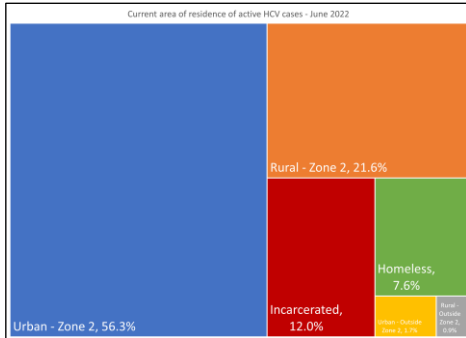


# Hepatitis C Prevalence in New Brunswick Health Zone 2 June 2019 – June 2022

## KEY POINT SUMMARY

- Between June 2019 and June 2022, HCV viremic prevalence has decreased by 26.9%.
- Highest prevalence is among 35-44-year-olds (0.493%), followed by 25-34-year-olds (0.425%).
- Mean age of new cases is 42.0 years for males and 33.7 years for females.
- Among active cases<sup>2</sup>, 21.6% live in rural areas of Zone 2.
- Since 2015, 503 individuals have been treated and cured of HCV – 68.0% through the RECAP clinic.
- A total of 44 post-treatment re-infections have been identified.
- As of the June 2022 review, 81.7% of active cases were acquired through high risk activities.
- Of the 60 deaths among active cases recorded since 2019, 28.3% were known to be drug-related, 13.3% of HCC, 11.7% of liver disease, and 46.7% of other or unknown causes.
- Of the 56 people with known cirrhosis, 46.4% have had HCC surveillance in the previous 12 months.

## LOCATION OF ACTIVE CASES<sup>2</sup>



In active cases, as of June 2022:

