

# HIV PREVENTION AND CARE AMONG TRANS PEOPLE IN SAN FRANCISCO

Erin Wilson, DrPH  
erin.wilson@sfdph.org  
erincwilson@gmail.com  
Trans Research Unit for Equity  
(TRUE)



**UCSF** Profiles  
Women in Science at UCSF





# THE SCIENCE OF HIV AMONG TRANS PEOPLE – [GOOGLE SCHOLAR](#)



## Transgender Advisory Committee

**Los Angeles-** Alexis Rivera, Sabel Simone, Bamby Salcedo, Talia Bettcher, Genesis, Hanna Howard, Teri Tinsley, Kimberly Scott, Vicky Ortega, Maria Roman, Shirley Bushnell, Drian Juarez, Erica Gonzalez, Brenda del Rio Gonzalez  
**Chicago-** Lois Bates





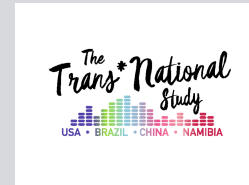
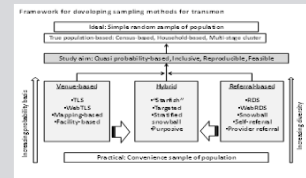
# Meet Ms. Billie Cooper

At the Intersection of  
Black, Transgender,  
and HIV Communities,  
the Outspoken Activist  
Fights for All of Our  
Needs

by Hank Trout  
Photos by Saul Bromberger and Sandra Hoover Photography



EXTRAMURAL GRANTS  
(NIH, HRSA, CDC, SAMHSA)  
OBTAINED BY OUR TEAM TO SERVE THE  
LOCAL TRANS COMMUNITY



# HIV SURVEILLANCE SPECIAL REPORT



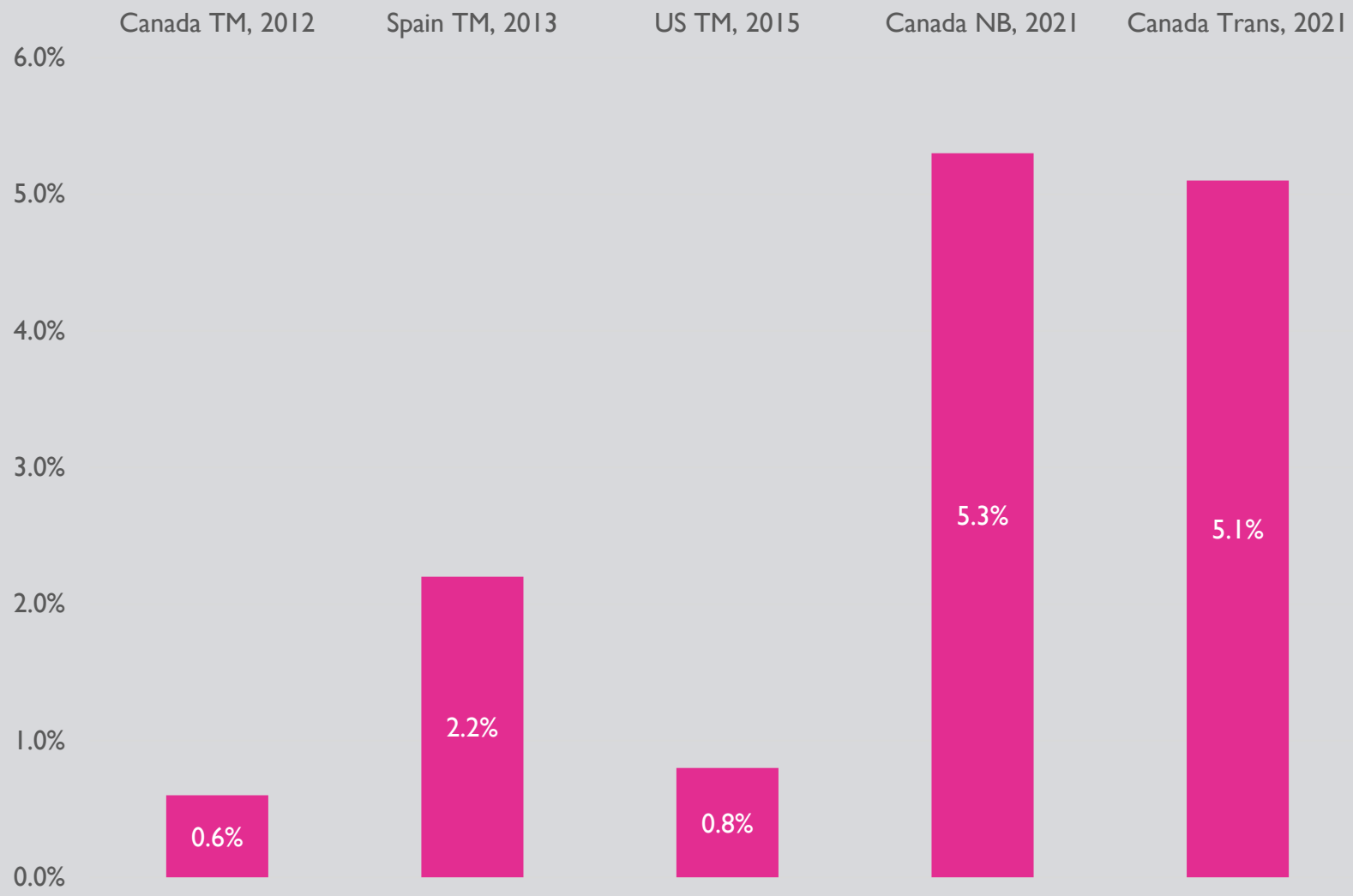
## HIV Infection, Risk, Prevention, and Testing Behaviors Among Transgender Women

National HIV Behavioral Surveillance • 2019–2020

**1,608** transgender women were interviewed in **7 cities** with high levels of HIV.

**42%** had **HIV**

# LIMITED HIV EPIDEMIOLOGICAL DATA WITH TRANS MEN & NON-BINARY PEOPLE



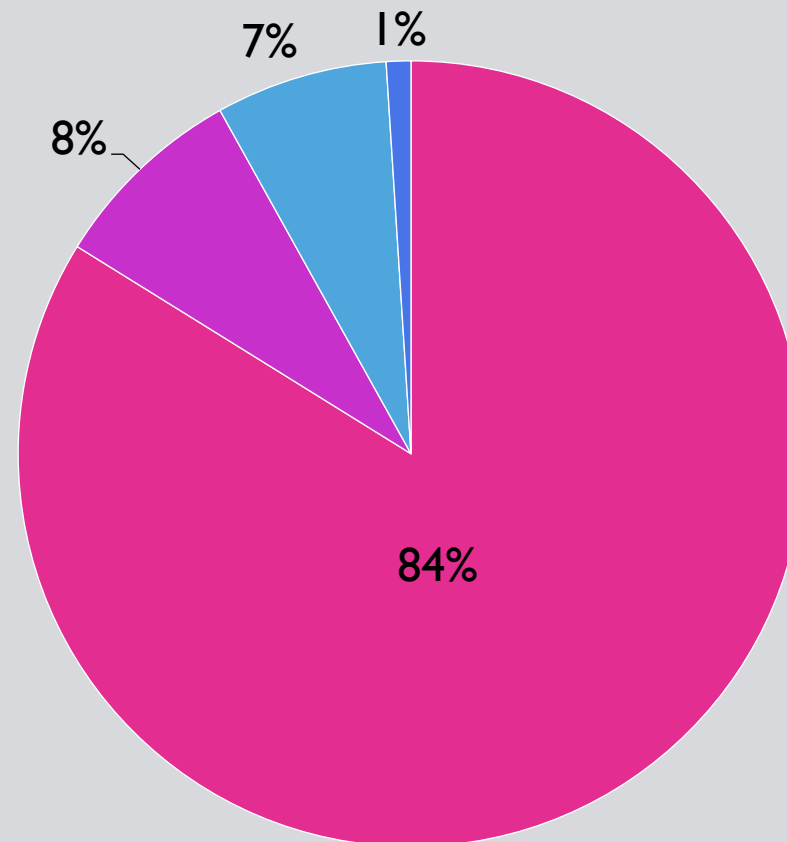
# IMPACT OF HIV ON TRANS PEOPLE IN SAN FRANCISCO

What do we know locally in San Francisco?

