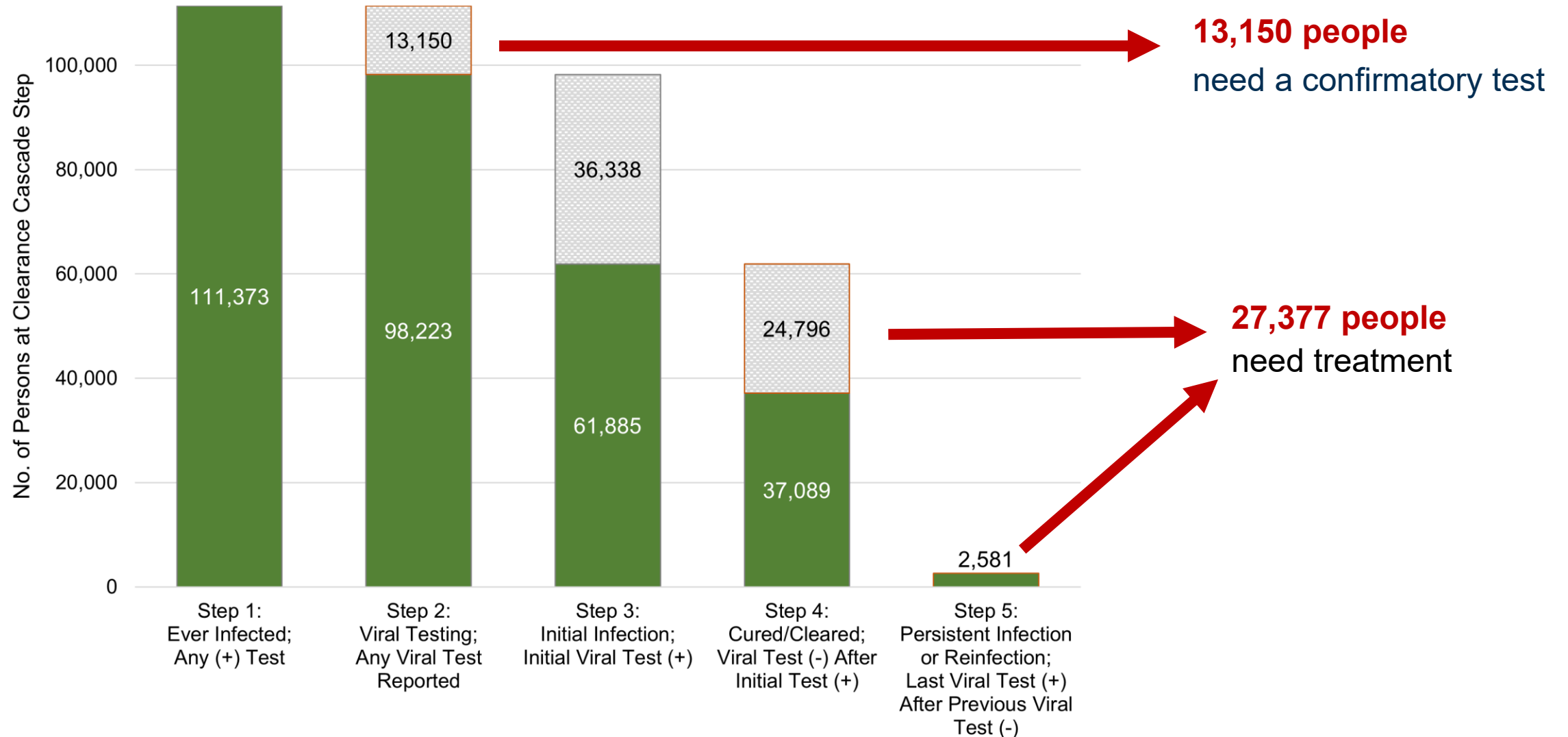


*Rates for the American Indian/Alaska Native population are not displayed for years 2019, 2020, 2023, and 2024 due to N <5

Laboratory-based hepatitis C virus clearance cascade, Massachusetts, 2014-2024



Opportunities to Advance HCV Care



Connect with us

anthony.osinski@mass.gov

www.mass.gov/hepC

617-983-6800

JSI Mass HCV Assessment

- Jon Snow Institute interviewed health care providers and patients regarding HCV
 - Interviewed medical leadership in multiple large hospital systems
 - Also surveyed patients at syringe service programs regarding beliefs and attitudes towards HCV screening and treatment