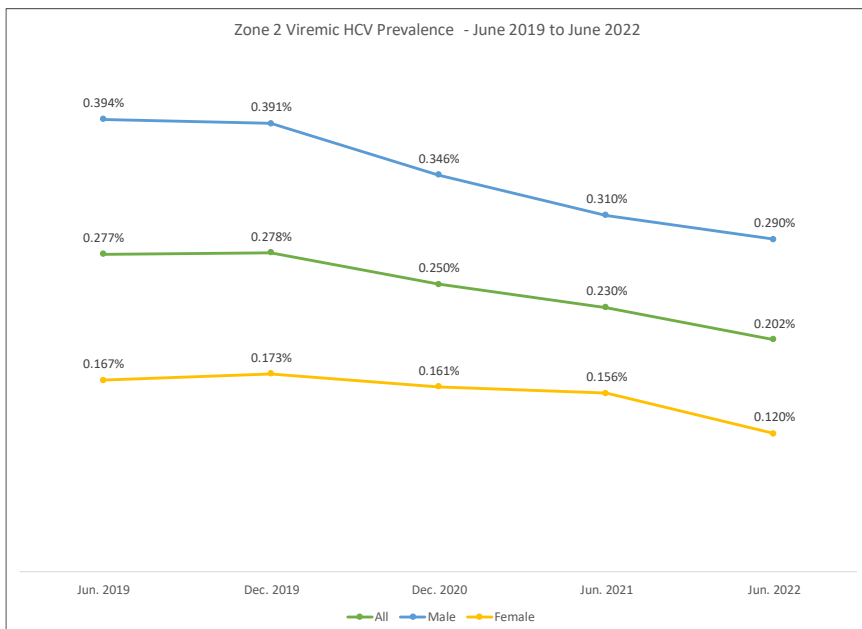
**69.3%** of cases are among males

**53.2%** of cases have evidence of ongoing high-risk activities<sup>3</sup>

**42.7%** are currently on opiate agonist therapy

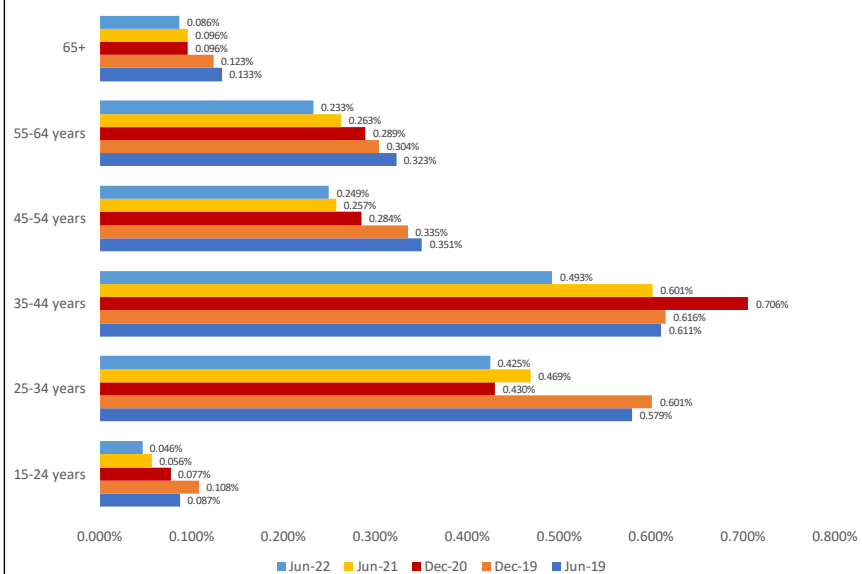
**50.8%** of cases among females are between the ages of 15 and 39 years.

## VIREMIC HCV PREVALENCE<sup>1</sup>



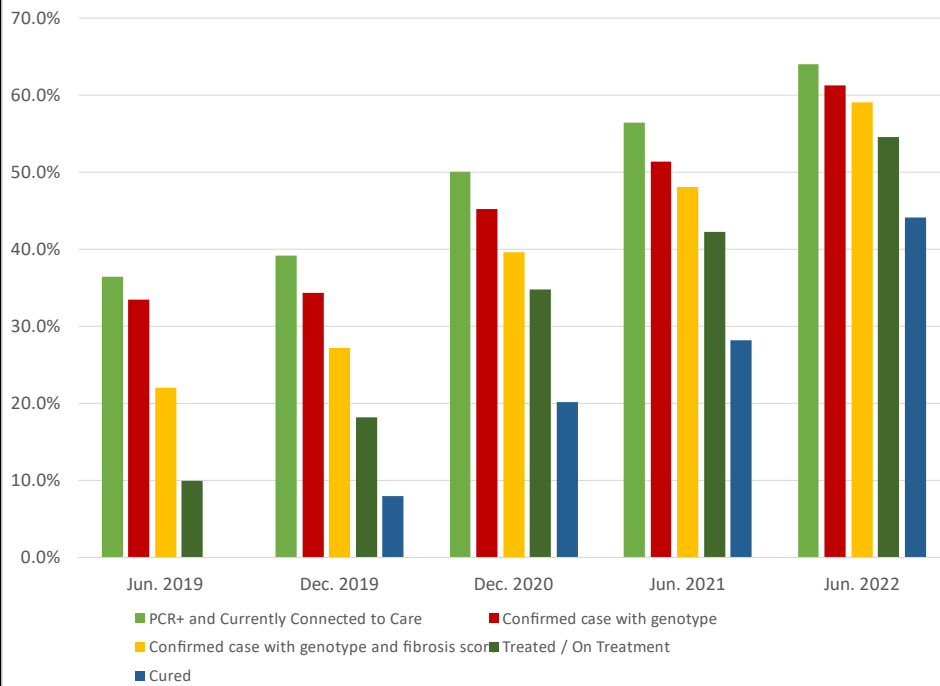
Overall, viremic prevalence has decreased by 26.9% since monitoring began in June 2019. Female HCV prevalence has decreased by 27.9% while male prevalence has decreased by 26.5%. Prevalence is influenced not only by cure, but relocation of cases outside of the zone, spontaneous clearance and death. On average, about 42% of the case decrease is attributed to cure, 26% to relocation, 21% to spontaneous clearance, and 10% to death. Decreases in prevalence through HCV cure has increased from 39.6% of cases in Dec. 2019 to 48.1% of cases in Jun. 2022.