# SAN FRANCISCO HIV-EPIDEMIOLOGY SURVEILLANCE DATA, 2019 REPORT

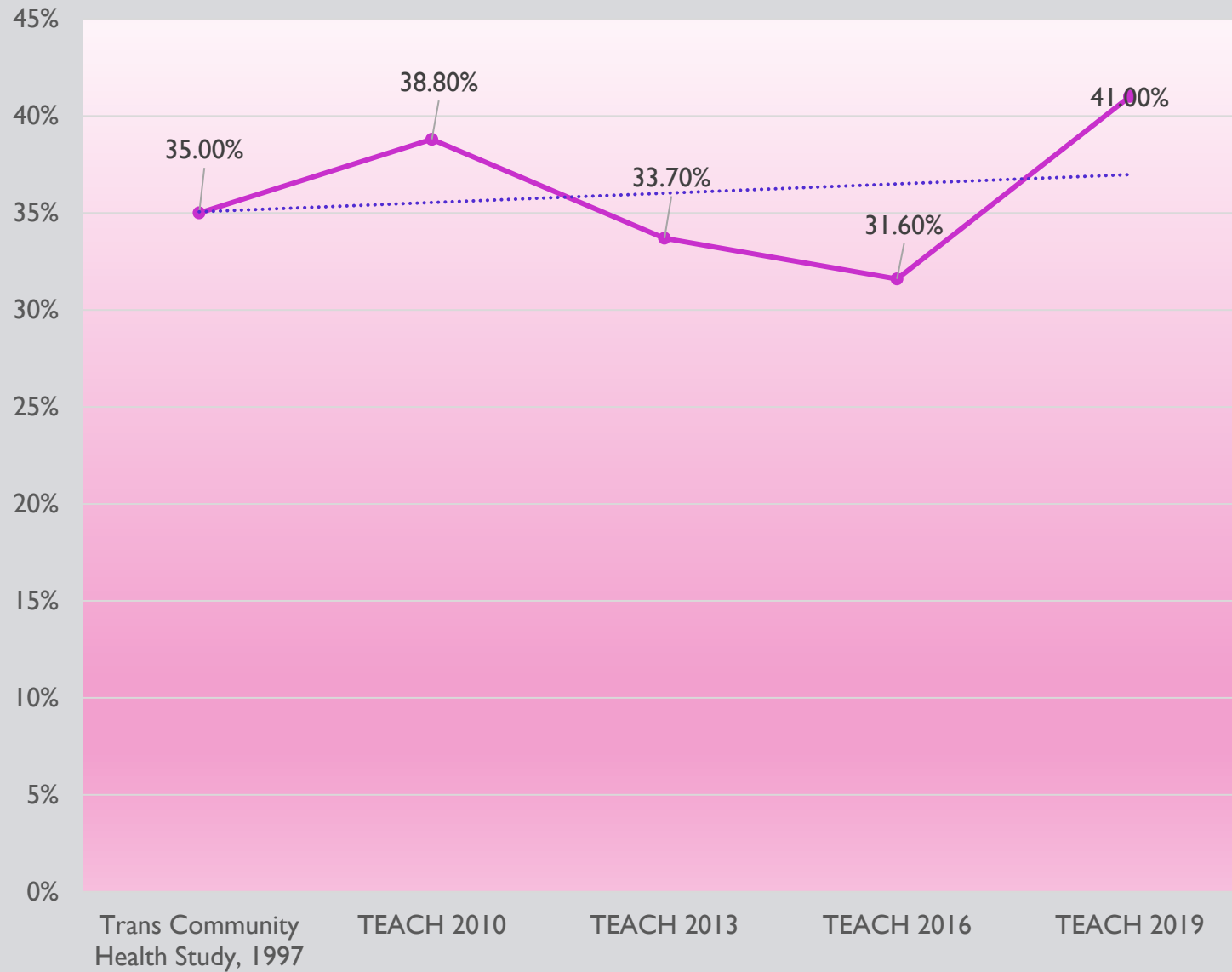
■ cis men ■ cis women ■ trans women ■ trans men

- Gender of people living with HIV/AIDS Cases (n=15,908)





## Trends in HIV prevalence among trans women



*The*  
**Trans\* National**  
*Study*

USA \* BRAZIL \* CHINA \* NAMIBIA



## IN THEIR OWN WORDS – HOW TRANS WOMEN IN SF ACQUIRED HIV

- Sex with a straight cisgender man partner when the respondent identified as a trans woman' (43.0%)
- Sexual assault (13.9%)
- Injection drug use (IDU) (10.1%)
- IDU or sexual contact (7.6%)
- Sex with a partner who injected drugs (7.6%)
- Sex work (6.3%)
- Sex with partner who was gay or MSM was (6.3%)

### When first HIV-positive test was done

Period	Era	n (%)
Up to 1986	Pre- effective AIDS treatment	5 (6.3)
1987 - 1994	Improving AIDS care and early ART	13 (16.5)
1995 - 2009	Highly effective ART	36 (49.4)
2010 - 2016	PrEP scale-up	17 (21.5)
2017 -	U=U, viral suppression as non-infectious	7 (8.9)
Don't know		1 (1.2)

### Where first HIV-positive test was done

Facility, site	Context	n (%)
Public health clinic	In the course of primary care	27 (34.2)
Correctional facility	Opportunistic testing in facility	18 (22.8)
Hospital, emergency room	In the course of other urgent care	15 (19.0)
Private doctor's office	In the course of primary care	6 (7.6)
HIV testing site, outreach, mobile	Specifically seeking HIV testing	6 (7.6)
Other	Other	7 (8.9)

## INCIDENCE DATA SHOW DISPARITIES IN NEW CASES AMONG TRANS WOMEN IN SF BAY AREA

HIV incidence rate of 1.3 per 100 py among trans women overall

18-24 yo trans women had **2.8 HIV incidence** compared to those who were 25 and older

Latina/x transwomen had **2 x HIV** incidence of White trans women.

