## Syndemics of HIV and Opioid Use: How Do We Increase Engagement in Care?

Irene Kuo, PhD, MPH Associate Research Professor George Washington University Milken Institute School of Public Health

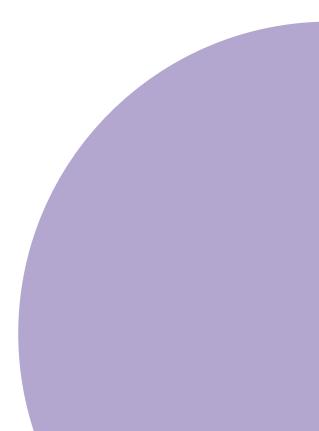


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## CONFERENCE

DCengage.org



## What is a syndemic?

### **Syndemic:**

Mutually reinforcing interaction of disease and social conditions that exacerbates negative health outcomes

Social Determinants of Health (poverty, housing instability, violence)

Substance use and overdose

Adverse Mental Health



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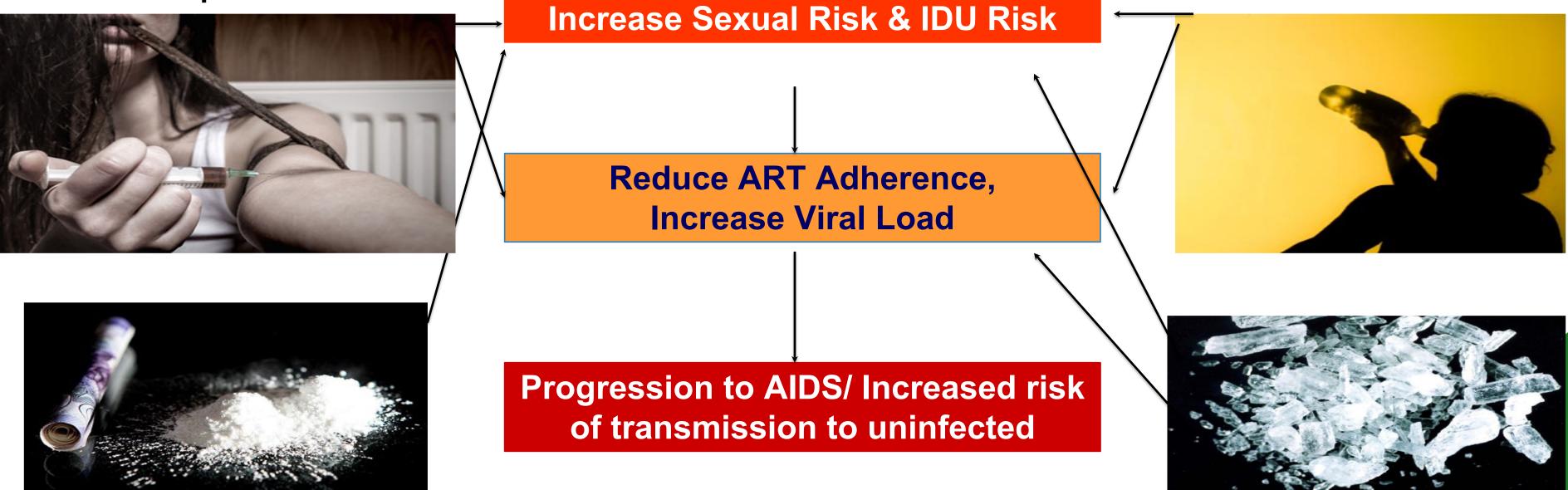


#### HIV, HCV, STIs



## Drug And Alcohol use Increases Risk of HIV Transmission & Interrupts the HIV Continuum of Care

Opioid



### Cocaine

Kurma et al., 2015, Mehta et al., 2014, Shoptaw, 2013, Wechsberg et al., 2011; Altice et al. Lancet 2010; Azar et al. 2010; Springer et al, CID, 2011

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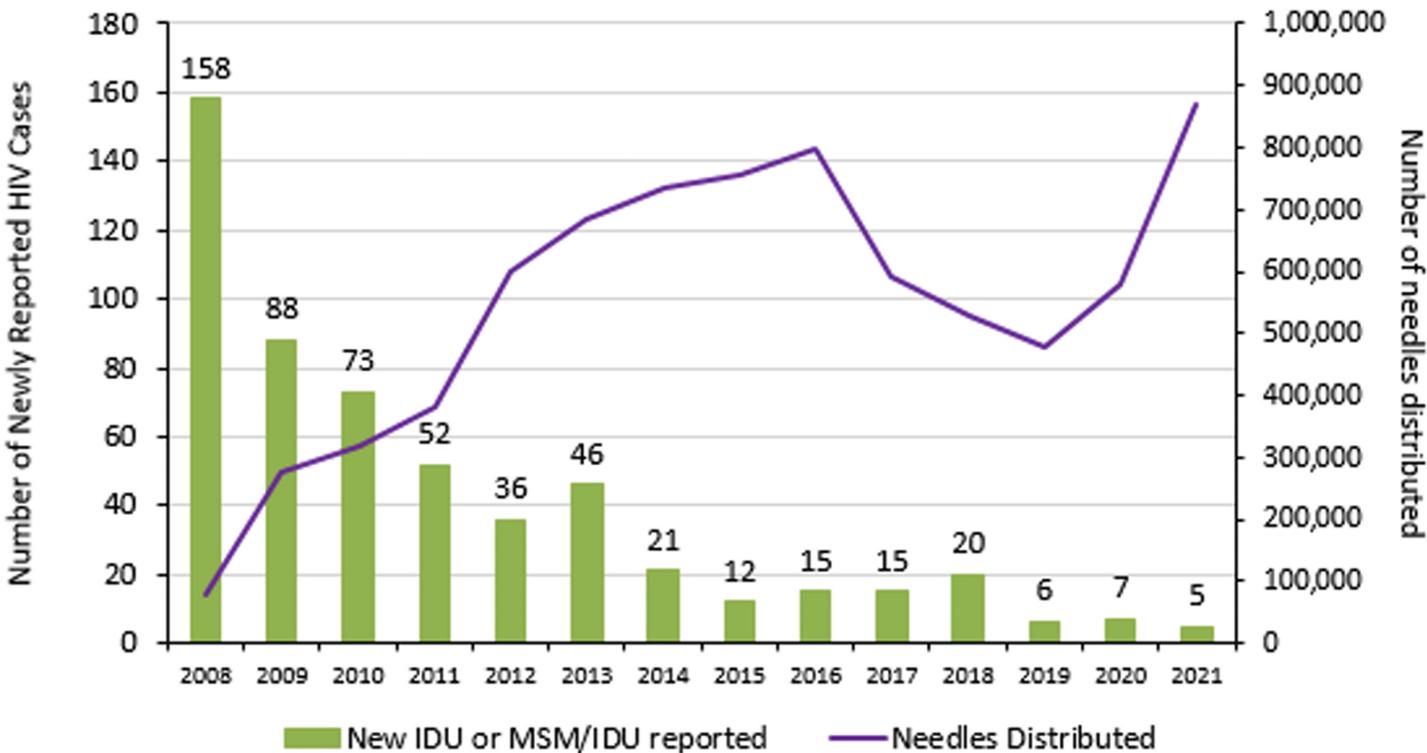
#### Alcohol

