

## Background

- Nearly 6.5 million persons living in the US have injected drugs in their lifetime.
- Despite representing only 3% of US adults, 6% of new HIV infections and 36% of AIDS deaths occurred in this group in 2015.
- Important gender-based HIV disparities exist among persons who inject drugs.
- If incidence remains unchecked, 1:23 women who inject drugs (WWID) will acquire HIV compared to 1:36 men.
- While pre-exposure prophylaxis (PrEP) could help reduce HIV transmission among WWID, little is known about the factors that affect WWID's decision to initiate PrEP.

## Objective

To describe factors impacting PrEP adherence among WWID using the Behavioral Model for Vulnerable Populations as a heuristic for understanding their behavior.

## Methods

- We recruited 100 WWID from Prevention Point Philadelphia, the largest syringe exchange program in the mid-Atlantic United States, in a prospective PrEP implementation study between 4/18 - 5/19.
- Eligible participants were: ≥18 years old, biologically female, English-speakers, who report recent injection drug use and one other HIV risk factor (e.g., bacterial STI, syringe sharing).
- Over 6 months participants:
  - completed a baseline survey assessing factors considered important to PrEP engagement drawn from the Behavioral Model for Vulnerable Populations (BMVP)
  - received a brief educational session about PrEP
  - were offered a PrEP prescription
  - completed semi-structured interviews measuring engagement and received follow-up PrEP care/adherence monitoring at 3 and 6 months
- A purposive subset of 25 WWID who declined PrEP (n=7) and chose to take a PrEP prescription (n=18) completed a semi-structured interview exploring adherence.
  - Content analysis included development and application of a priori and emergent codes.
  - In the final stage, exemplar quotes were selected to represent themes and self-selected pseudonyms were added.

## Sample Description

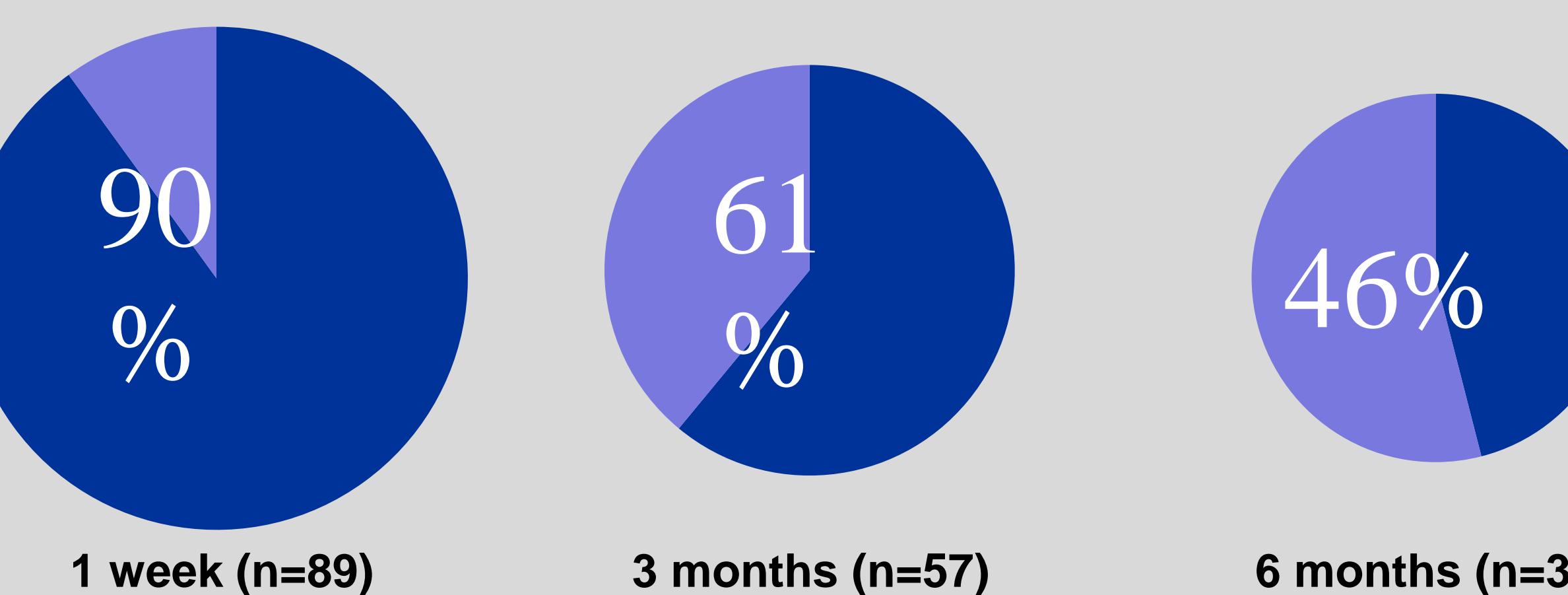
- Median age: 36, interquartile range 31, 44
- Participants were predominantly white (70%), Black (12%), Multiracial (6%); 6% also identified as Latina
- HIV risk behaviors, last 6 months:
  - Median injections daily: 5 (3, 7)
  - Syringe sharing: 45.2%
  - Transactional sex: 77%,
  - Median sexual partners: 6 (2, 22)
  - Inconsistent condom use: 78.1%
- 46% perceived they were extremely, very, or somewhat likely to get HIV

