

# Prevalence of Hepatitis C Antibodies (HCV Ab) in people at risk for HIV infection in Kentucky

Jaime Soria, MD, Jana Collins, MS, James Thacker, MPH, Ardis Hoven, MD, Alice Thornton, MD

Kentucky Income Reinvestment Program (KIRP) - University of Kentucky, Lexington, USA



Abstract ID: 1246

## Background:

- ❑ The Kentucky Income Reinvestment Program (KIRP) provides comprehensive Early Intervention Services targeting those at the highest risk for HIV infection. The objective of this study was to evaluate the prevalence of Hepatitis C Antibodies (HCV Ab) in people at risk for HIV infection in Kentucky.

## Methods:

- ❑ A cross-sectional study was conducted using the KIRP Outreach database, including data from people at risk for HIV infection from January 2021 to April 2022.
- ❑ A survey about risk factors was used to identify people at risk of HIV infection.
- ❑ A Point-of-Care rapid test was used for the detection of HCV Ab.
- ❑ Study data were collected and managed using REDCap electronic data capture tools hosted at the University of Kentucky.

## Results:

- ❑ The analysis included 8,225 people at risk for HIV infection. All of them were tested for Hepatitis C and HIV; of them, 3,981 (48.4%) were male, and the median age was 41. (Table 1) No previous test for HCV Ab detection was reported in 3,966 (48.2%).
- ❑ HCV Ab was detected in 1,180 (14.3%); of them, 891(75.5%) were people who inject drugs (PWID).
- ❑ HIV infection was detected in 14/8,225 (0.2%) of people tested; of them 3/14 (21.5%) were in people with detectable HCV Ab.
- ❑ Among PWID, HCV Ab was detected in 36.6%. Factors associated with HCV Ab reactive were male gender, white race, and PWID. (Table 2)

Table 1. Epidemiological features of the study population

	Total (n=8,225)		HCV Ab Reactive (n=1,180)	
Age, median (range)	41	(13 - 87)	39	(18 - 82)
Gender, Male	3,981	48.4%	683	57.8%
Race, White	7,158	87.0%	1,109	93.9%
Ethnicity, Hispanic	231	2.8%	25	2.1%
HIV Positive	14	0.2%	3	0.2%
MSM	691	8.4%	105	8.9%
PWID	2,432	29.6%	891	75.5%

Table 2. Associated factors with the detection of HCV Ab

Associated Factors	Bivariate Analysis			Multivariate Analysis		
	OR	95% CI	P-value	OR	95% CI	P-value
Age <45	1.60	1.41 - 1.83	<0.001	1.11	0.95 - 1.28	0.16
Gender, Male	1.56	1.37 - 1.77	<0.001	1.28	1.11 - 1.46	<0.001
Race, White	2.57	2.00 - 3.29	<0.001	1.62	1.24 - 2.12	<0.001
Ethnicity, Hispanic	0.72	0.47 - 1.09	0.123			
MSM	1.07	0.86 - 1.33	0.506			
PWID	11.1	9.53 - 12.71	<0.001	10.19	8.79 - 11.81	<0.001

## Conclusion:

- ❑ The prevalence of the Hepatitis C virus in Kentucky remains higher, mainly in PWID. Hepatitis C antibodies were detected in more than 20% of the HIV infected.