### Methamphetamine



### **DC** Context for HIV and PWID

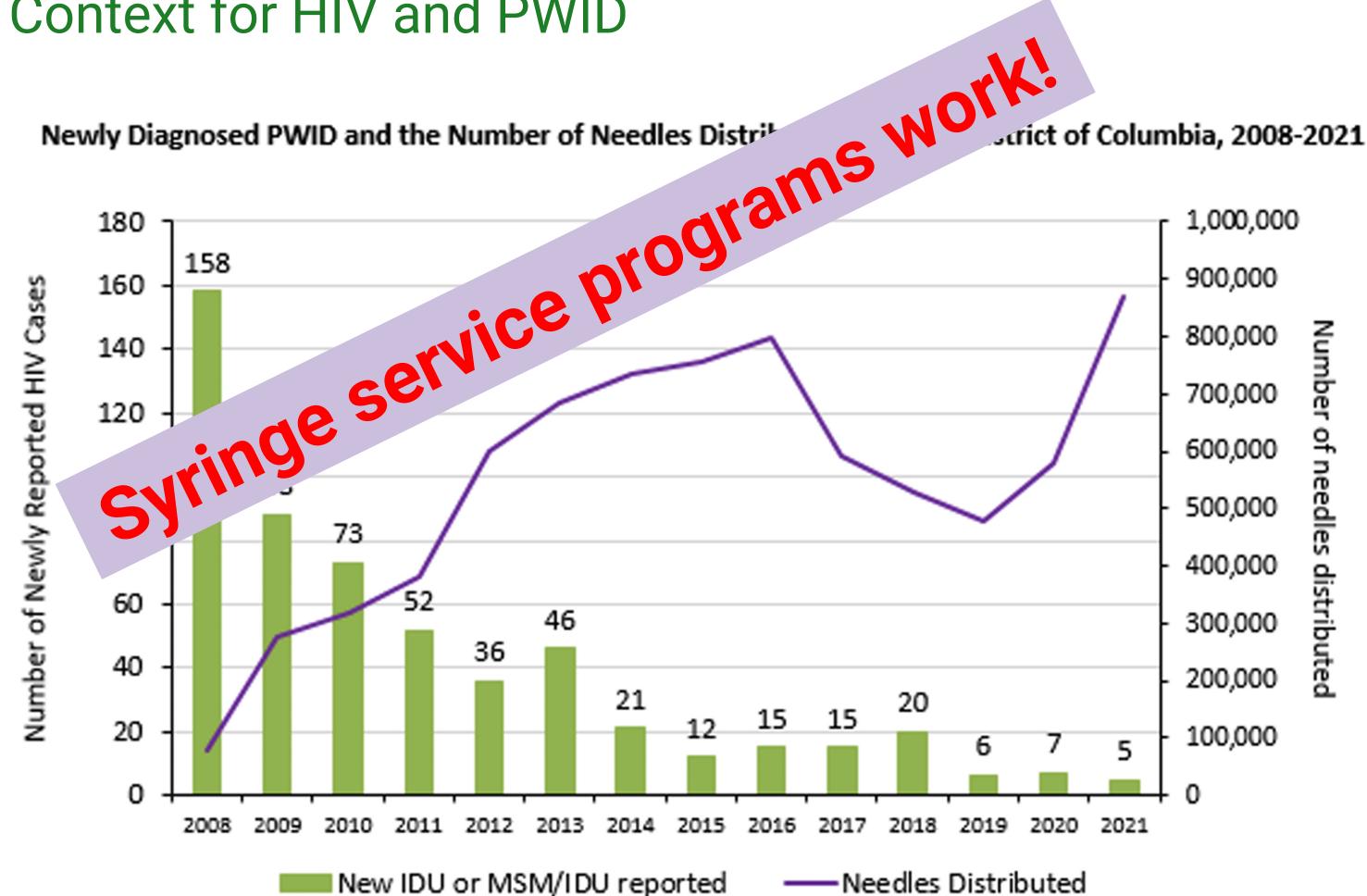
#### Newly Diagnosed PWID and the Number of Needles Distributed, by Year, District of Columbia, 2008-2021