## Results

### PrEP Uptake & Engagement in Care

- Of 100 WWID enrolled, 93 expressed interest in PrEP, and 79/93 (85%) returned to collect their prescription, available 1-week later.
  - 60/79 (76%) returned to pick up medications using our partnership with a local pharmacy, as opposed to a paper prescription
  - 37/60 (62%) returned to pick up medications ≥2 times

Figure 1: Retention at 1 week, 3 months, and 6 months

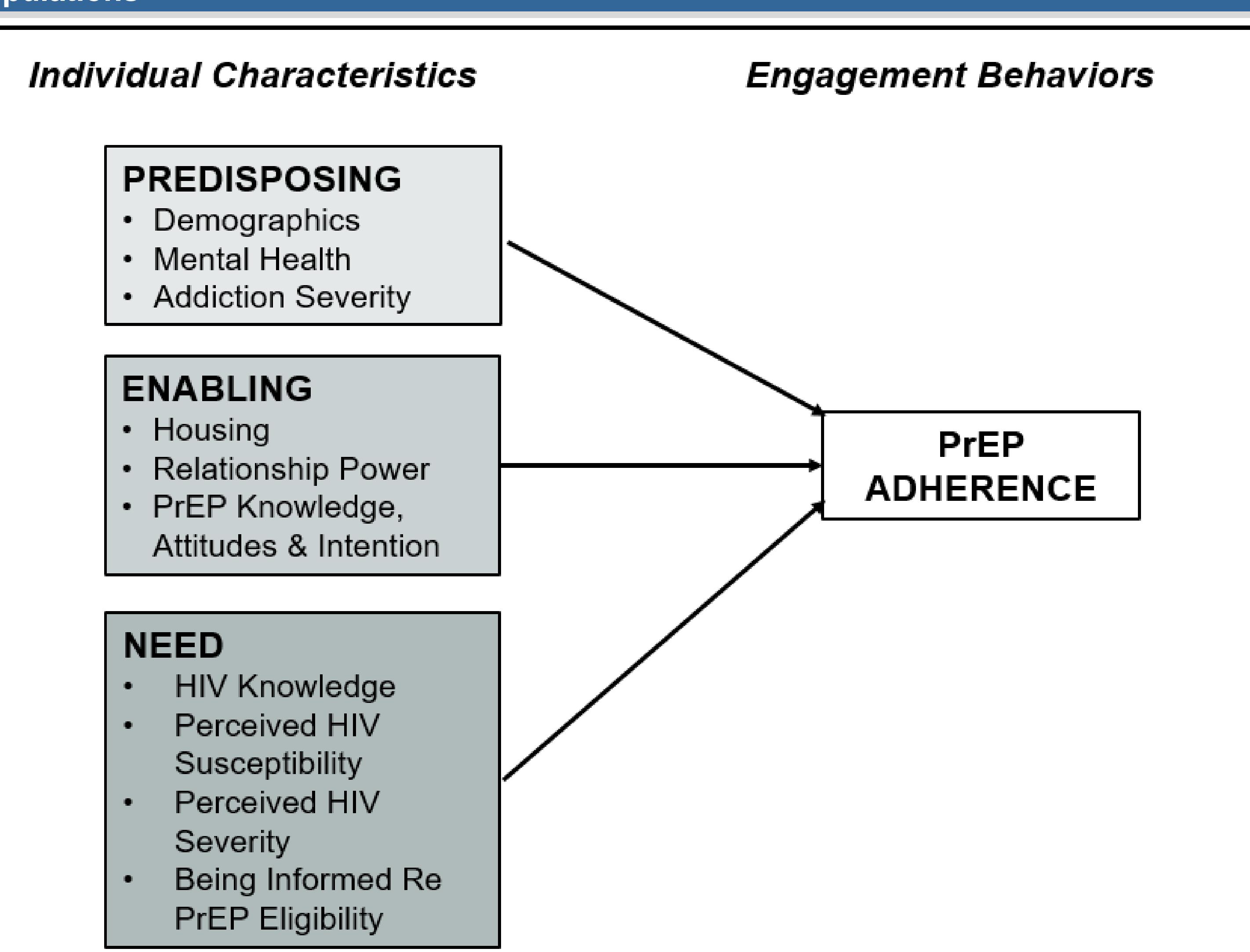


### PrEP Adherence

Table 1: Self-Reported Adherence and Tenofovir Urinalysis Results at 3- and 6-months

	3-month N (%)	6-month N (%)
<b>Self-Reported Adherence</b>		
Perfect adherence (0 missed pills in last 7 days)	(n=50)	(n=30)
Partial adherence (1-6 missed pills in last 7 days)	24 (48%)	12 (40%)
Non-adherence (7 missed pills in last 7 days)	12 (24%)	12 (40%)
	14 (28%)	6 (20%)
<b>TFV Urinalysis Results among Adherent WWID</b>		
Recent adherence (>1000 ng/mL)	(n=22)	(n=9)
Partial/inconsistent adherence (10-1000 ng/mL)	1 (4%)	1 (11%)
Non-adherence (<10 ng/mL)	5 (23%)	2 (22%)
	16 (73%)	6 (67%)

Figure 2: Conceptual Framework Adapted from Behavioral Model for Vulnerable Populations



## Illustrative Quotes

### Predisposing Factors

The chaotic nature of opioid use, especially the need to focus on "staying well" (in this case using with sufficient frequency to avoid painful opioid withdrawal) impacted women's ability to consistently prioritize PrEP.

"[For women who are] livin' homeless and in active addiction, I just don't think it would be people's first priority...I just remembered just bein' out there...my first priority was to get well. Then it was to make sure my ass was washed, and—and then my last thought would probably be the PrEP." -B