Trans women who had been incarcerated had **1.7 x HIV incidence** than those w/o a hx of incarceration

Trans women w/o health insurance **had 5 x HIV incidence** than those with health insurance



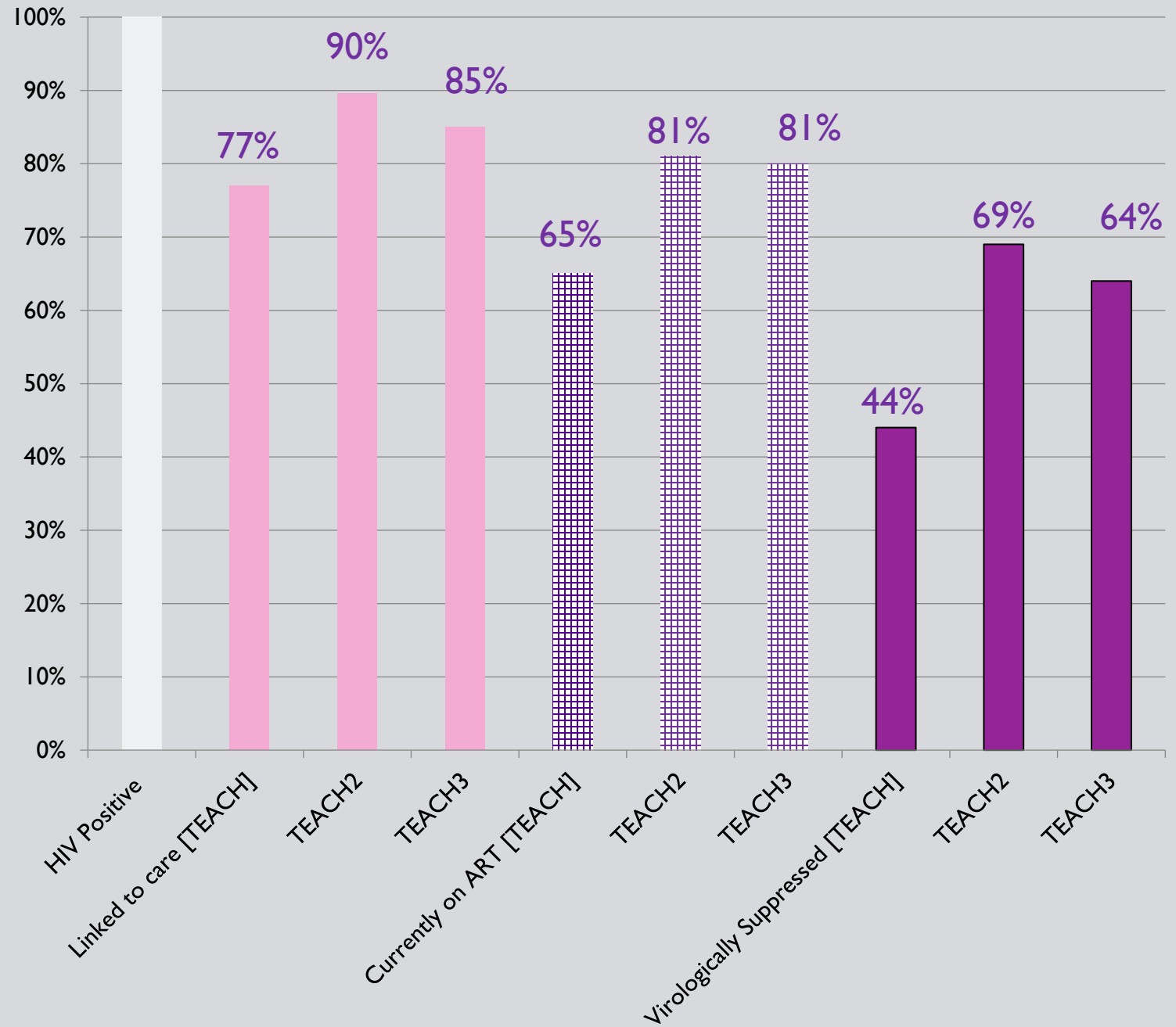


## TIME SPENT UNSUPPRESSED AND TRANSMITTABLE, 2012-2014

- The overall mean time spent unsuppressed over the 2-year time period was 12%
- 7% of the time with a transmittable viral load
- Comparatively, trans women spent significantly more time above both viral thresholds (43% of time unsuppressed and 35% of time transmittable,  $P < 0.0001$  for both).

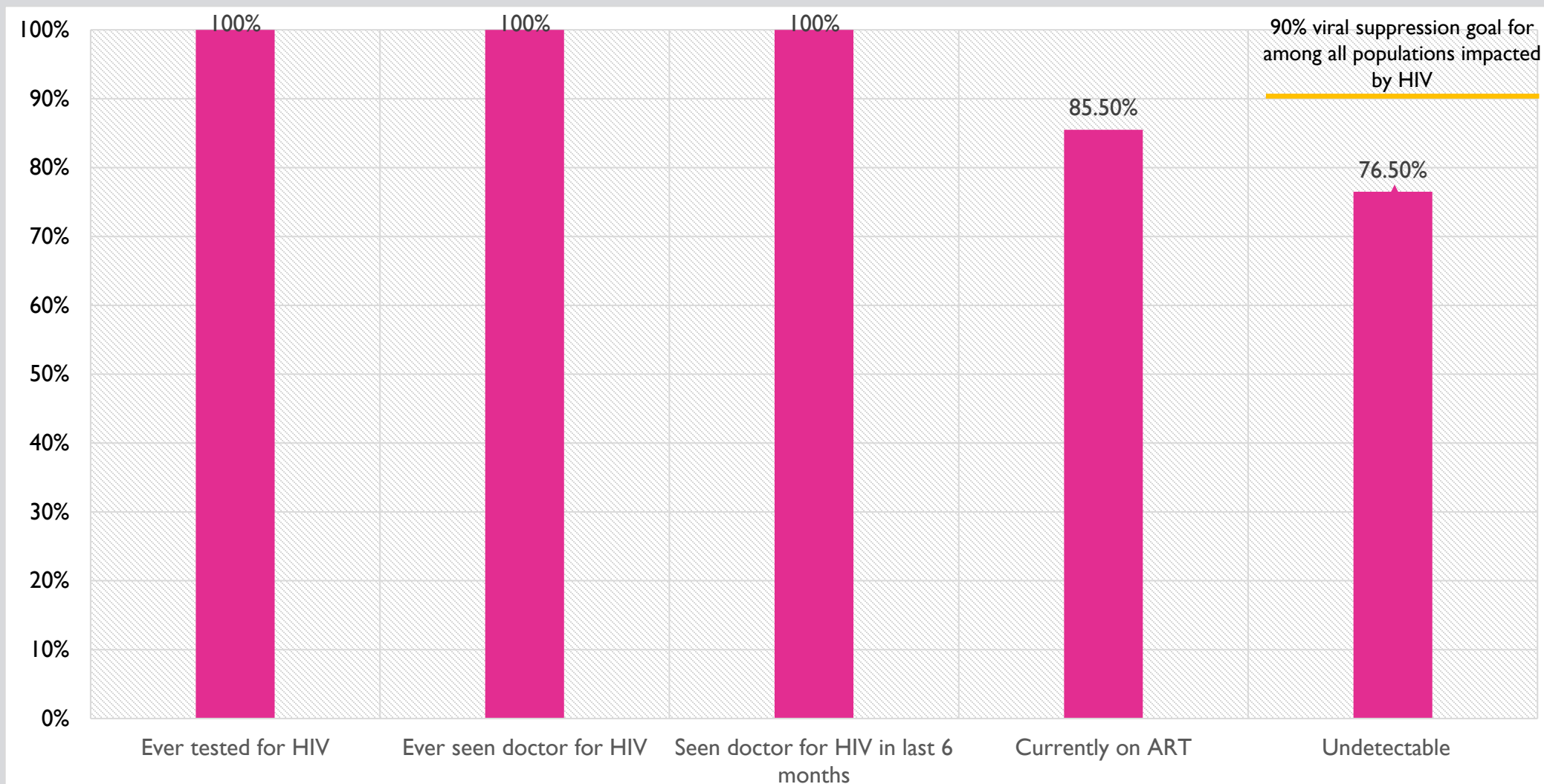
# ► Steady Improvements in HIV care cascade indicators