### DC Context for HIV and PWID

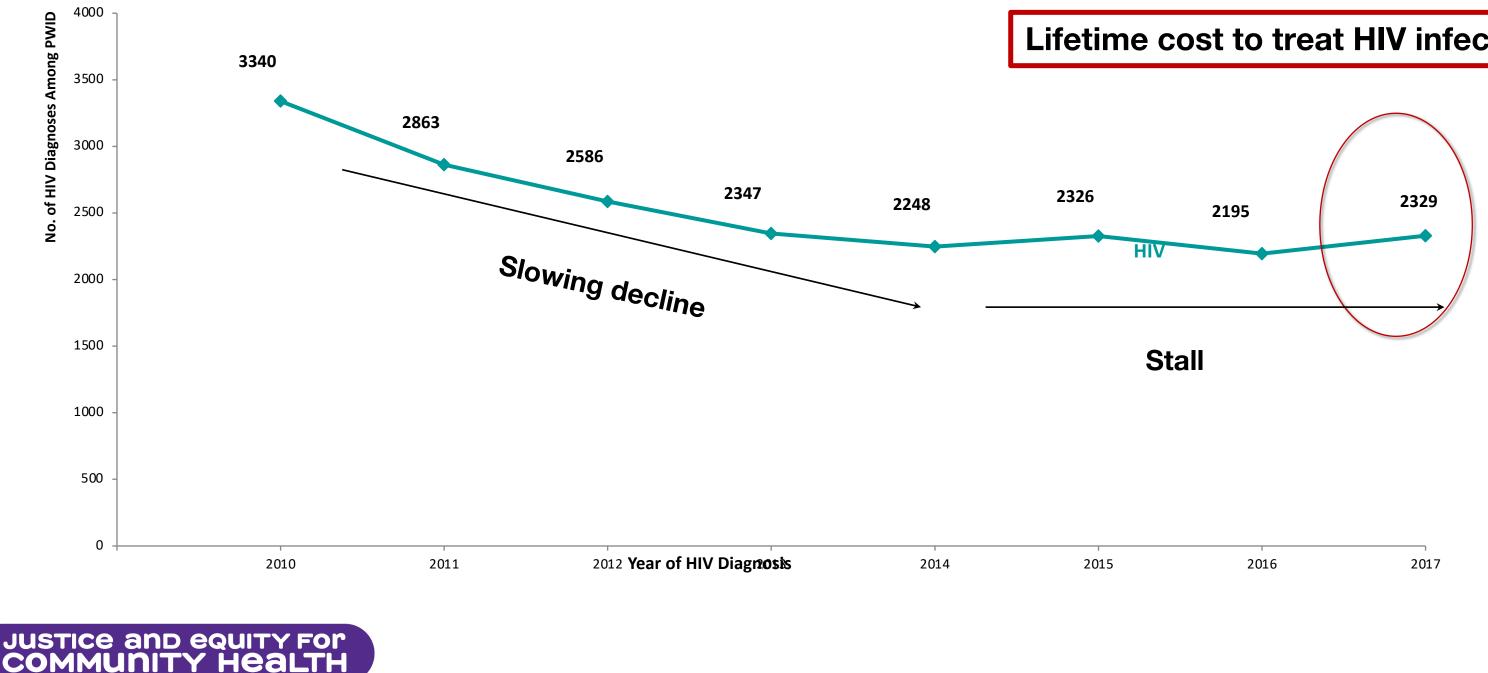




### **HealthHIV**

#### The Changing Face of the HIV Epidemic Among PWID in the United States

The longstanding decline in HIV diagnoses among persons who inject drugs in United States how now stalled.



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#### Lifetime cost to treat HIV infection: \$478,000

### **Increase** as of 2017



## **HIV Prevention: Pre-Exposure Prophylaxis** (PrEP)

- **FDA-approved PrEP** regimens
  - **Oral daily pill** (Truvada or Descovy) approved for people at risk 0 through sex or injection drug use.
  - Long-acting injection every 2 months (cabotegravir or Apretude) 0 approved for people at risk through sex
  - \*\*Taken correctly can be more than 90% effective in preventing in HIV transmission

