

Characteristics Associated With Fentanyl Test Strip Use Among People Who Use Drugs in Rhode Island (2021-2023)

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Overview

This study examined fentanyl test strip (FTS) use among people who use drugs (PWUD) in Rhode Island from 2021-2023. FTS adoption remained low, with significant disparities by age, race/ethnicity, and behavioral factors such as witnessing an overdose or possessing naloxone. These findings highlight the need for targeted harm reduction strategies to improve FTS uptake statewide.

Background

- Fentanyl-related overdose deaths in Rhode Island have increased 30-fold since 2009, with **78% of accidental overdoses** in 2023 involving fentanyl.¹
- In response, harm reduction interventions such as **fentanyl test strips (FTS)** have been introduced to help people who use drugs (PWUD) detect fentanyl in their substances.
- Studies show that FTS use **promotes safer drug use behaviors** and can reduce the risk of an overdose.²⁻⁴
- FTS were legalized in Rhode Island in 2018**, and over **50,000** test strips have since been distributed by community organizations.⁵
- Research gaps remain in FTS uptake & characteristics of those who use them.

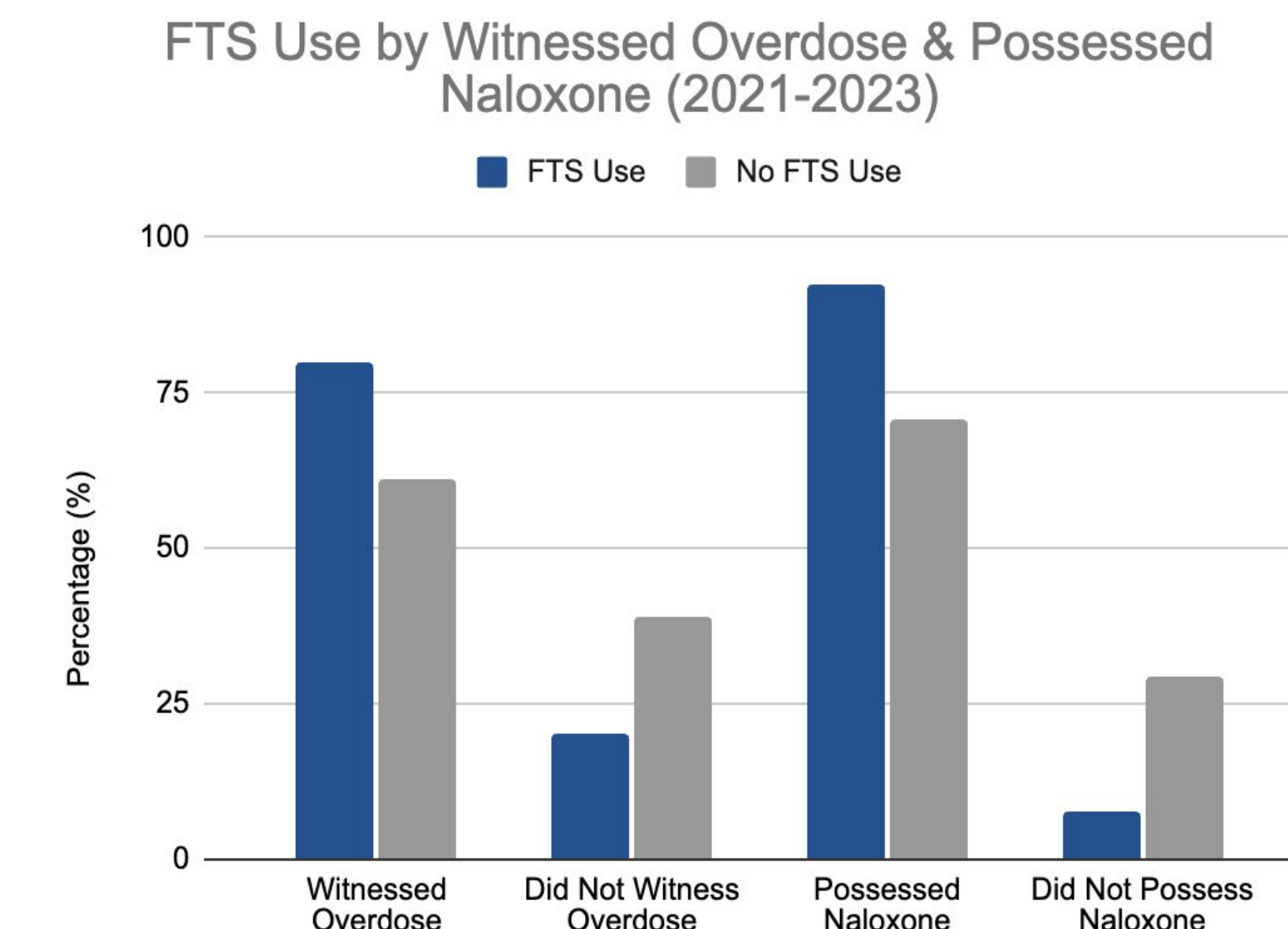
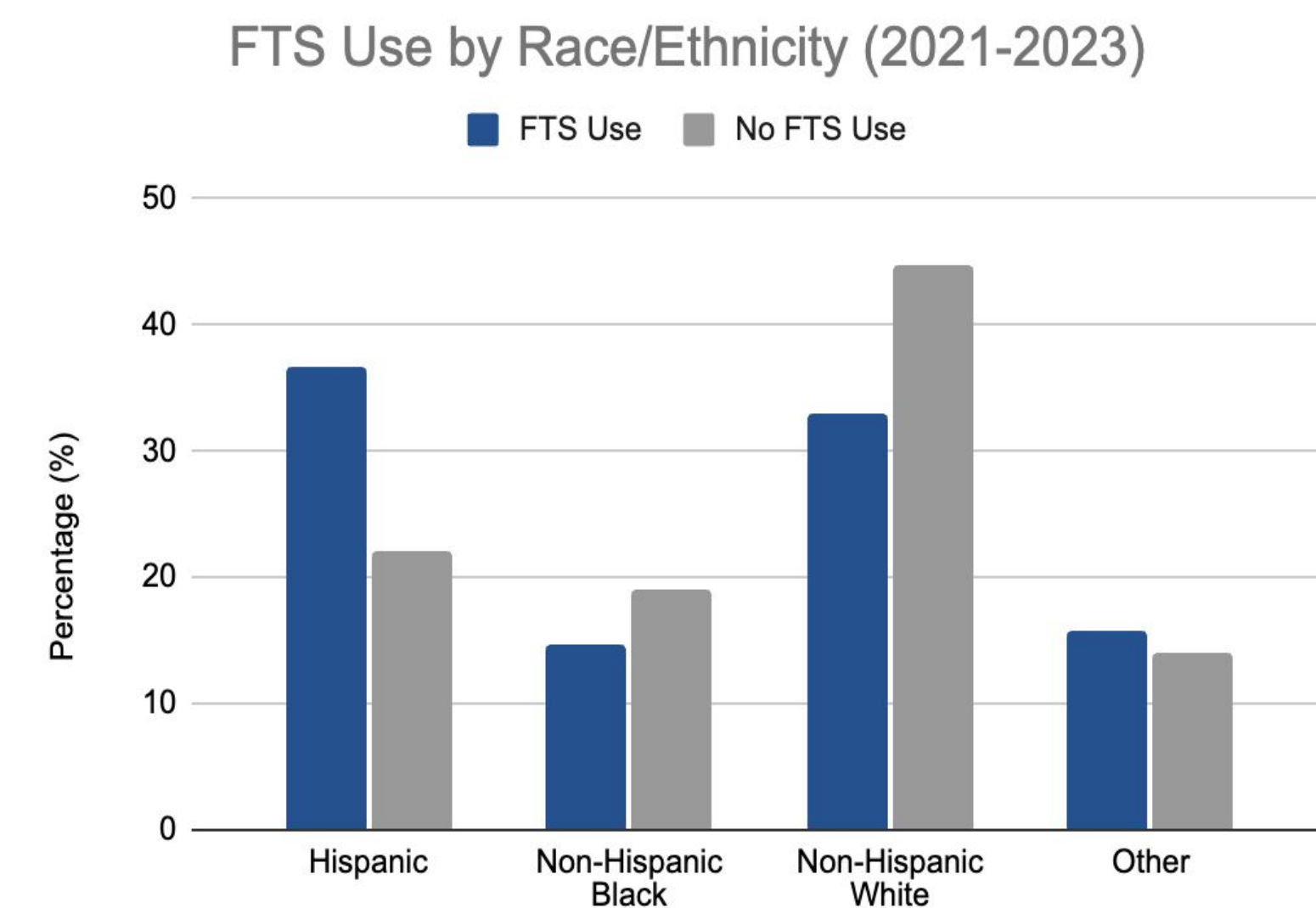
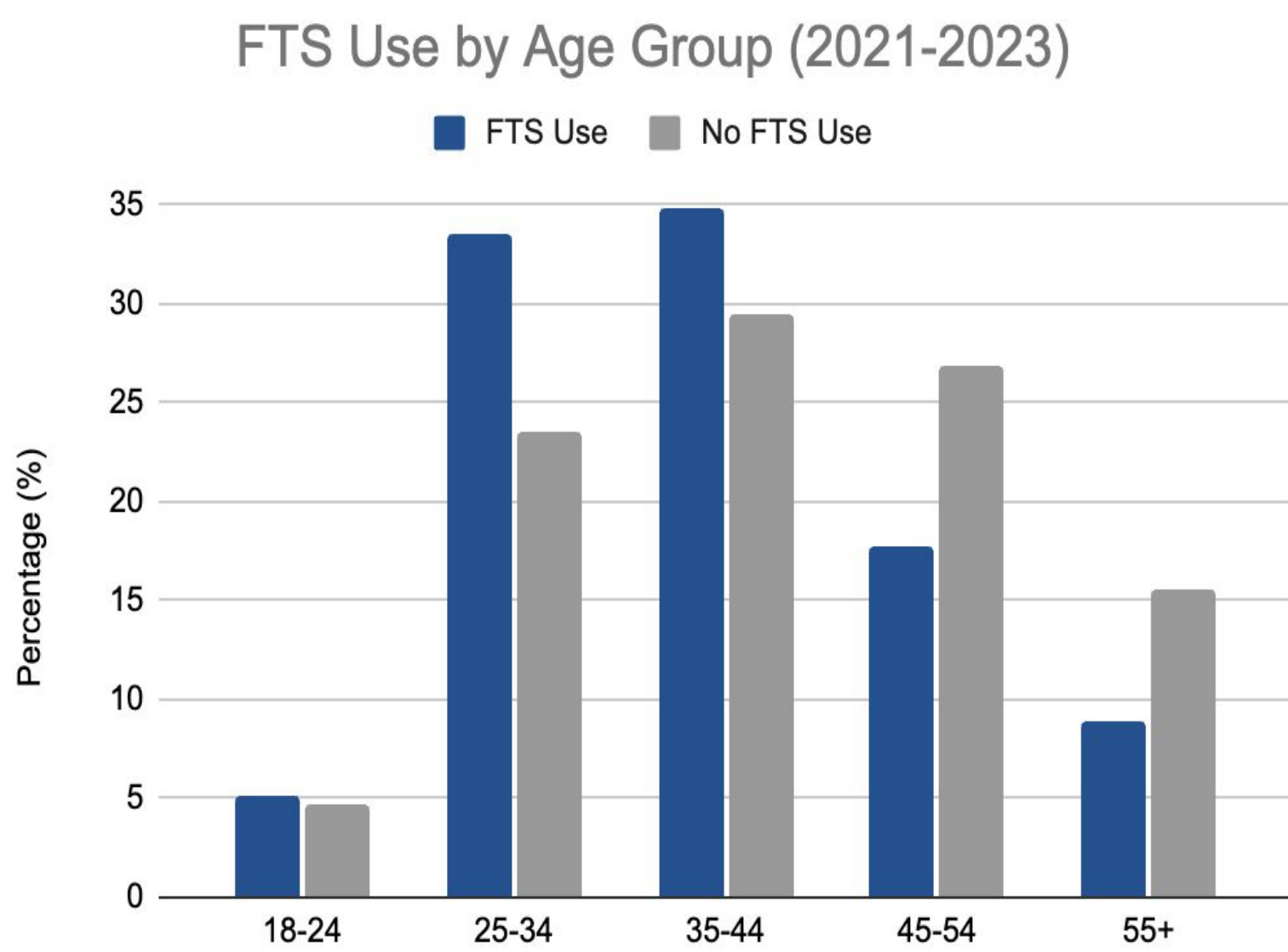
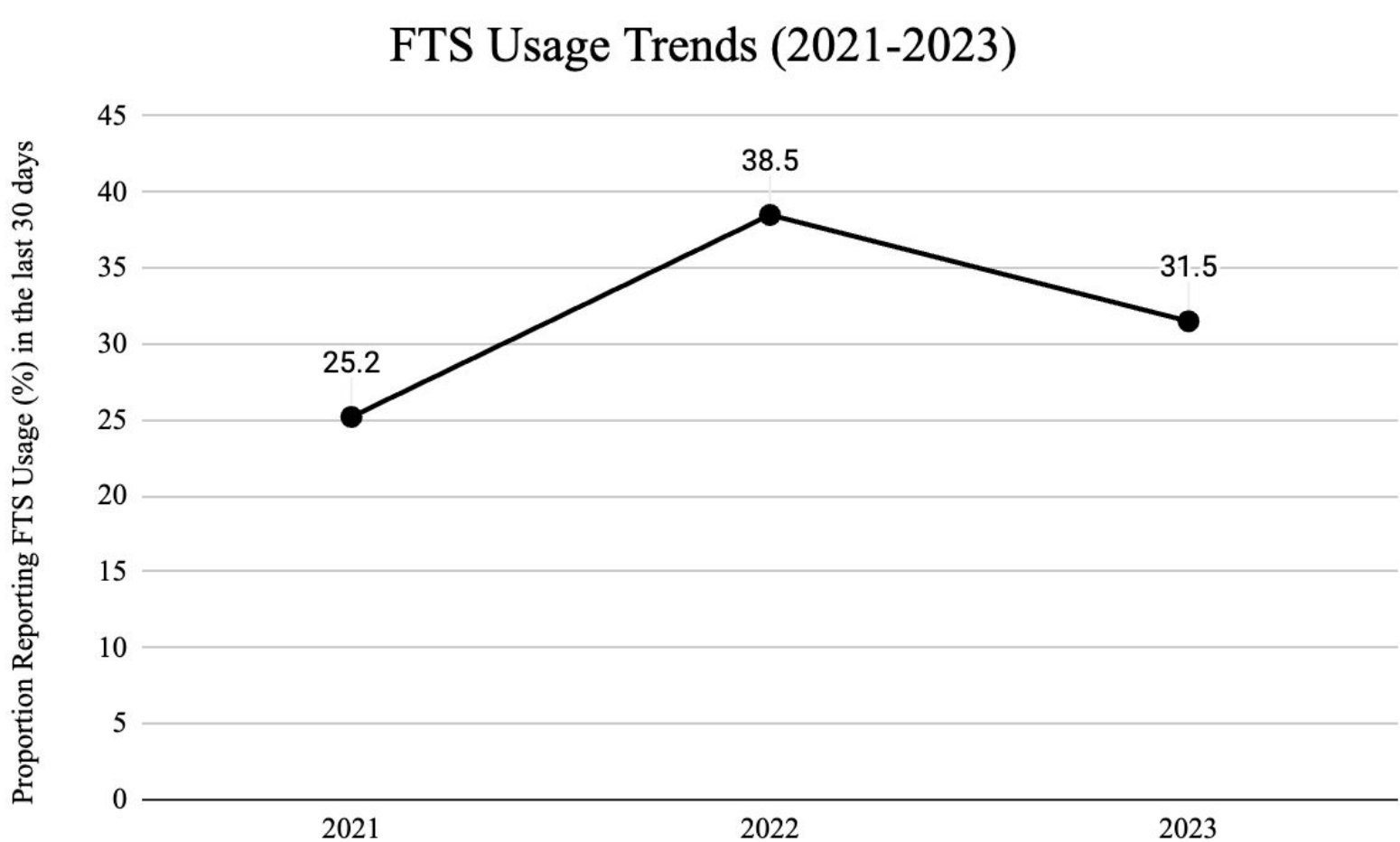
Study Design