► 2010, 2013, 2016



# Not yet achieving 90% viral suppression among trans women in San Francisco

NHBS-Trans 2019/2020, (n = 85)





# HIV AND STIS AMONG TRANS MEN IN SAN FRANCISCO COMMUNITY STUDY



# ROOTS OF HIV IN SAN FRANCISCO TRANS COMMUNITIES

- Invisibility
  - When new prevention modalities are introduced, trans communities are not a focus in rollout (e.g., PrEP)
  - Lack of HIV prevention and care models designed and tested with trans communities
  - Models developed for HIV prevention and care are not grounded in the lived experience of trans women
  - Systemic racism and violence towards trans people prevents focus on HIV and health



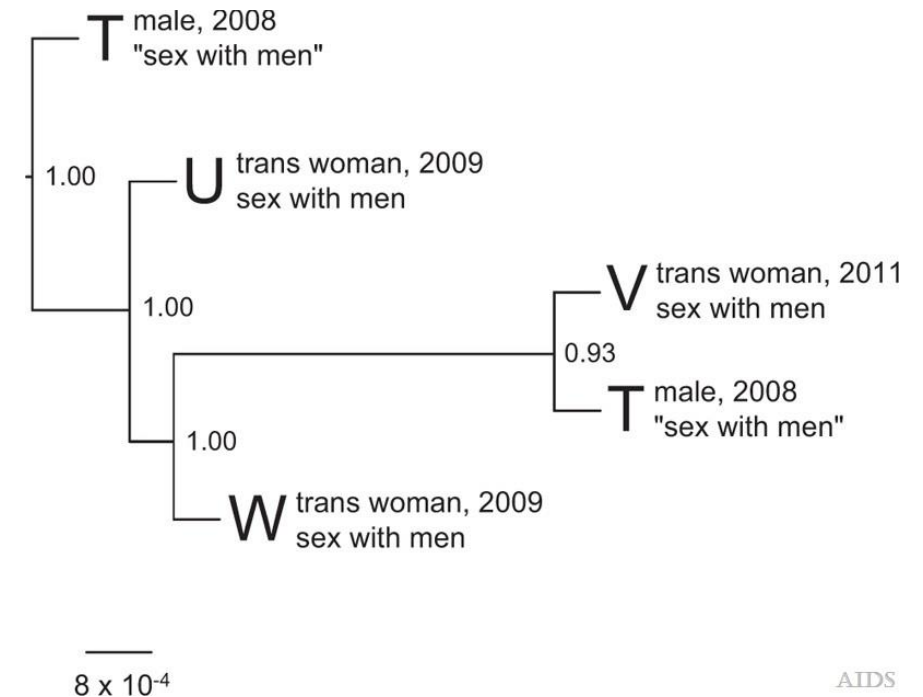
## AGGREGATION OF TRANS WOMEN WITH MSM IN SURVEILLANCE DATA

### How are transgender women acquiring HIV? Insights from phylogenetic transmission clusters in San Francisco

Truong, Hong-Ha M.; O'Keefe, Kara J.; Pipkin, Sharon; Liegler, Teri; Scheer, Susan; Wilson, Erin; McFarland, Willi

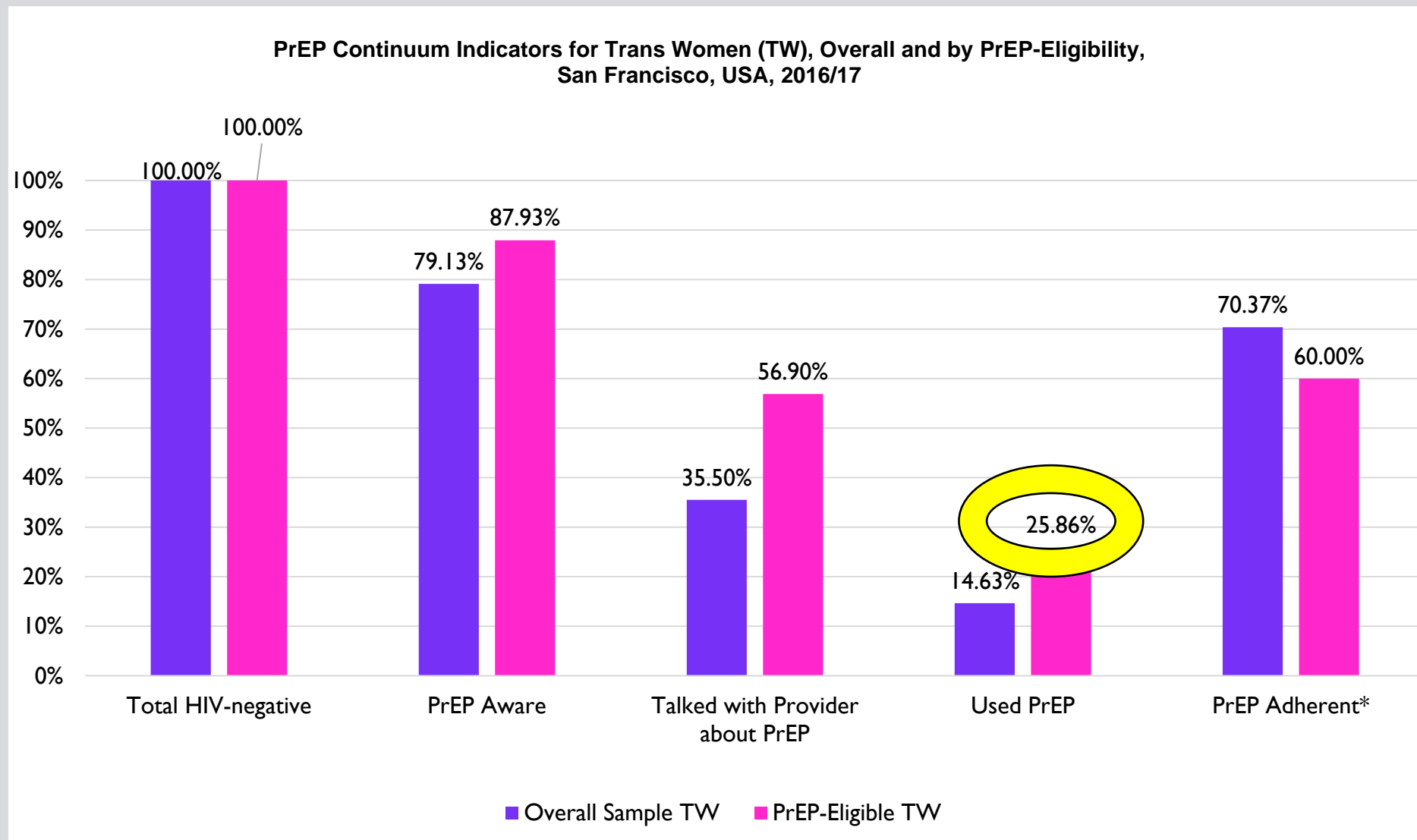
AIDS33(13):2073-2079, November 1, 2019.