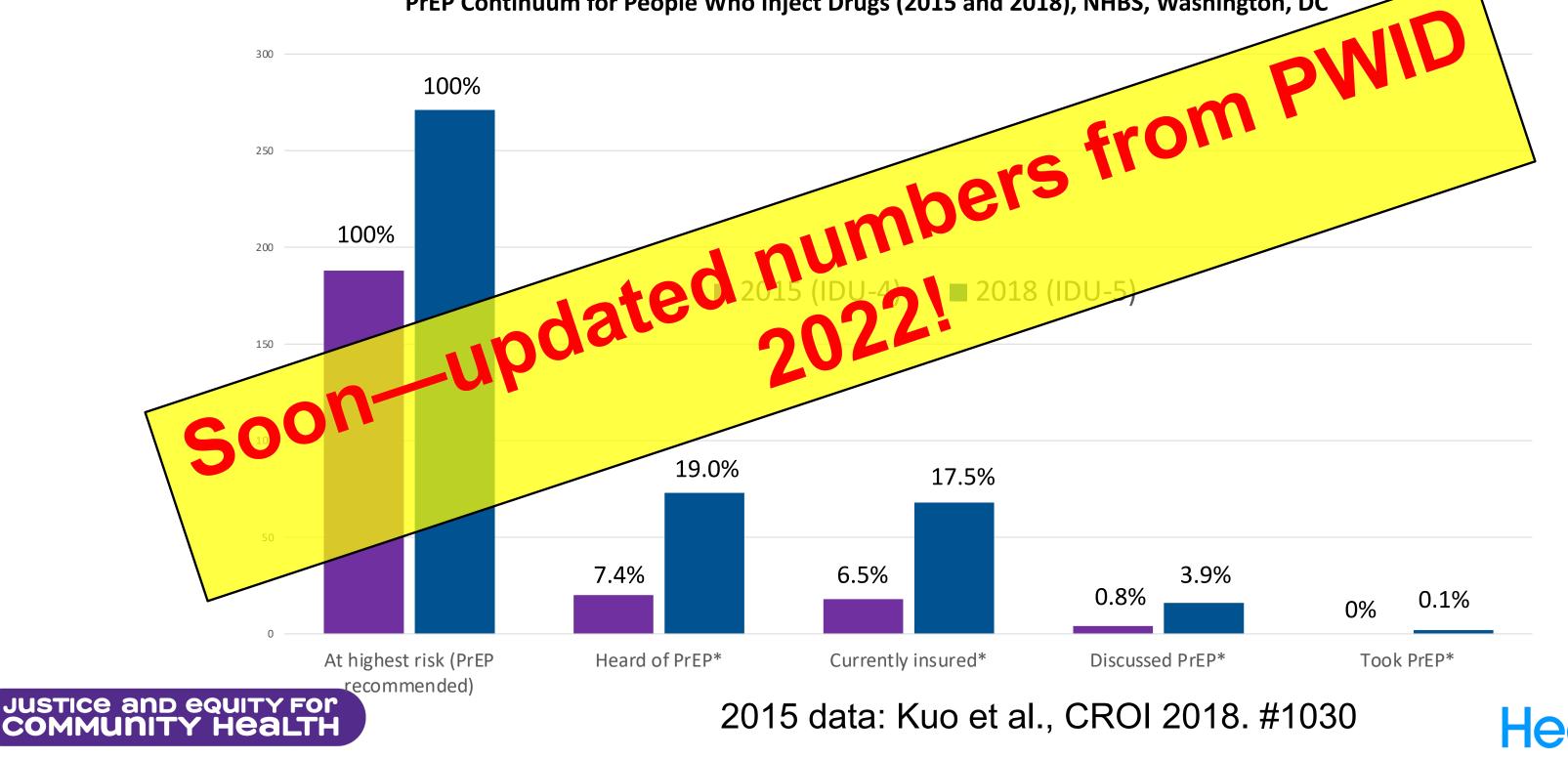






## **PrEP Continuum among People Who Inject Drugs,** Washington, DC (2018 vs. 2015)

PrEP Continuum for People Who Inject Drugs (2015 and 2018), NHBS, Washington, DC

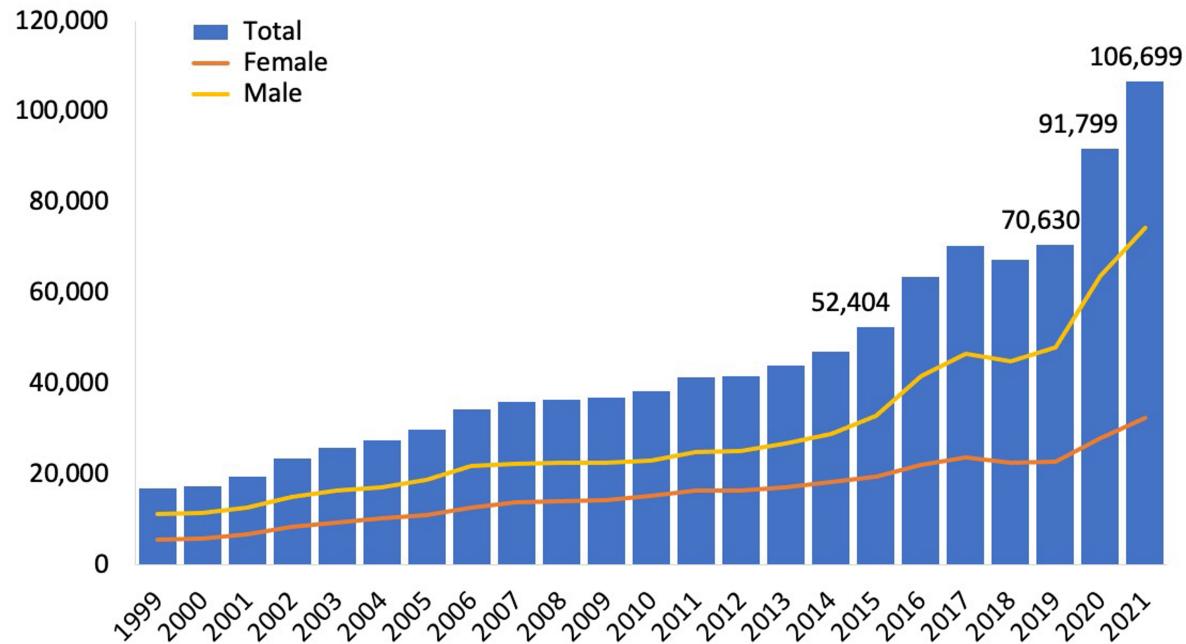


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HealthHIV.org

### Figure 1. National Drug-Involved Overdose Deaths\*, Number Among All Ages, by Gender, 1999-2021



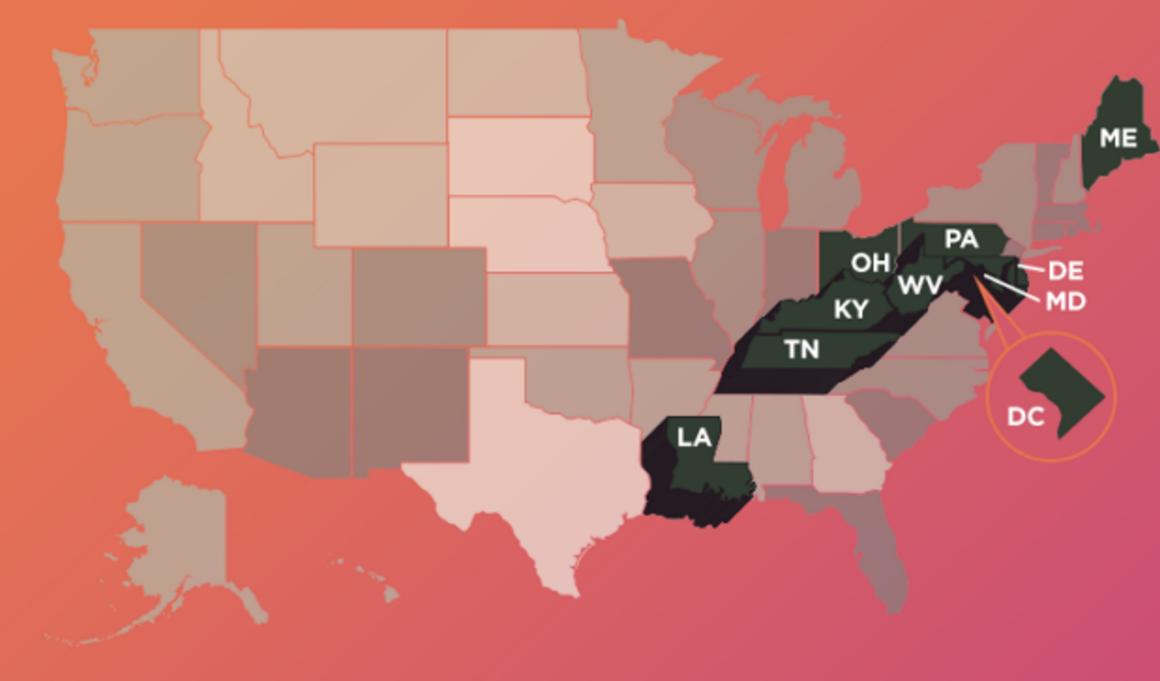
\*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2021 on CDC WONDER Online Database, released 1/2023.







# In 2020, 7 out of the 10 states with the highes overdose mortality rates were in the South.



Overdose Mortality Rate, per 100,000 people, 2020

0 - 14.1 14.2 - 18.0 18.1 - 24.4 24.5 - 31.7 31.8·
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HepVu.org

SOURCE: HepVu

st	West Virginia	81.4%
	Washington D.C.	58.1%
	Kentucky	49.2%
	Delaware	47.3%
	Ohio	47.2%
	Tennessee	45.6%
	Maryland	44.6%
	Louisiana	42.7%
	Pennsylvania	42.4%
	Maine	39.7%
	*For the purposes of this analysis,	

\*For the purposes of this analysis, Washington, DC is treated as a state.



