

## MEASURING HEPATITIS C AND HIV INCIDENCE IN PEOPLE WHO INJECT DRUGS DURING THE COVID-19 PANDEMIC

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**Background:** HEPCO is an open cohort study measuring hepatitis C virus (HCV) and HIV incidence in people who inject drugs in Montreal, Canada. Study visits (usually every three months) were halted March-November 2020 due to COVID-19 and resumed slowly, leading to longer follow-up times between study visits. We aimed to estimate trends in HCV and HIV incidence, 2011-2022, while seeking to minimise bias due to extended follow-up times from 2020 onwards.

**Methods:** In previous incidence analyses, cases have been assigned to the year of study visit. To avoid upwardly-biasing estimates by attributing all cases detected in 2022 to that year, we calculated a single incidence estimate for the period April 2020-September 2022 ("pandemic period"). Data for the first three months of 2020 were included with 2019 data. We examined the characteristics of participants before and during the pandemic period to assess changes in the cohort profile that may influence incidence.

**Results:** HCV incidence was declining from 2014 (12.5/100 person years [PY], 95% CI 8.7-17.5) to 2018 (3.0 /100PY, 95% CI 1.3-5.9), but this may have plateaued (2019: 4.0/100PY, 95% CI 2.0-7.1); pandemic period 2.2/100PY, 95% CI 0.9-4.5). HIV incidence was persistently low 2011-2019 (0.2/100PY, 95% CI 0.07-0.4) and increased slightly during the pandemic period (0.6/100PY, 95% CI 0.1-2.0). The cohort profile during the pandemic was slightly older, with less cocaine injecting and more opioid injecting, but similar number of days injecting, compared to before the pandemic.

**Conclusion:** The COVID-19 pandemic has created challenges for measuring HCV and HIV incidence in cohort studies. We identified signals suggesting changes in HIV and HCV incidence that require ongoing monitoring. The cohort profile may have shifted due to loss to follow-up that occurred during the pandemic period. Ongoing data collection will support clearer interpretation of incidence trends.

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