doi: 10.1097/QAD.0000000000002318





# LOW PREP USE AMONG TRANS WOMEN IN SAN FRANCISCO, 2016/2017



# BARRIERS ARE MULTI-LEVEL AND INTERSECTIONAL

## Systemic

- Institutionalized racism
- HIV stigma
- Economic disparities
- Access to employment
- Social injustice

## Structural

- Trans-affirming clinics & providers
- Urgent life priorities
- Housing crisis
- Acuity >> Access

## Interpersonal

- Trauma
- Trust & support
- Shared decision making
- Gender affirming medical care care

## Trans-specific

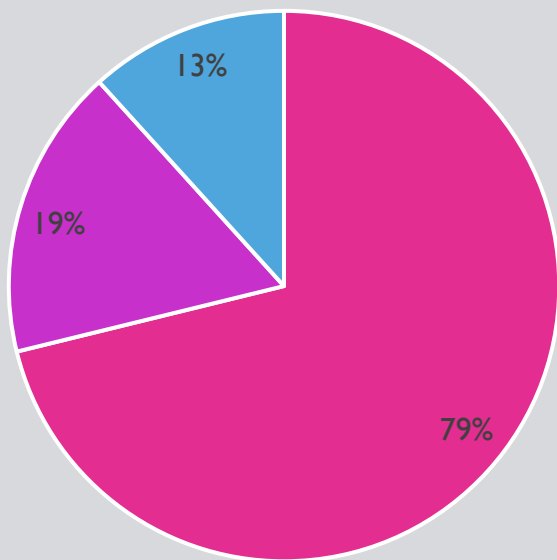
- Gender affirming therapy
- Trans humility lacking
- Trans visibility, peers & community engagement
- Margins → center of larger LGBT movement