### Enabling Factors

Housing instability directly influenced prescription storage and indirectly influenced experiences of prescription theft both of which influenced suboptimal adherence.

"I had my [PrEP] hidden...behind an abando...the pills were there because I try not to carry around a lot of stuff on me...I went back there the one night and my stuff was thrown all over the place and the pills were...all over the ground." -Adrianna

"[It's easier to take PrEP when] you're in a safe environment...When you're on the street, where are you gonna keep it? If you lay down and go to sleep on the street, they're gonna rob you." -Brenda

### Need

Women saw PrEP as a beneficial HIV prevention tool, recognizing risks within and beyond their control.

"I do [think I'm at risk for HIV] because...first of all, you can get attacked at any given second, like, you don't see it coming...I didn't know that my girlfriend had HIV, I got poked with her needle...she put me at risk for it, so accidents happen." -Sunday

However, their perceived risk was mutable peaking during periods of high-volume drug use, sex work, or homelessness and waning during periods of drug treatment or greater stability.

## Conclusions

- Most WWID accepted and initiated their PrEP prescriptions. This suggests they perceive PrEP as a beneficial and acceptable HIV prevention tool.
- Despite viewing PrEP as important, many WWID did not adhere to PrEP due to predisposing, enabling, and need-related factors.
- Addressing these barriers to adherence through enhanced structural and behavioral supports will be important for WWID, especially given the need for daily adherence in order for PrEP to be effective.

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