### Number of Overdose Deaths in Washington, DC, 2014-2022

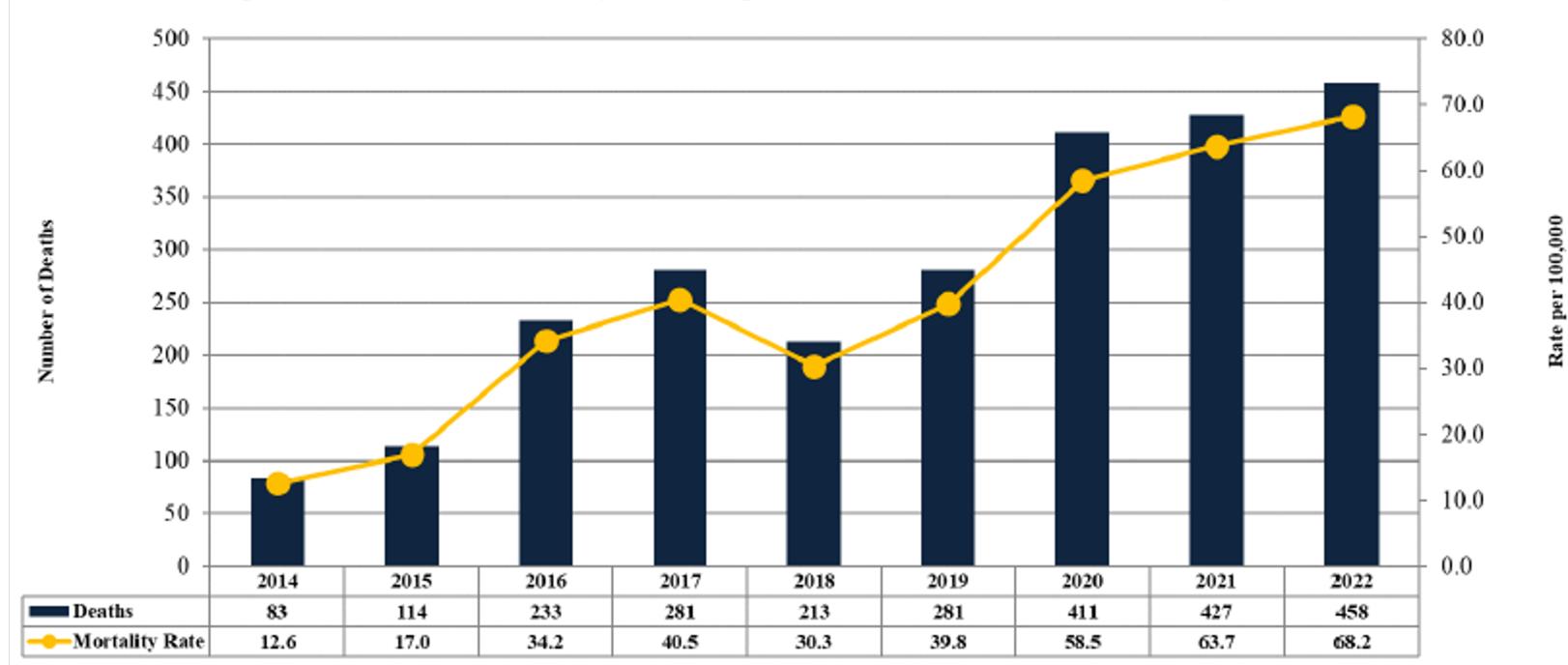


Fig. 1(a): Number and Mortality Rate of Opioid-Related Fatal Overdoses in DC by Year: 2014-2022

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DC Office of Chief Medical Examiner (OCME), 6/20/23 Fatal Overdose Report

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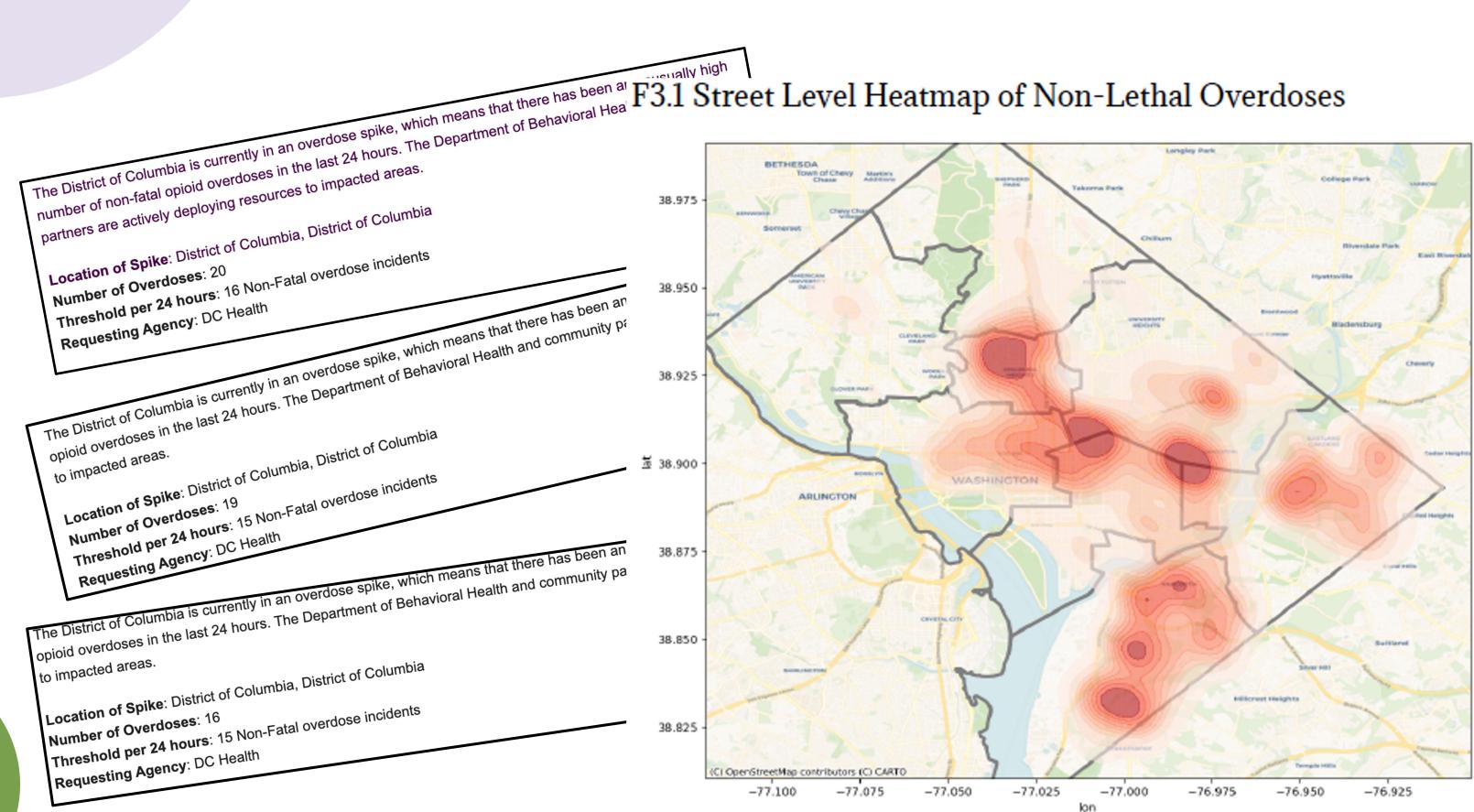
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#### Source: DC Health Monthly Non-Fatal Overdose Report, April 2023