- Data Source:** Rhode Island Harm Reduction Surveillance System (HRSS), 2021-2023
- Data Collection & Recruitment:**
 - Participants were recruited through **targeted canvassing** at local syringe distribution programs, harm reduction outreach programs, and **street outreach** in overdose hotspots in RI
 - Surveys conducted in-person or by phone
- Participants:**
 - Eligibility:** 18+, Rhode Island resident, self-reported illicit drug/unprescribed medication use in the past 30 days, and provided a valid response to the FTS use question
 - 498 PWUD surveyed** (2021: n=198, 2022: n=192, 2023: n=108)
 - Majority **male** (65.9%), **non-Hispanic White** (41%), and **aged 25-34** (57.8%)
 - Most respondents had some form of **health insurance** (94.2%) but experienced **housing instability** (73.5%)
 - Polysubstance use was common (89.4%)**, with reported non-prescribed substances including crack (71.3%), cocaine (44%), fentanyl/heroin (39.4%), methamphetamine (26.3%), and opioid pain medications (16.7%).
- Analysis:**
 - Retrospective quantitative analysis using aggregate data
 - Chi-squared tests** assessed relationships between FTS use and demographic/behavioral factors
 - FTS users** were classified as those who reported using FTS “always,” “most of the time,” or “some of the time.” Individuals who reported “never” were considered **non-users**.

Acknowledgements

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Results



Conclusions

- Most surveyed PWUD in RI **did not recently use FTS**, despite legalization and distribution efforts.
- Most FTS users were aged **25-44**, with higher use among **Hispanic** and **non-Hispanic White** participants, as well as those who had **witnessed an overdose** or possessed **naloxone**.
- Non-Hispanic Black PWUD reported the lowest FTS use** despite experiencing the highest overdose rates in RI, consistent with harm reduction disparities seen in existing literature.⁶
- These findings align with the **RAPIDS study**, which found that while FTS use is common among individuals engaged in other harm reduction practices, overall uptake remains low.²
- Targeted outreach efforts** are needed to increase education and awareness statewide.

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