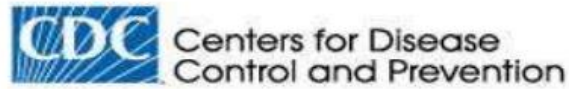
• ***Key themes and takeaways***

- Most systems lack formal policy and quality metrics for HCV screening and treatment; most rely on national guidelines or EMR-based care gaps
- Despite the availability of reflex antibody-to-viral load testing, it remains underutilized.
- Lack of institutional-wide patient education for HCV screening and treatment.
- Interdisciplinary care teams (navigators, CHWs, MAs, PAs, Pharm) are essential in HCV care.
- Patients with HCV *want treatment* but are faced with challenges navigating the healthcare system and treatment *gatekeeping*.

2020 Screening Recommendations



JAMA 2020 March; 323:970-975.



MMWR Recomm Rep 2020 April; 69:1-17



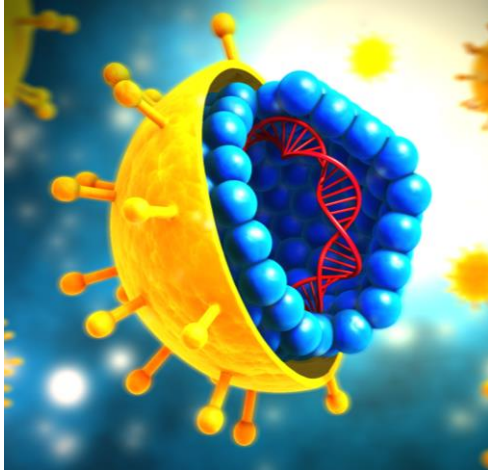
All adults (ages 18 to 79 years)
including pregnant women

All adults (ages 18 years & older)
including all pregnant women during
each pregnancy, except prevalence
<0.1%

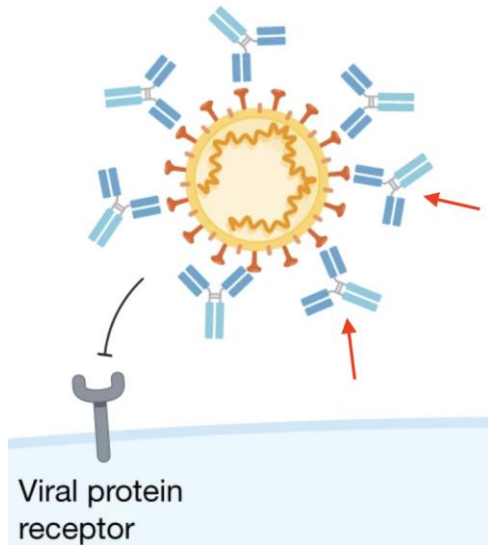
All adults (ages 18 years & older)
including pregnant women, and age
<18 with risk factors

DETECTION & DIAGNOSIS

Definitions:



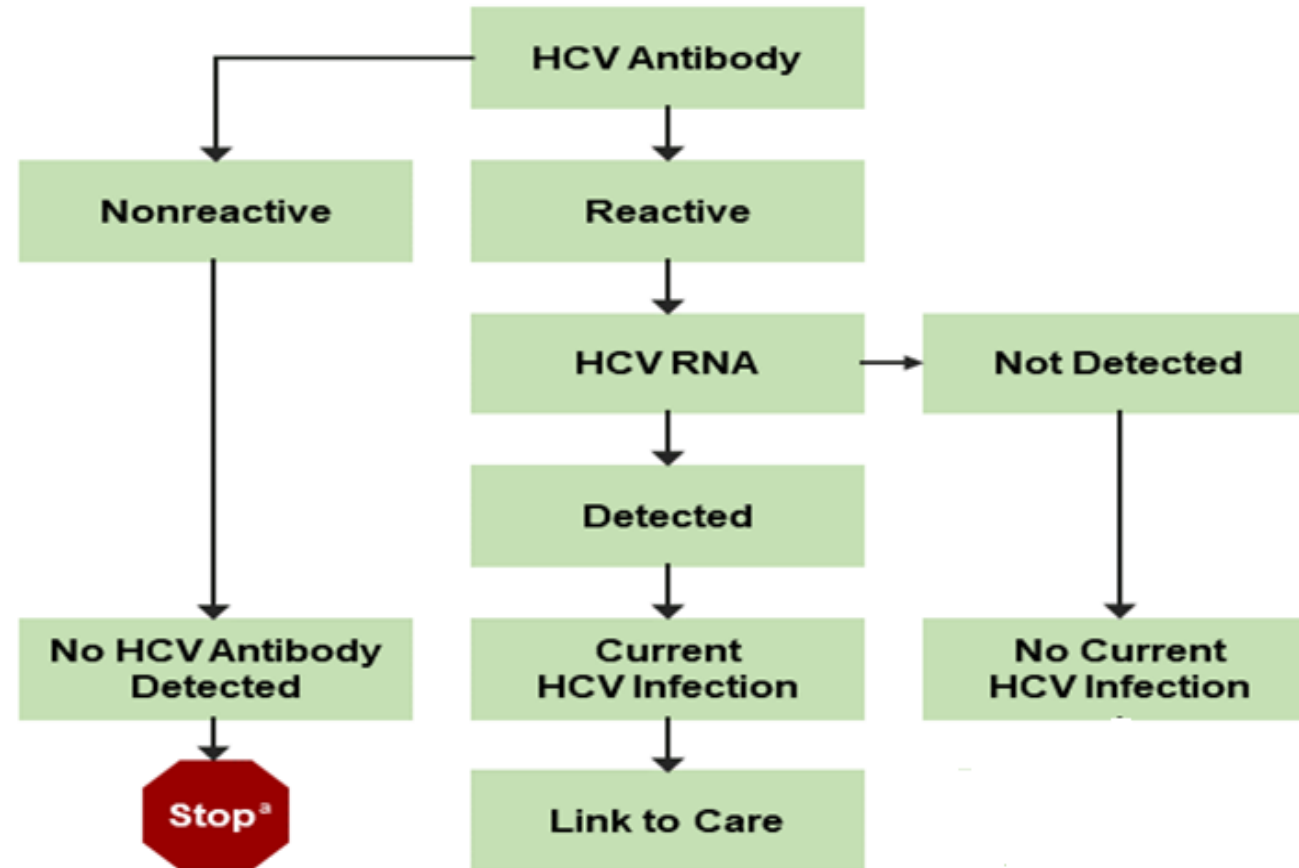
Hepatitis C **Virus**: enveloped **RNA** virus with proteins on the outside and genetic material on the inside



Hepatitis C **Antibody**: a protein made by the immune system in response to exposure to the hepatitis C virus