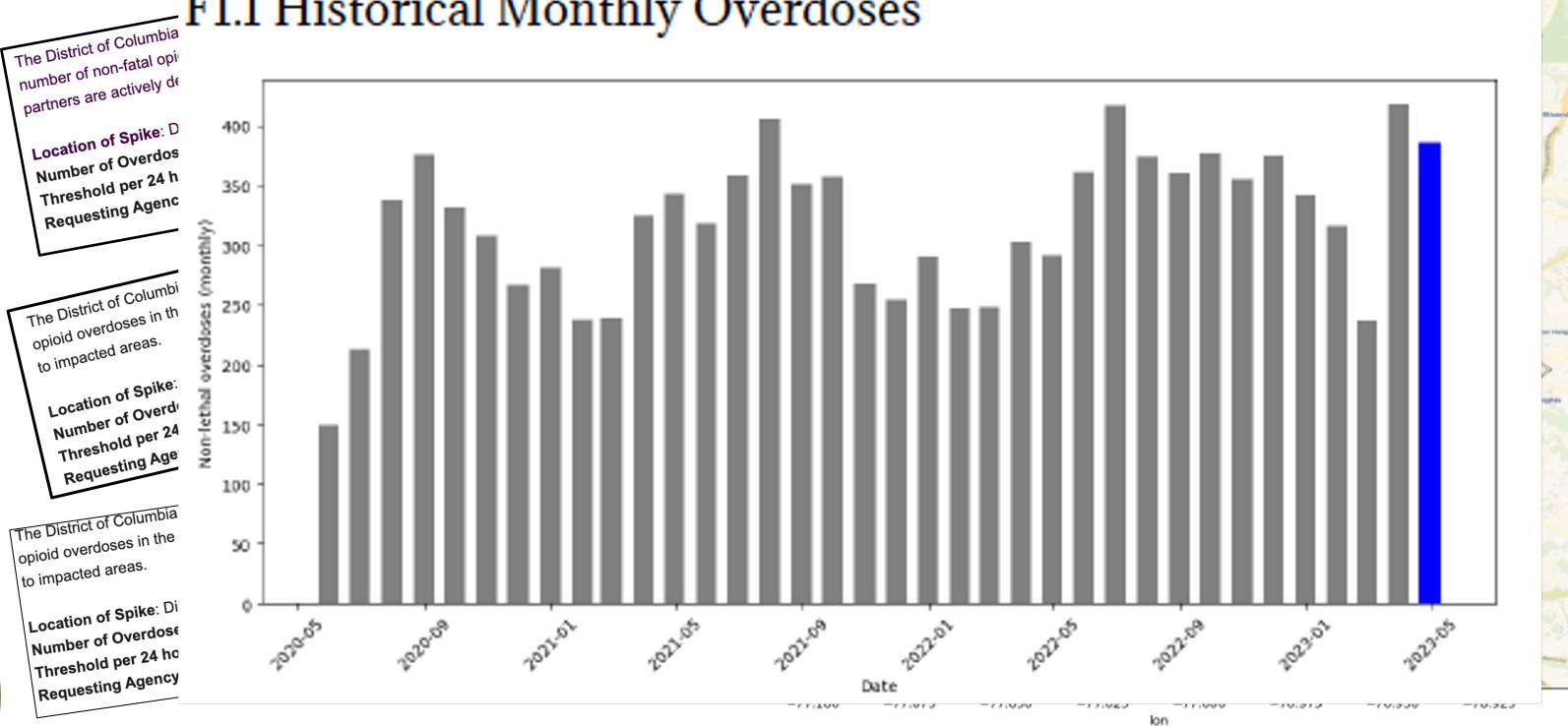
**HealthHIV** 

HealthHIV.org

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#### Source: DC Health Monthly Non-Fatal Overdose Report, April 2023

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### F1.1 Historical Monthly Overdoses

F3.1 Street Level Heatmap of Non-Lethal Overdoses





## Naloxone and Anti-HIV Drug Knowledge and Use among People who Inject Drugs and Live in the DC Metropolitan Statistical Area (n= 500), 2018 National HIV Behavioral Surveillance Study (NHBS)

29% of Over one-Nearly two-0.9% of third of participants thirds of participants participants reported reported if participants own Narcan that they had never they were had used heard of currently or Naloxone Narcan on the Good taking PrEP Samaritan someone else during Law an overdose ΗΕΔΙΤΗ

VARCANisatore HD NASAL SPRAY 4 mg

Nearly 20% strongly agreed/ agreed that they would no longer need to use sterile needles if they were on PrEP

82% of participants would be very/ somewhat likely to take PrEP if it were available in DC for free

## Medication treatment of OUD also improves HIV viral suppression....

### A Systematic Review and Meta-Analysis of Studies Evaluating the **Effect of Medication Treatment for Opioid Use Disorder on Infectious** Disease Outcomes 👌

Katelyn F McNamara, BS, Breanne E Biondi, MPH, Raúl U Hernández-Ramírez, PhD, Noor Taweh, Alyssa A Grimshaw, MSLIS, Sandra A Springer, MD 🖾 🖾

