

Fentanyl test strip use and homelessness among people who use drugs in Rhode Island, USA

Julia E. Noguchi¹, Seashore Li¹, Carolyn J. Park¹, Jacqueline E. Goldman¹, Leah C. Shaw¹, Jane A. Buxton², Scott E. Hadland³, Susan G. Sherman⁴, Katie B. Biello¹, and Brandon D.L. Marshall¹

(1) Department of Epidemiology, Brown University School of Public Health, Providence, Rhode Island, USA (2) School of Population and Public Health, The University of British Columbia, Vancouver, British Columbia, Canada; BC Centre for Disease Control, Vancouver, British Columbia, Canada (3) Division of Adolescent and Young Adult Medicine, Massachusetts General Hospital for Children and the Department of Pediatrics, Harvard Medical School, Boston, Massachusetts, USA (4) Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA.

Overview

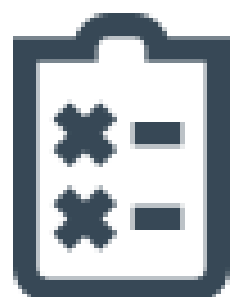
In a longitudinal study, we found that people experiencing homelessness (PEH) were willing and able to use fentanyl test strips (FTS) and that housing status was not associated with FTS use.

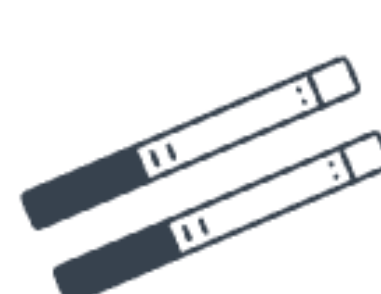
Background

- PEH have been disproportionately affected by the overdose crisis in the United States.^{1,2}
- Previous research has shown that FTS can address the uncertainties of the illicit drug supply and help people who use drugs (PWUD) avert overdose by testing their drugs for unexpected substances before consumption.³⁻⁵
- We assessed the association between past month homelessness and FTS use among PWUD in a clinical trial studying the efficacy of a brief, theory-based overdose prevention intervention that incorporates FTS education and distribution in Rhode Island from 2020 to 2023.⁶

Methods

 Analysis sample: 505 PWUD recruited from 2020-2023 for the RAPIDS trial to study the efficacy of a brief, theory-based overdose prevention intervention.

 Follow-up surveys occurred at months 1, 2, 3, 6, and 12.

 Baseline data were used to assess correlates of past-month FTS use through bivariable and multivariable analyses.

 We used generalized estimating equations (GEE) to estimate the longitudinal association between past-month homelessness and FTS use over 12 months.

Results

- Although significant at $P > 0.05$ in bivariate analysis, homelessness was not associated with FTS use in multivariable GEE analysis.
- Regular use^a of crystal methamphetamine was positively associated with FTS use.
- The odds of FTS use among persons recruited in 2023 increased by 158% compared to 2020.
- People experiencing *sheltered* homelessness had a consistently lower and declining rate of FTS use compared to *housed* and *unsheltered* people over the study period.