Anti-trans  
stigma  
Racism  
Violence

# NOT MEETING BASIC NEEDS OF OUR COMMUNITY

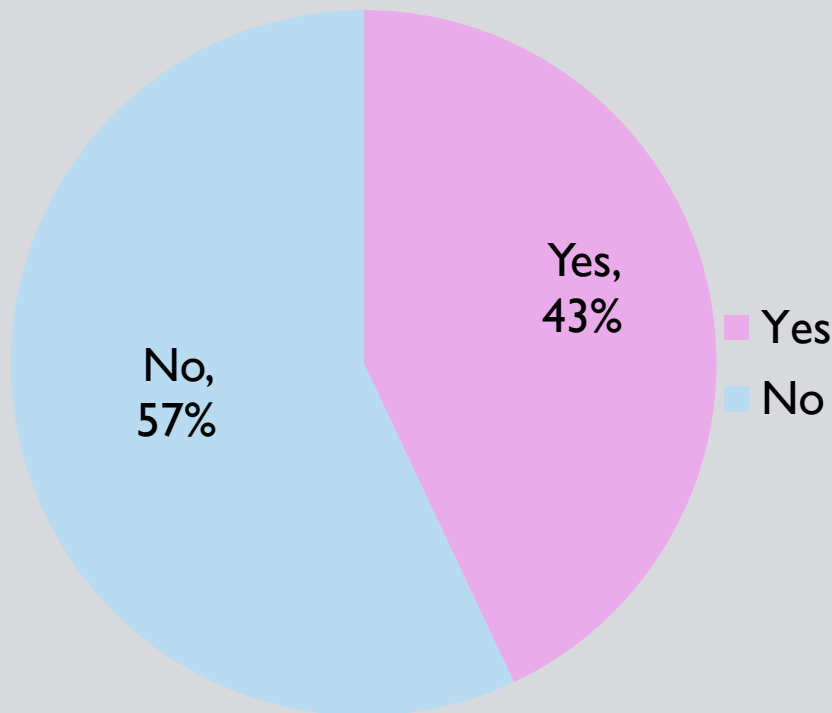
\*DATA FROM BAY AREA TRANS WOMEN OF COLOR LIVING  
WITH HIV

Ran out of \$ in last month



■ 2+ times ■ 1-2 times ■ Never

Sex work in last 6 mos

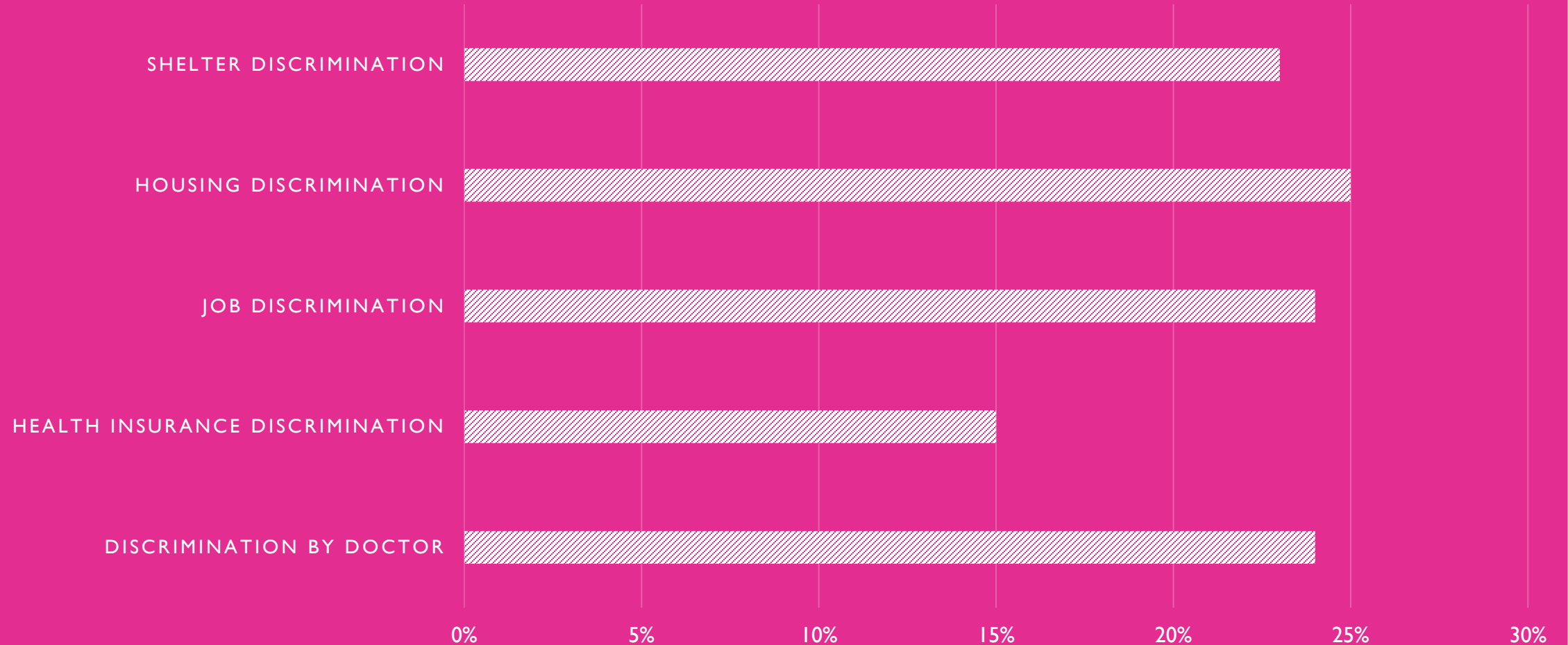


■ Yes  
■ No

**15% were  
incarcerated  
in the last 6  
months**

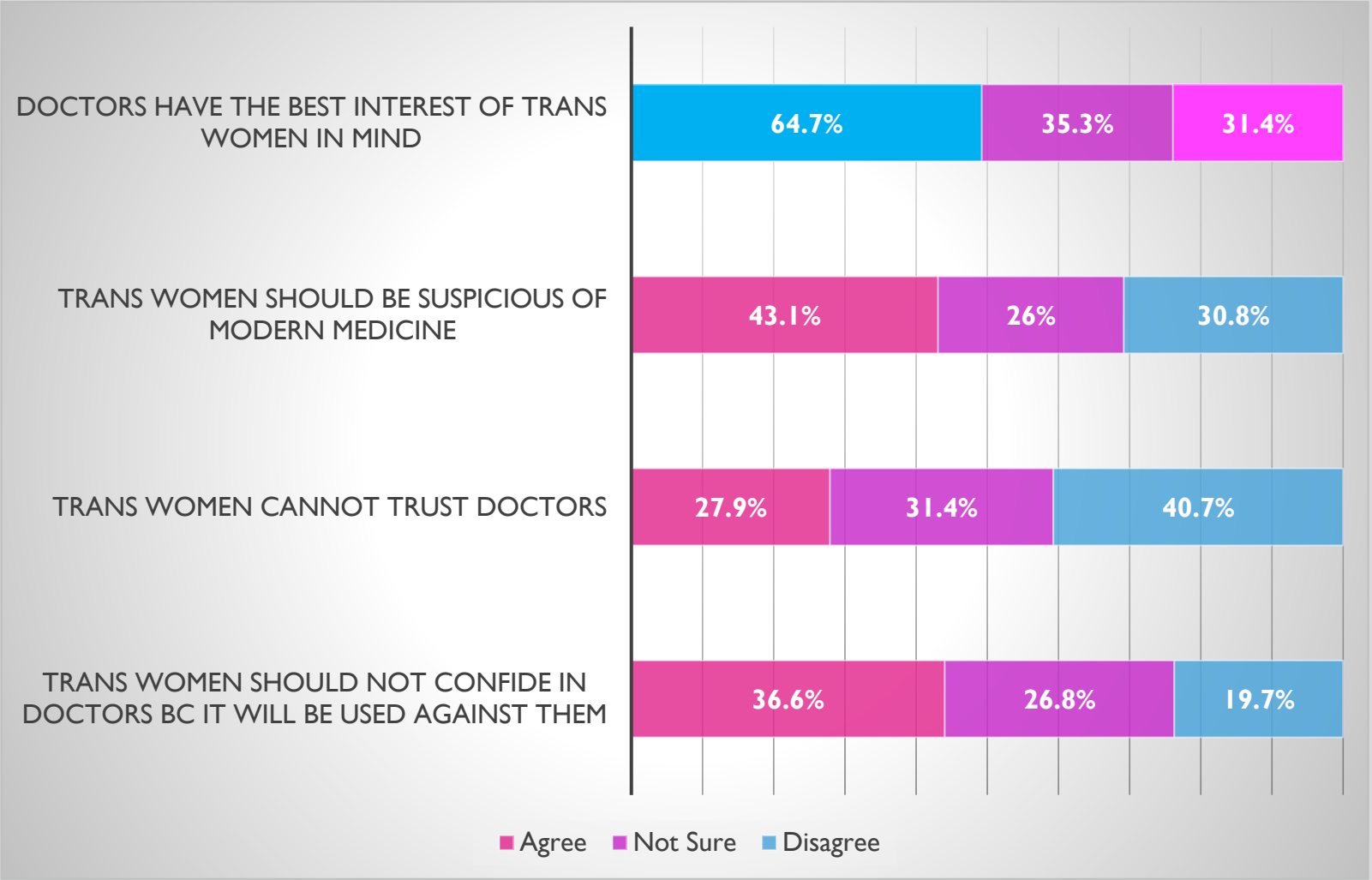
# DISCRIMINATION

## DISCRIMINATION IN LAST 6 MOS





# MEDICAL MISTRUST



## VIOLENCE TOWARDS TRANS WOMEN IN SAN FRANCISCO IS AN EPIDEMIC

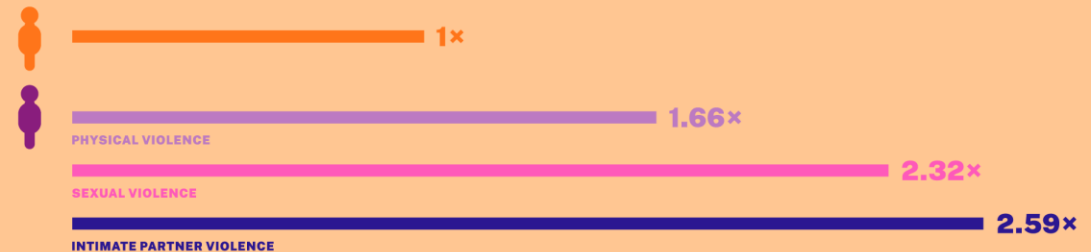
### Trans Women, Violence, & Homelessness

More than one third of trans women in a community survey experienced violence within 2019 and over 75% of violent experiences occurred to trans women who experienced homelessness.



### Likelihood to Encounter Violence

Trans women who experienced homelessness encountered significantly more instances and types of violence.



## SECONDARY DATA ANALYSIS OF THE 41.2% OF TRANS WOMEN IN SF LIVING WITH HIV

### HIV outcomes

- 15% not taking ARTs
- 23.5% reported having a detectable viral load

### Mental health needs

- 57% have a cognitive disability
- 12% reported feeling depressed
- 15% reported suicidality in the last year

### Substance use need

- 15.3% binge drank in last 30 days
- >30% used meth in the last year

# COVID-19 IMPACT ON HIV CARE FOR TRANS WOMEN IN SF

## SYSTEM LEVEL

- Transition to telehealth
  - Less viral load monitoring
  - Lack of opportunity for assessment of MHSA need

## CLINIC LEVEL

- Major staff changes
  - Covid-19 activation
  - Shifts in roles and responsibilities

## PATIENT LEVEL

- Increased mental health needs
  - Heightened isolation socially- Little to no social engagement- leading to increased depression and anxiety
  - Lack of safe transportation



