

# Hepatitis C Prevalence and Risk Factors Among People Who Engage in Transactional Sex Work, Philadelphia

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## Background

Transactional sex work (TSW) is associated with increased rates of HIV, STIs, and substance use disorder as well as barriers to healthcare engagement. While there is extensive research on hepatitis C (HCV) exposures and prevention interventions among people who use drugs (PWUD), little is known about the epidemiology of HCV in people who engage in TSW.

## Methods

- C Change is Philadelphia’s plan to eliminate HCV among PWUD, and partners with substance use disorder (SUD) treatment programs and the city’s syringe exchange program.
- Enrollment included HCV testing, care navigation services, and an interviewer-administered survey. This interim analysis included the first 858 enrollees.
- Comparisons were made using Fisher’s exact test and chi square tests where appropriate.

## Results

- Among enrollees, 41% (n=353) reported a history of engaging in TSW, defined as “exchanging sex for things like money, drugs, alcohol, gifts, food or shelter”. TSWs were more frequently male, had an incarceration history, and were more likely to share injection equipment, snort drugs, and have sex with men who have sex with men (MSM) (Table 1).
- Regardless of TSW history, 71% of enrollees were HCV antibody positive (Ab+). Among TSW, 62% of males (n=205) and 84% of females (n=148) were HCV Ab+]. (Figure 1)
- Compared to HCV Antibody negative (Ab-) enrollees, HCV Ab+ TSW reported higher rates of injection drug use (IDU) and sharing injection equipment (Figure 1).
- Females with TSW reported higher rates of sex with men who have sex with men (MSM) and sex with HCV Ab+ individuals than men. (Figure 2.)
- Females with TSW were more likely to report a history of IDU, and they were less likely than males to carry naloxone. Males with TSW history were more likely than females to snort as the only route of drug administration (Figure 2.)

Table 1. Participant Characteristics

	Total N= 858 (%)	History of TSW N=355 (%)	No TSW History N=505 (%)	p-value
<b>Gender</b>				
Male	593 (69%)	205 (58%)	388 (77%)	<b>&lt;0.0001</b>
Female	261 (30%)	147 (42%)	114 (23%)	
Transgender (F-M)	2 (<1)	1 (<1)	1 (<1)	
Transgender (M-F)	2 (<1)	0	2 (<1)	
<b>Snorted (ever)</b>				
Yes	752 (88%)	225(83%)	417 (87%)	<b>&lt;0.0001</b>
No	106 (12%)	17(5%)	88 (13%)	
<b>Shared injection equipment (ever)</b>				
Yes	473 (74%)	225 (83%)	248 (67%)	<b>&lt;0.0001</b>
No	167 (26%)	46 (17%)	121 (33%)	
<b>Witnessed Someone Overdose</b>				
Yes	667 (78%)	295 (84%)	382 (76%)	<b>0.005</b>
No	181 (22%)	58 (26%)	123 (34%)	
<b>Carry Narcan</b>				
Yes	466 (69%)	221(75%)	245 (64%)	<b>0.002</b>
No	210 (31%)	73 (25%)	137(36%)	
<b>Treated for a Sexually Transmitted Infection</b>				
Yes	303 (35%)	178 (51%)	125 (25%)	<b>&lt;0.0001</b>
No	551 (65%)	173 (49%)	378 (75%)	
<b>Has sex with MSM</b>				
Yes	55 (7%)	39 (13%)	16(3%)	<b>&lt;0.0001</b>
No	727(93%)	262 (87%)	465 (97%)	
<b>Incarceration History</b>				
Yes	693 (81%)	306 (87%)	387 (77%)	<b>0.0003</b>
No	164 (19%)	47 (13%)	117 (23%)	
<b>Antibody Status</b>				
Positive	593 (70%)	249 (71%)	344 (69%)	<b>0.5</b>
Negative	260 (30%)	29 (29%)	158 (31%)	

Figure 1. Risk Behavior of C Change Participants who Exchange Sex for Services by Antibody Status