## HCV Prevalence by Age Group - June 2019-June 2022



1 The viremic prevalence does not include cases which have not yet been diagnosed, therefore true prevalence is likely higher.  
 2 'Active' HCV refers to a case where a detectable viral load is present OR if no viral load has been done where there is evidence of a PCR-positive result.  
 3 High risk activities are determined through review of the EMR (where available), urine drug screens, reasons for hospitalization/ER visits and any other information available. The percentage is an approximation based on information available for the purposes of understanding ongoing risk of transmission or re-infection.

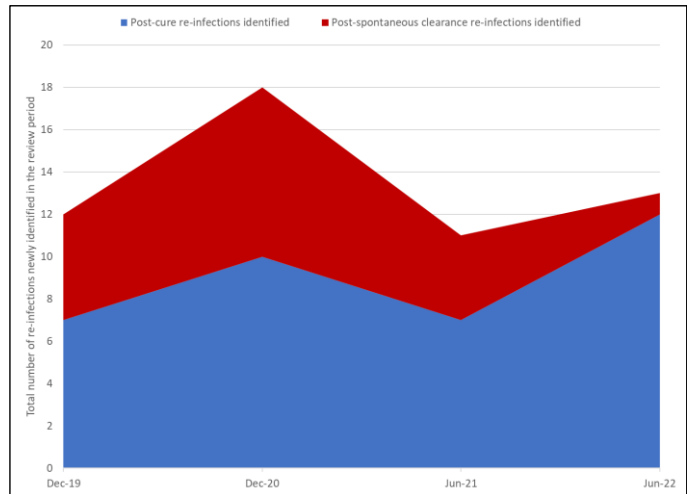
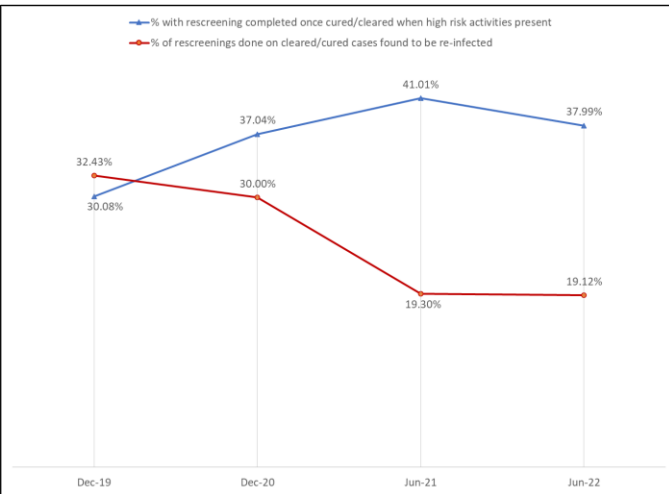
# Zone 2 HCV Cascade of Care – June 2019-June 2022



## HCV Treatment

- Prior to the introduction of direct acting antiviral (DAA) treatment, on average < 1 person was initiated on treatment per month.
- Since DAA's became available without strict fibrosis restrictions in 2018, this has risen to an average of 5-9 treatment starts per month.
- In 2019, RECAP began nurse-initiated HCV treatment which involved collaborating with an ID physician without the patient having to wait to be seen by ID to start treatment in uncomplicated cases. Since then, 37% of all treatment initiations have been RN led.
- Since 2017, over 70% of all treatment starts have occurred through RECAP. By June 2022, this number has risen to 79.1%.

## Post-cure / Post-spontaneous Clearance Re-Screening and Re-infections



Among those who have either spontaneously cleared or who have been cured, the proportion being re-screened in the setting of ongoing high-risk activities has increased from 30% in Dec-19 to 38% in Jun-22; however, despite increased screening, the proportion found to be re-infected with HCV has decreased from a high of 32% in Dec-19 to only 19% in Jun-22. The overall proportion of re-infections is increasingly post-cure. It should be noted that the period of time captured in Jun-21 represented only 6 months (Dec-20-Jun-21) in contrast to Dec-20 and Jun-22 which cover 12-month periods.