WHAT DO WE KNOW  
ABOUT BEHAVIORS OR  
TRANS WOMEN AND  
THEIR SEXUAL  
PARTNERS

Variable	Trans women (N=158)	Sexual Partners (N=121)	Test statistic
<b>RISK BEHAVIORS</b>			
# sexual partners in past 6 months	M = 9.72	M = 10.07	t(220) = .141, p = .888
Exchanged sex in past 3 months	38 (24.1%)	16 (13.2%)	$\chi^2(1) = 5.147, p = .023$
Sex with someone who injects drugs in past 3 months	22 (13.9%)	20 (16.5%)	$\chi^2(1) = .365, p = .547$
Anal sex w/o condom in last 6 months	94 (60.3%)	70 (63.6%)	$\chi^2(1) = .312, p = .577$
Insertive Condomless Anal Sex	M = 1.32	M = 3.80	t(277) = 2.587, p = .010
Receptive Condomless Anal Sex	M = 22.83	M = 0.97	t(277) = -2.816, p = .005
STI last 6 months	M = 0.65	M = 0.62	t(277) = -.248, p = .805
Binge drank in last year	M = 18.31	M = 30.75	t(245) = 1.533, p = .127
Currently using			
Meth	28 (50.9%)	24 (37.5%)	
Crack	4 (7.3%)	4 (6.9%)	
Cocaine	14 (8.9%)	16 (13.2%)	
Currently using substances	M = .84	M = 1.14	t(262) = 1.67, p = .097
Injected drugs last 6 months	8 (5.1%)	6 (5.5%)	$\chi^2(1) = .014, p = .907$
Currently depressed	23 (14.6%)	17 (14.0%)	$\chi^2(2) = .348, p = .840$
Most or all of the time			
Virally detectable	3 (1.9%)	3 (2.5%)	$\chi^2(1) = .110, p = .740$

## AND PROTECTIVE FACTORS

Variable	Trans women (N=158)	Sexual Partners (N=121)	Test statistic
Relationship Type, last 12 mos			
<i>Main</i>	72 (45.5%)	65 (53.7%)	
<i>Casual</i>	61 (38.6%)	71 (58.7%)	
<i>Commercial</i>	22 (13.9%)	13 (10.7%)	
Relationship Status			
<i>Single</i>	58 (36.7%)	45 (37.2%)	
<i>Coupled, living together</i>	55 (34.8%)	41 (33.9%)	
<i>Coupled, not living together</i>	45 (28.5%)	34 (28.1%)	
<i>Other</i>	-	1 (0.8%)	
<b>PROTECTIVE BEHAVIORS</b>			
<i>Engaged in HIV care</i>	29 (18.4%)	17 (14.0%)	$\chi^2(1) = .922, p = .337$
<i>On ART</i>	29 (18.4%)	16 (13.2%)	$\chi^2(1) = 1.334, p = .248$
<i>Recent PrEP use</i>	50 (31.6%)	19 (15.7%)	$\chi^2(1) = 9.357, p = .002$
<i>Recently tested for HIV</i>	157 (99.4%)	119 (98.3%)	$\chi^2(1) = .670, p = .413$

## UNMET MENTAL HEALTH NEEDS AMONG TRANS MEN

- 81% of trans men in our STRIPE study reported suicidal ideation
  - 48% of those reported a suicidal attempt
- Factors associated with lifetime suicidal ideation were
  - Being a trans man of color
  - Having a prior depression diagnosis
- Protective factors
  - Social support

## SEXUAL BEHAVIOR CHANGES AMONG TRANS MEN RELATED TO TESTOSTERONE

- 69% of trans men reported new sexual behaviors as a result of starting to take testosterone
- 72% reported an increase in sexual activity
- Increase in number of cis men and trans women sexual partners after starting testosterone
  - 3.3% of trans men had cis men sexual partners before starting testosterone and 25.4% after
  - 4.1% of trans men had trans women sexual partners before starting testosterone and 13.9% after



WHAT ARE WE DOING TO ADDRESS  
HIV IN TRANS COMMUNITIES?





STAY

NOW THERE'S A PILL THAT CAN HELP  
PREVENT HIV INFECTION FOR  
TRANS PEOPLE. IT'S CALLED PrEP.  
IT'S SAFE. IT CAN HELP YOU  
STAY HIV-NEGATIVE.

AWARE

Get PrEP for free, the support you need to  
take it every day and up to \$375.

Text "STAY" to (617) 826-9932 to find out how  
or visit us at [StayStudy.org](http://StayStudy.org)

the  
center  
for public  
health  
research.