Open Forum Infectious Diseases, ofab289, https://doi.org/10.1093/ofid/ofab289

Published: 02 June 2021 Article history

## ...and saves lives by preventing overdoses



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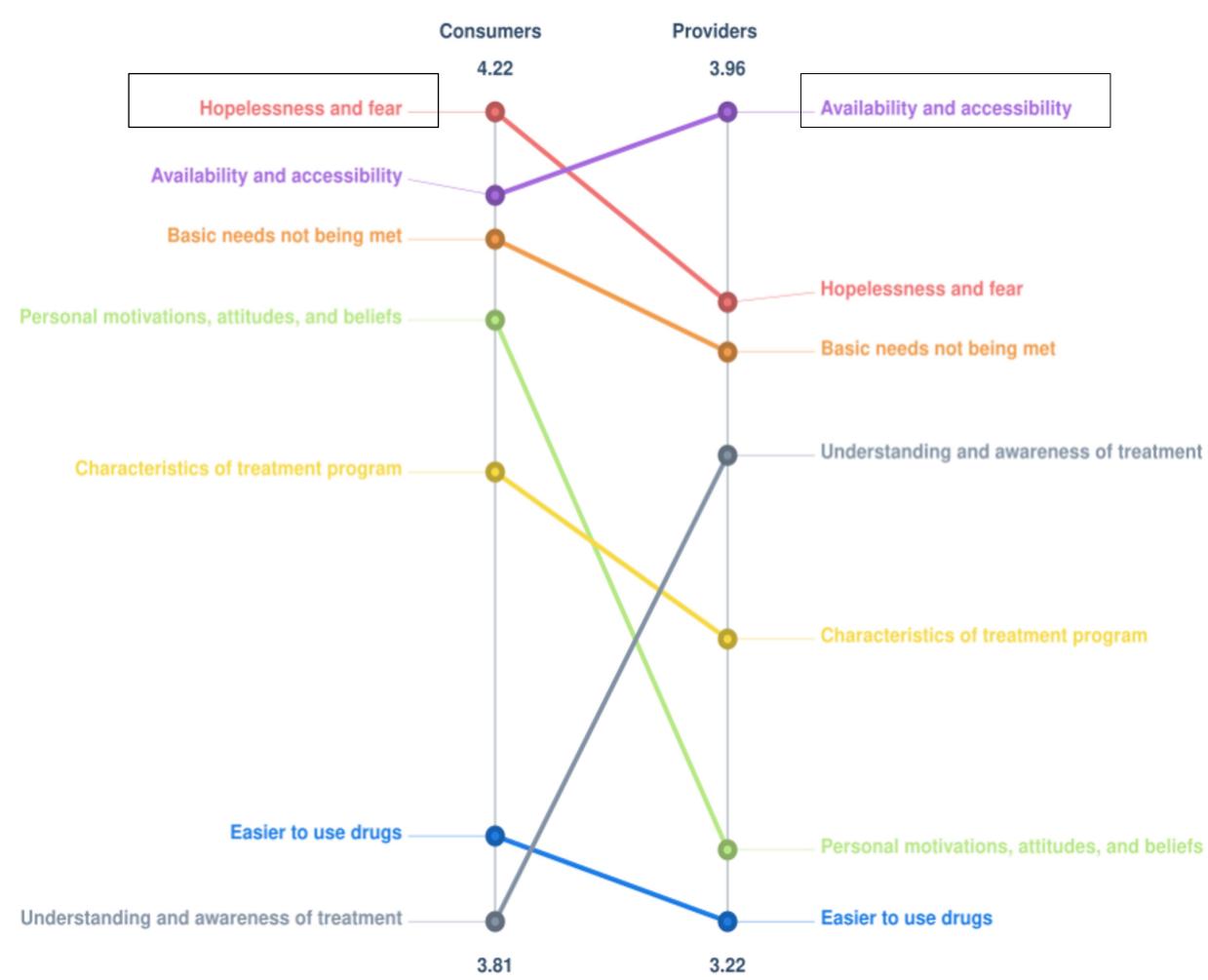


MOUD was associated with :

### Greater ART Adherence OR 1.55, 95%CI 1.12-2.10

### HIV Viral Suppression OR 2.19, 955 CI 1.88-2.56





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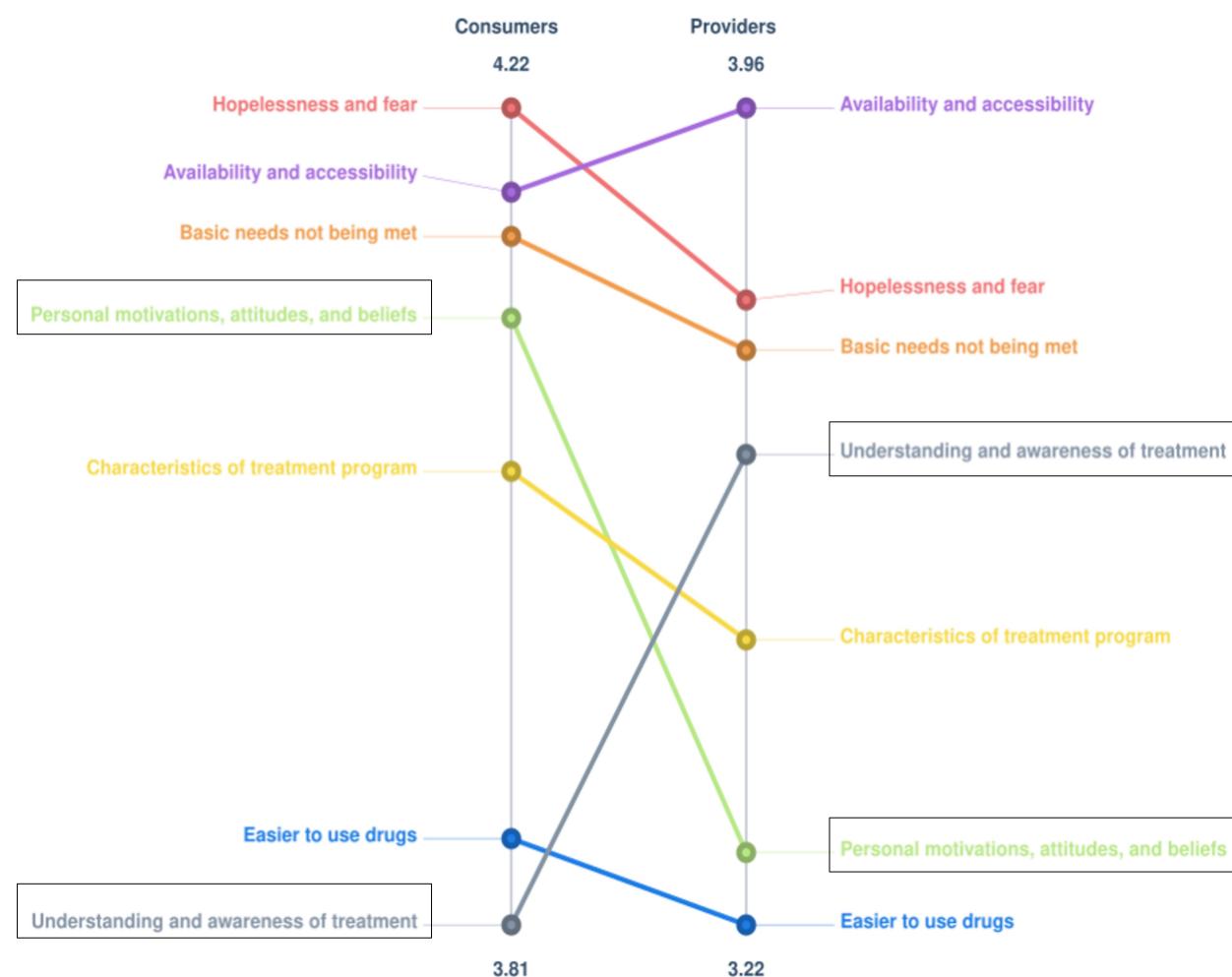
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"Welcome MAT" Study