## Hepatocellular carcinoma surveillance

A total of 56 individuals remain under surveillance for HCC due to hepatitis C infection. Of these, 91.1% have been cured of HCV. A further 3 have been diagnosed with HCC and are living.

Mean age of those currently under follow-up is 56.9 years (range 34-81 years). Males account for 80.4% of those needing follow-up.

- 46.4%** have had imaging to monitor for HCC in the past 12 months.
- 12.5%** have had imaging to monitor for HCC in the past 1-2 years.
- 16.7%** have last had imaging to monitor for HCC > 5 years ago.
- 8.9%** have no evidence of ever having any HCC monitoring.



Of the 49 individuals with cirrhosis followed until death, 44.9% died from HCC, 38.8% from end stage liver disease, and 16.3% from other causes.

## Summary and Next Steps Toward HCV Elimination from the Data

Prevalence and the cascade of care are moving steadily in the right direction, despite any disruption the pandemic has caused – it has not greatly appeared to affect our ability to engage and treat individuals with hepatitis C. The data from this prevalence review does show some areas to work on:

### Do not only target OAT clinics for screening and treatment

Clinics which primarily provide OAT are easy locations to identify, screen and treat for HCV; however, it should be noted that only 42.7% of viremic HCV cases were currently on OAT in June 2022.

In the 53.8% not connected to an OAT clinic, 21% are in rural areas of zone 2, and 8.4% were homeless. Though unreliable, information retrieved from the EHR shows that 37.8% do not have a primary care provider.

### Consider end of treatment viral loads to better qualify re-infections

In many cases, a post-cure re-infection is classified as such based on assessment of patient risk factors since treatment. In over half of those classified as post-cure re-infections, no SVR12 was ever obtained and the first screening following treatment occurred at >12 weeks and found a detectable viral load.

Based on the knowledge of DAAs, either end of treatment or SVR-4 may be helpful to verify whether it is a treatment failure or re-infection.

### Make treatment accessible for those provincially incarcerated

Of the 41 viremic cases incarcerated as of June 2022, 21 (51.2%) are in provincial correctional facilities where HCV treatment is currently inaccessible and often work-up for treatment is limited.

Coordinating with an organization like RECAP or other HCV treatment providers to begin treatment during incarceration could help decrease prevalence further and ensure the individual is connected to follow-up for HCV rescreening in the community once released.

### Continue nurse-initiated treatment / more flexible treatment options

Between January 2020 and June 2022, 44.4% of all treatments have been nurse-initiated. Had this pathway not been used, 88 fewer individuals would have been much less likely to be treated for HCV given time constraints of physicians.

### Rural access strategies

In June 2022, 22% of active cases were among people living in rural areas of Zone 2 with 60% of those with information available having evidence of ongoing high risk activity. Rescreening of those cleared/cured of HCV is also lower in the rural population with 67.7% rural versus 56.8% urban not having rescreening performed as needed. Screening and treatment strategies for rural areas must be expanded and innovative ideas needed to ensure adequate access.

### Rescreen, rescreen, rescreen

HCV care in persons at high risk does not end when an individual spontaneously clears or is successfully treated. Rescreening has improved over time, but still less than 50% are being rescreened at regular intervals when high risk activities remain present. Between July 2019 and June 2022, 63 re-infections would have been missed without rescreening.

The need for rescreening should be emphasized and improved whether or not an individual has previously been HCV antibody positive as long as risk factors are present. With point-of-care testing and DBS, screening is easily performed and non-medical personnel can be trained in this task thereby expanding screening availability.

*Disclaimer: The data represented here is accurate to the best possible extent given available records. Caution should be used interpreting primary care access and proportion homeless as these are often incorrect or out-dated in the EHR. The purpose of this summary and its findings are to inform those working toward HCV elimination where to best target limited resources for screening, treatment and follow-up based on real-world data from our area.*