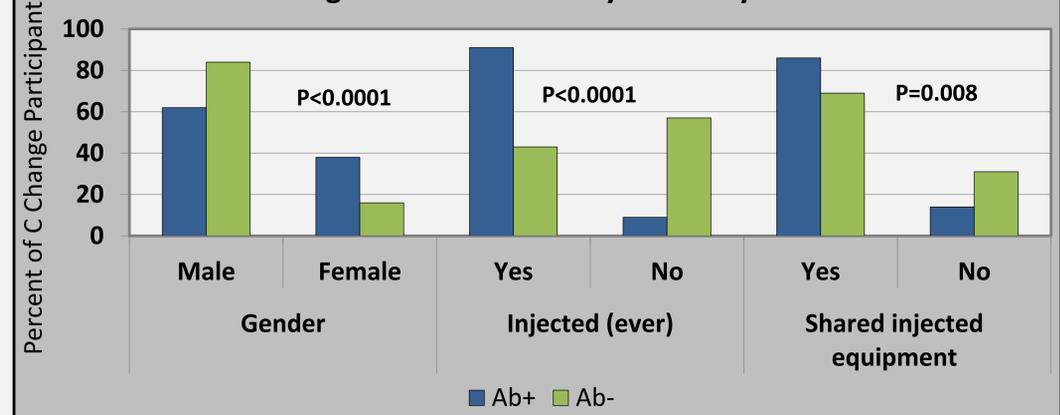
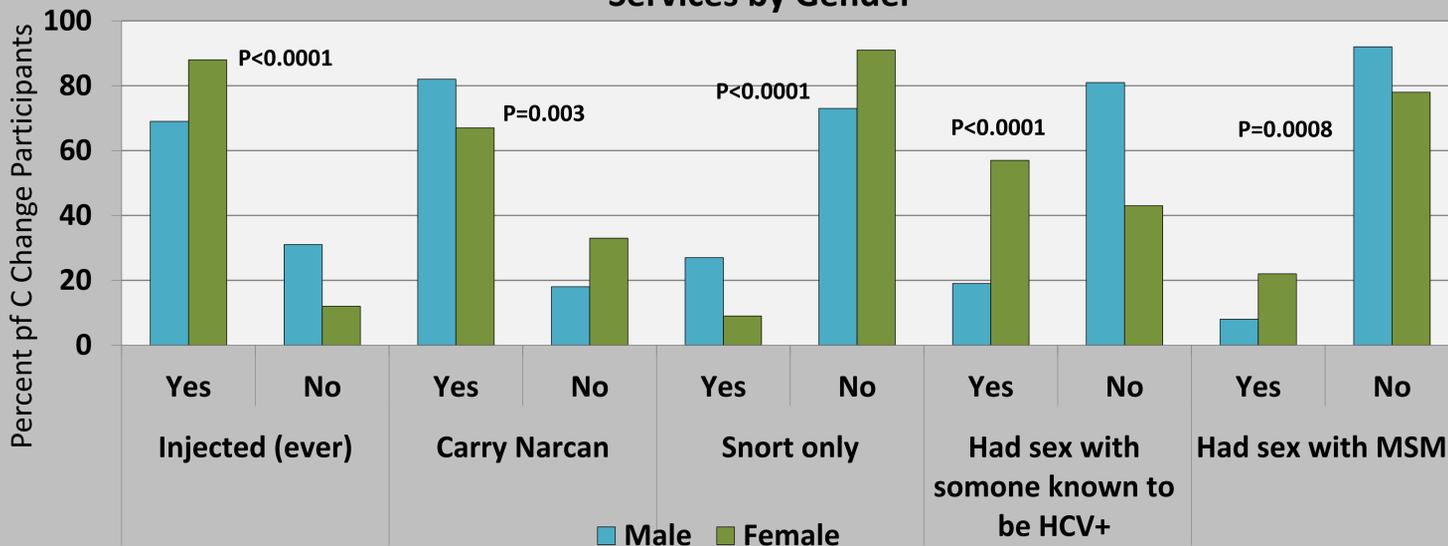


Figure 2. Sexual Risk behavior among C Change Participants who Exchange Sex for Services by Gender



## Conclusion

- TSW was prevalent among all C Change enrollees. Despite TSW being more commonly reported by male participants, females with TSW history were more likely to be HCV Ab+ and to report concurrent sexual and drug related risk factors.
- Harm reduction services and strategies specifically geared to serve the gender responsive needs of TSWs should be considered in HCV elimination planning.