DETECTION & DIAGNOSIS

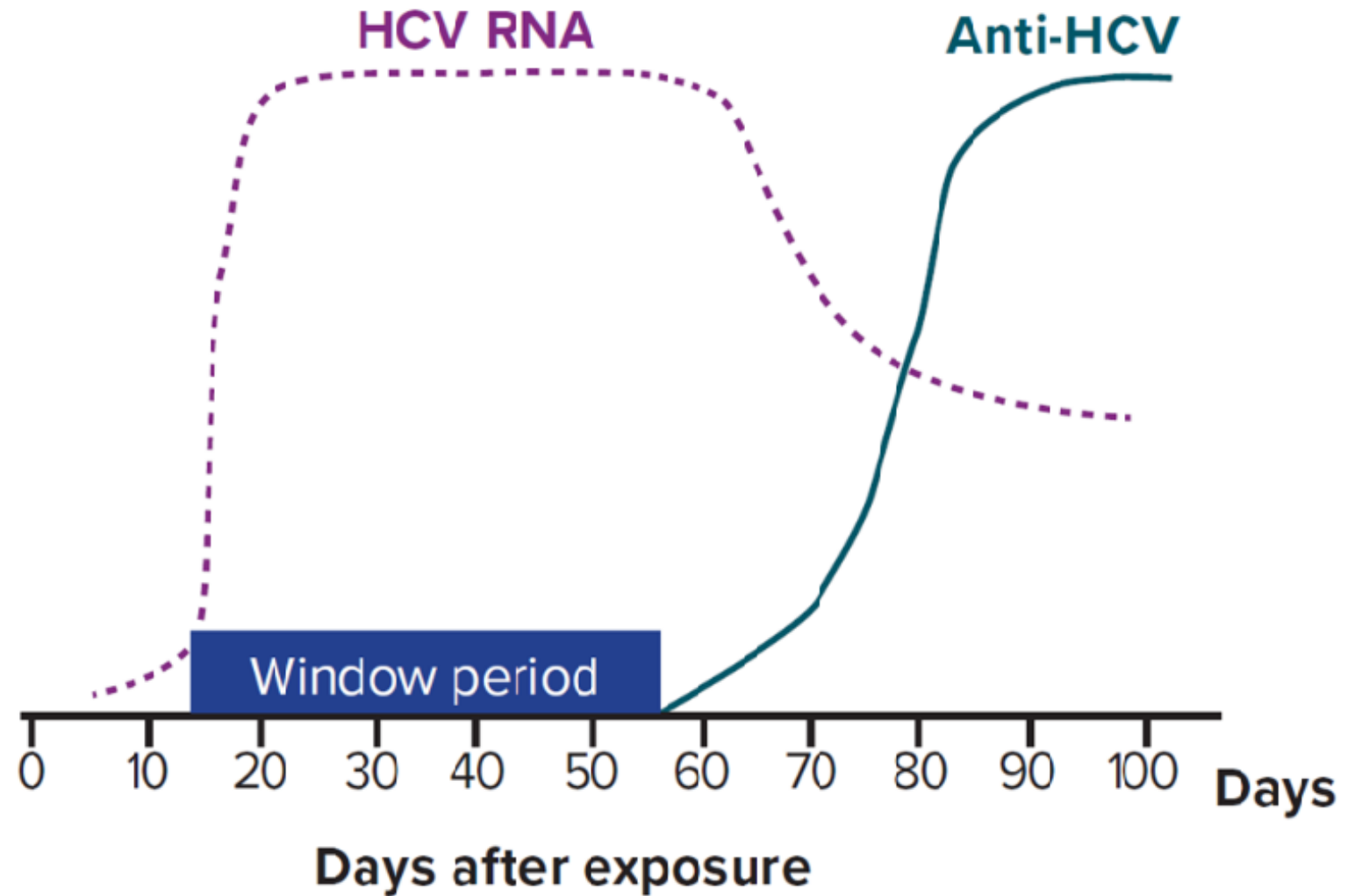
Figure 1. CDC-Recommended Testing Sequence for Identifying Current HCV Infection



**Reflex testing
is
underutilized.**

^a For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA or follow-up testing for HCV antibody should be performed. For persons who are immunocompromised, testing for HCV RNA should be performed.

Serologic course of HCV infection



Hepatitis C Point-of-Care (POC) Tests



	POC HCV Antibody Test (2010)	POC Xpert HCV RNA Test (2024)
Blood Sample	Fingerstick/venipuncture whole blood	Fingerstick whole blood
Time to results	20 minutes	41-60 minutes
Sensitivity / Specificity	97.8% / 100%	99.1% / 98.7%
Cost	\$14.68 per kit	\$21,000 for system; \$14.90 per cartridge

Rescreening for people with Ongoing Risk Factors

- Between 2016 and 2020 only 13.7% of MA residents had been tested at least once
- Routine periodic HCV screening is recommended for people with ongoing risk factors including injection drug use.
- For people with a history of HCV, the antibody will remain positive for life
 - Re-screen with HCV RNA test

TAKE AWAYs

1. Everyone needs a ONE TIME HCV TEST regardless of risk factors
2. CONTINUED SCREEING is recommended if there are ongoing risk factors
3. Preferred screening test is a reflex test:
 1. Hepatitis C Antibody with Reflex to HCV, RNA, Quantitative, Real-Time PCR or
 2. Hepatitis C Antibody with Reflex to HCV RNA with Reflex to HCV Genotype (if available)
4. Active Hepatitis C infection is the + presence of HCV RNA

Case Presentation

Session 1



Thank you !

Session Number	Topic
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Session 7 – 12/4/26	How to incorporate HCV treatment in your practice

Submit Cases using this Qualtrics link:

https://umassmed.co1.qualtrics.com/jfe/form/SV_0f8rrTTCXBKW7nn