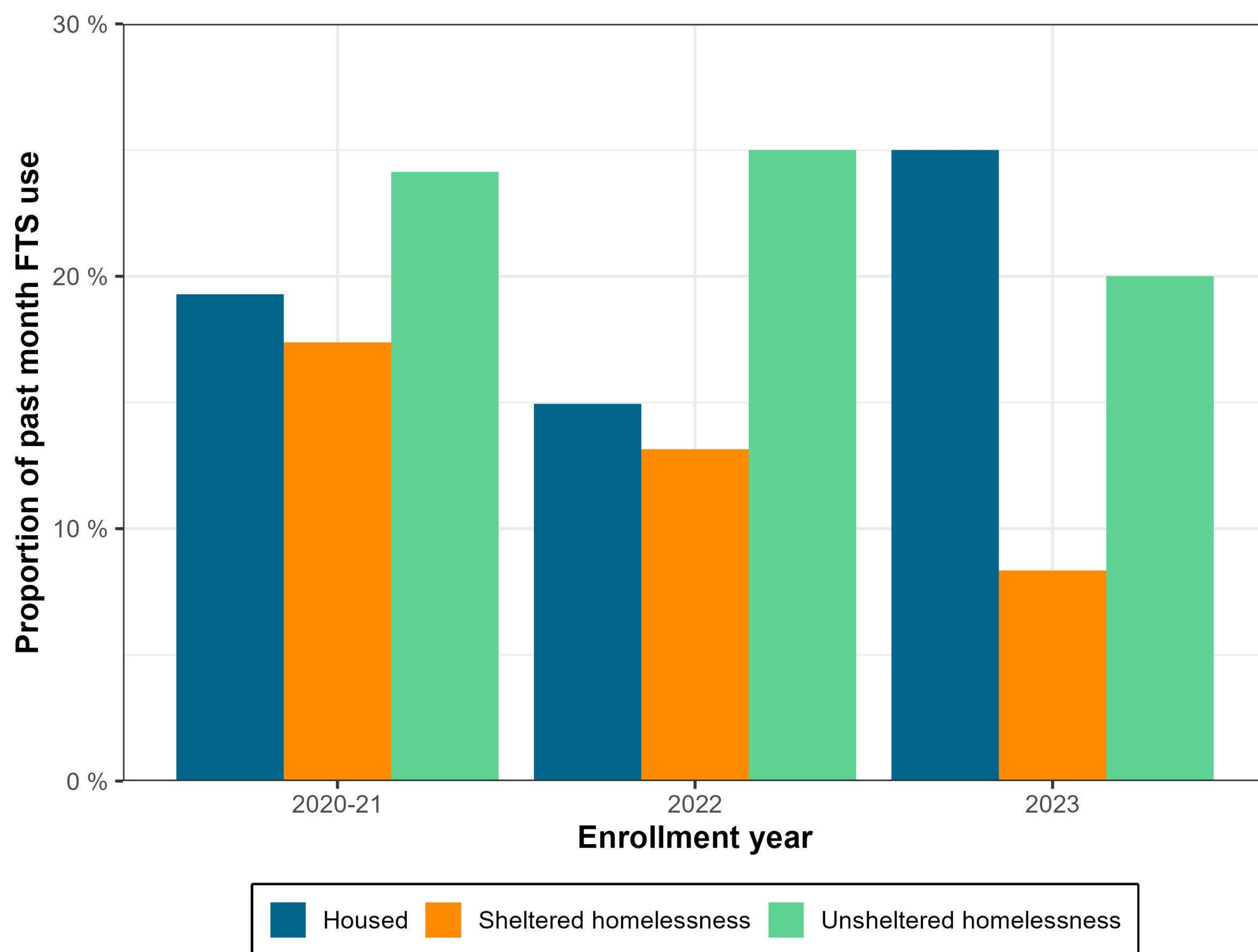
^aDefined as 4 or more days of injection and non-injection use in the past month

Figure 1. Select adjusted odds ratios for predictors of fentanyl test strip use in the sample

Characteristic	Adjusted Odds Ratio (95% CI)	P-value
Homelessness (y/n)	1.16 (0.89–1.49)	0.269
Enrollment year		
2020	Ref	
2021	0.88 (0.40–1.93)	<0.001
2022	0.86 (0.39–1.88)	
2023	2.58 (1.27–5.25)	
Regular use ^a of crystal meth (y/n)	2.12 (1.43–3.13)	<0.001

^aDefined as 4 or more days of injection and non-injection use in the past month.

Figure 2. Past-month fentanyl test strip use by past-month housing status at baseline and by enrollment year, 2020-2023



- “Housed” includes responses such as permanent or supportive housing, such as housing for persons with disabilities, section 8 housing, veteran’s housing, assisted living facilities, mobile home, or private rental unit or house.
- “Sheltered homeless” included all forms of transitional or temporary housing, such as a boarding house, halfway house, or sober house; couch surfing; homeless shelter; shelter for persons experiencing interpersonal violence; hotel through a voucher program; or a friend’s shed or garage.
- “Unsheltered homeless” included responses such as a vehicle (other than a mobile home), the street, tent, or other outdoor location not intended for human habitation.

Conclusion

- FTS use was acceptable among PEH of all housing statuses.
- This work supports previous literature that people who use crystal methamphetamine are keenly aware of contamination with fentanyl in the illicit drug supply and use harm reduction measures to avoid overdose.
- Factors associated with *sheltered* homelessness, such as transience, policing and security in and around shelters, and various restrictions imposed by shelters may pose barriers to using FTS, and merit further exploration.
- Interventions tailored to people who experience sheltered homelessness are needed to help prevent fentanyl-involved overdoses.

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