"Rate this item in terms of importance to accessing MAT."



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"Welcome MAT" Study

"Rate this item in terms of importance to accessing MAT."

### **SOCIAL DETERMINANTS OF HEALTH** FOR PWUD

Structural: Racism, poverty, access to care, stigma and discrimination

> **Community: Lack of** housing, availability of substances

> > Interpersonal: Substance use, mental health

> > > Individual: Infections, wounds, overdose

- Social determinants of health are social, economic, and political circumstances that influence individual and community health status.
- Comprehensive harm reduction addresses drug use as well as the environment in which someone is using drugs.
- Experiences of discrimination and trauma related to race and gender identity, class, family history, and incarceration influence people's drug use behaviors and access to care.
- Within a harm reduction framework, providers' responsibility is to acknowledge and address barriers in order to promote stability, safety, and health for their communities.

Reduction JUSTICE AND EQUITY FOR

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## In conclusion...

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- Syndemic of opioid use and HIV in DC is still a major public health problem Harmree
- Harm reduction is critical to health of people who use drugs
- New HIV infections are decreasing but overdose rates are not
- Drug treatment/medication for opioid use disorder/PrEP can improve syndemic outcomes, but engagement in care is suboptimal
- Interventions to improve access and engagement in care and prevention in a syndemic framework are needed (integrated care models)

INTEGRA Study (HPTN 094) mobile health unit providing integrated care







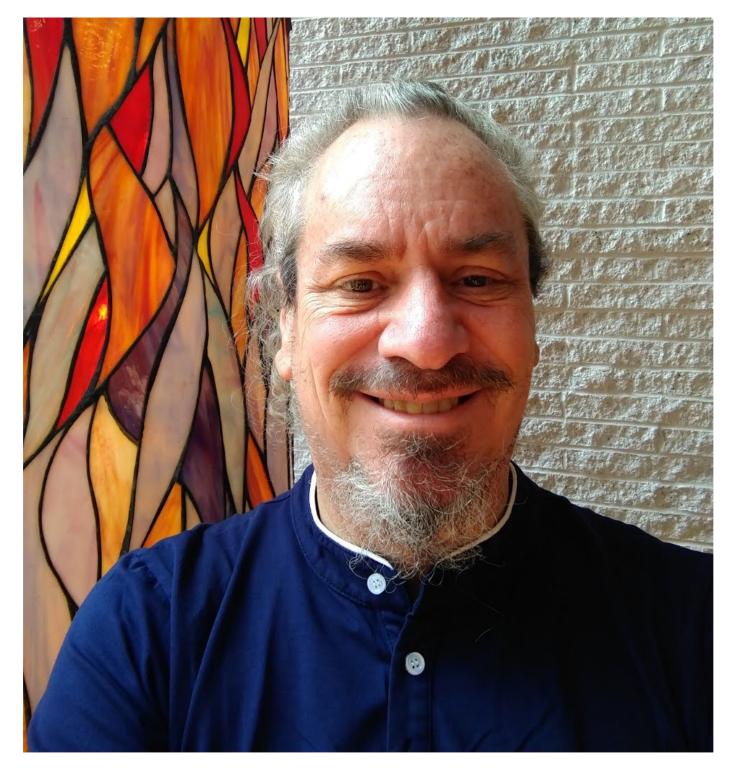




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### **About the Speaker**

George Kerr, MT-CDSMP/DM Harm Reduction at Westminster / George@giiiassociates.com

I am committed to educating, training, advocating, and collaborating for social justice through harm reduction. I have a long and committed history of effectively working with some of the District's most prominent health service providers and have motivated hundreds of individuals to advocate for those who the stigma of HIV and substance abuse has silenced. I believe that TOGETHER, we can build a healthier community.



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### **About the Speaker**

#### Leslie Demus

of Corrections / Idemus@unityhealthcare.org

My name is Leslie Darnell Demus, Community Health Worker (CHW) presently employed with Unity Health care at the Department of Corrections. Previously working under a linkage to care grant, for newly diagnosed HIV/AIDS clients. I've had extensive training as a CHW in the field of HIV/AIDS. Having a clear understanding of the community I serve, this has enabled me to serve as a liaison/intermediary between medical providers/social services and the community. Working with this population requires me to perform HIV/STD screening often in the community. Living with HIV for over 20 years and my experience in the community has been a great asset in my job performance. I supply the support needed to assist individuals to stay adherent to their medical regiment and address the barriers that would prevent them from being medically compliant. I have been employed and or affiliated with all HIV organization in the DMV and have facilitated several HIV support groups. I am spiritually grounded and very physically fit. I love sports, especially tennis and I often ski and ride horses. An inspirational quote that I try to live by, Be as patient with others as God has been with you.



## SUD Certified Peer Navigator, Unity Healthcare at Department

