

## Hepatitis C Virus (HCV) in Non-Injection Drug Users in NJ Medication-Assisted Treatment Programs for Opioid Use Disorder

Rishav Agrawal<sup>1</sup>, Peter Attia<sup>1</sup>, Daniel M. Rosenblum, PhD<sup>1,2,3</sup>, Nikolaos T. Pylsopoulos, MD<sup>1</sup>, and Stanley H. Weiss, MD, FACP, FACE<sup>1,2,3</sup>

<sup>1</sup>Department of Medicine, Rutgers New Jersey Medical School

<sup>2</sup>Department of Biostatistics & Epidemiology, Rutgers School of Public Health

<sup>3</sup>Division of Cancer Prevention and Control, Rutgers Cancer Institute of New Jersey

### Background

Hepatitis C virus (HCV) is among the most common bloodborne infections in the United States. HCV primarily infects people who inject drugs (PWID), but HCV infection burden has been less studied among non-injection drug users (NIDU) who use recreational drugs such as cocaine or heroin by means other than injection. This study examines potential risk factors for HCV infection in NIDU.

### Methods

Subjects were recruited from medication-assisted treatment programs for opioid use disorder and completed a survey administered by a trained interviewer, answering detailed questions about drug use, HCV status, and sexual behavior. Subjects who denied ever injecting a drug were considered NIDU. Medical records were obtained, when possible, to corroborate HCV status.

### Results

298 subjects completed the questionnaire, of which 127 (42.6%) were NIDU. The overall prevalence of HCV infection was 43.0%, with PWID (63.4%) significantly more likely than NIDU (18.9%) to have been infected with HCV ( $p < 0.01$ ; RR = 9.1). HCV prevalence in NIDU was not different across genders and racial/ethnic groups. NIDU born between 1945 and 1965 ("Baby Boomers") were more likely to be positive for HCV than subjects born after 1965 ( $p = 0.04$ , RR = 1.4). There is a consistent trend that did not reach statistical significance in which the frequency of non-injection drug use by several separate measures was slightly higher in HCV positive than in HCV negative subjects. However, snorting of cocaine did not explain the increased risk. HCV+ subjects did not have more sexual partners than HCV- NIDU subjects.

### Conclusion

NIDU who are baby boomers are at greater risk for HCV than younger NIDU. Neither sexual activity nor non-injection methods of drug use in NIDU appear to be causal for their HCV infection. Further research is required to understand the elevated prevalence of HCV in NIDU compared to control populations.