**BridgeHIV™**  
San Francisco Department of Public Health

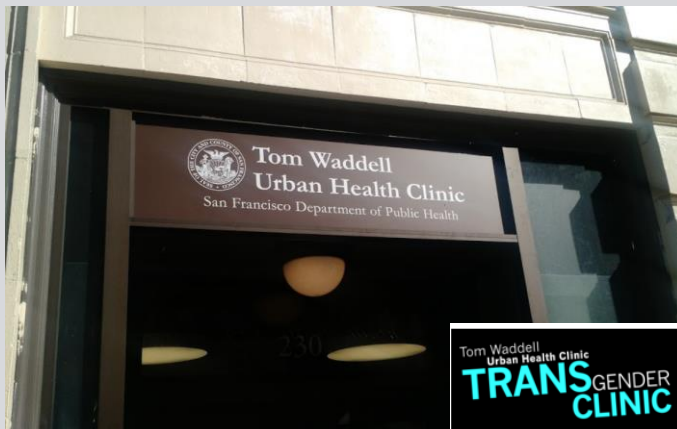
# STAY STUDY COMMUNITY-BASED TRANS CLINIC SITES



**San Francisco Community Health Center, formerly API Wellness Center**



**Castro Mission Health Center**



**Tom Waddell Urban Health Center**

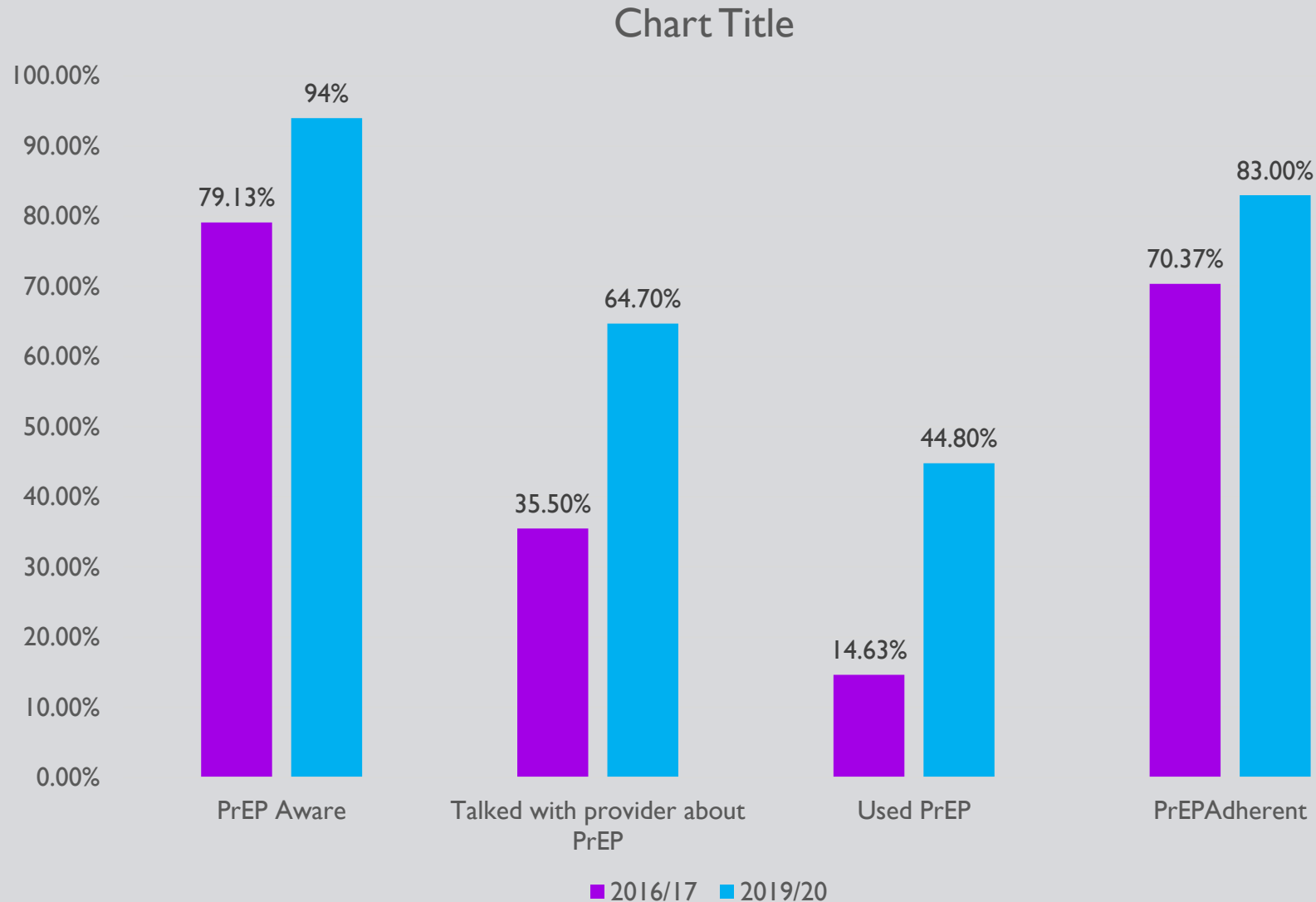


**Tri-City Health Center**

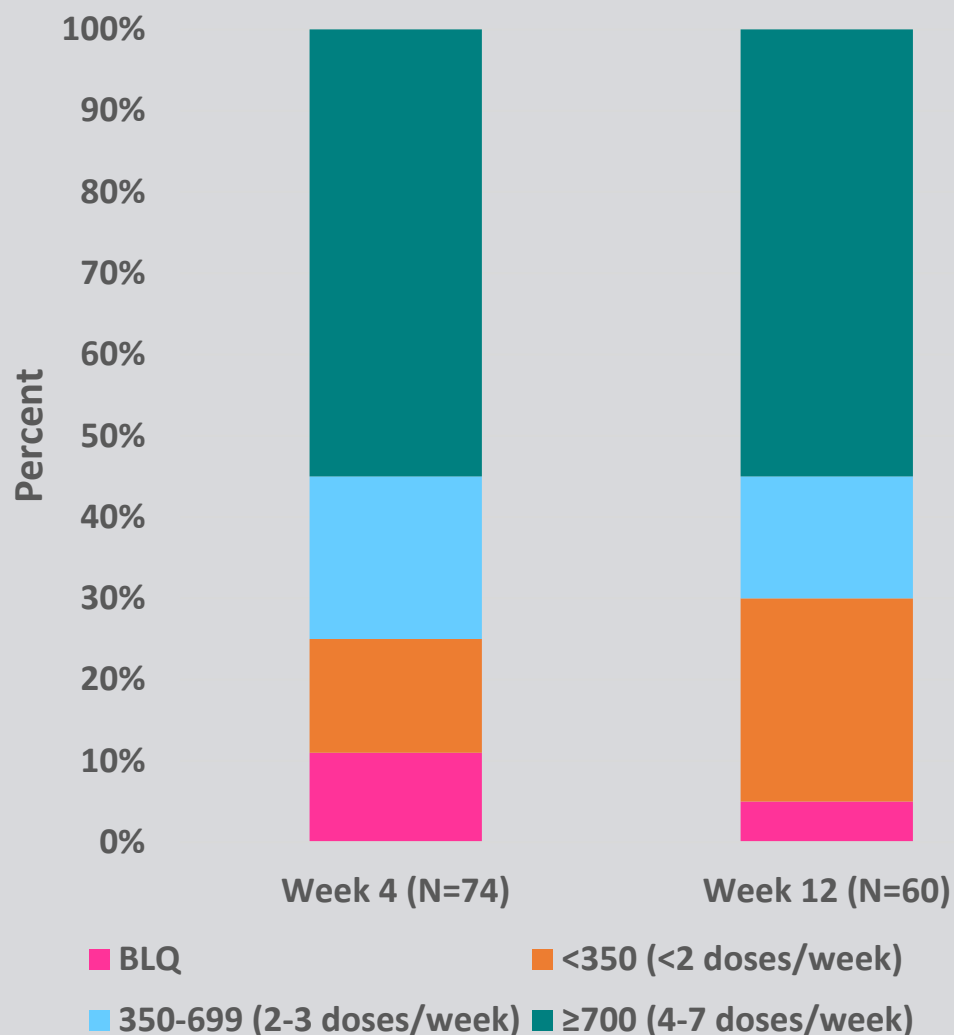


# PREP INCREASED AMONG TRANS WOMEN IN SAN FRANCISCO

## 2016/17 TO 2019/20



## Tenofovir diphosphate (TFV-DP) levels in dried blood spots at 4 and 12 weeks



## MV MODEL OF FACTORS ASSOCIATED WITH TFV-DP LEVELS CONSISTENT WITH 4-7 DOSES/WEEK

Characteristics	AOR (95% CI)	P value
Race/ethnicity		
White	(ref)	
Latinx	0.29 (0.08-1.04)	0.06
Black/African-American	0.27 (0.06-1.20)	0.08
Asian	1.09 (0.23-5.27)	0.91
<b>Multirace/Other</b>	<b>0.11 (0.03-0.45)</b>	<b>0.002</b>
Current living situation		
Homeless/shelter	(ref)	
Own	0.23 (0.01-3.67)	0.30
Rent	2.99 (0.64-13.84)	0.16
Someone else's home	0.70 (0.10-4.79)	0.71
Institution	2.19 (0.25-18.83)	0.48
Motel, hotel, boarding house	8.47 (1.56-45.85)	<b>0.013</b>
Other	5.19 (0.50-54.07)	0.17
Any food insecurity	<b>0.26 (0.07-0.94)</b>	<b>0.04</b>

Use of gender affirming hormones was not associated with TFV-DP levels ( $p=0.77$ )

## REMAINING CHALLENGES WITH PREP

- Over half of STAY participants with DBS tested at early follow-up visits had high PrEP adherence
- Food insecurity was highly prevalent and associated with lower PrEP adherence
- Relative housing stability was associated with higher PrEP adherence, highlighting the impact of structural factors on PrEP adherence in this population
- Hormone use was not associated with TFV-DP levels in this real-world cohort
- **Addressing social and structural determinants of health are critically needed to support HIV prevention needs in trans communities**



# **BREAKING SYSTEMS BARRIERS FOR TRANS WOMEN OF COLOR LIVING WITH HIV**



Dr. Erin Wilson, DrPH (SFDPH)  
Senior Research Scientist  
Trans Research Unit for Equity  
(TRUE)  
[erincwilson@gmail.com](mailto:erincwilson@gmail.com)

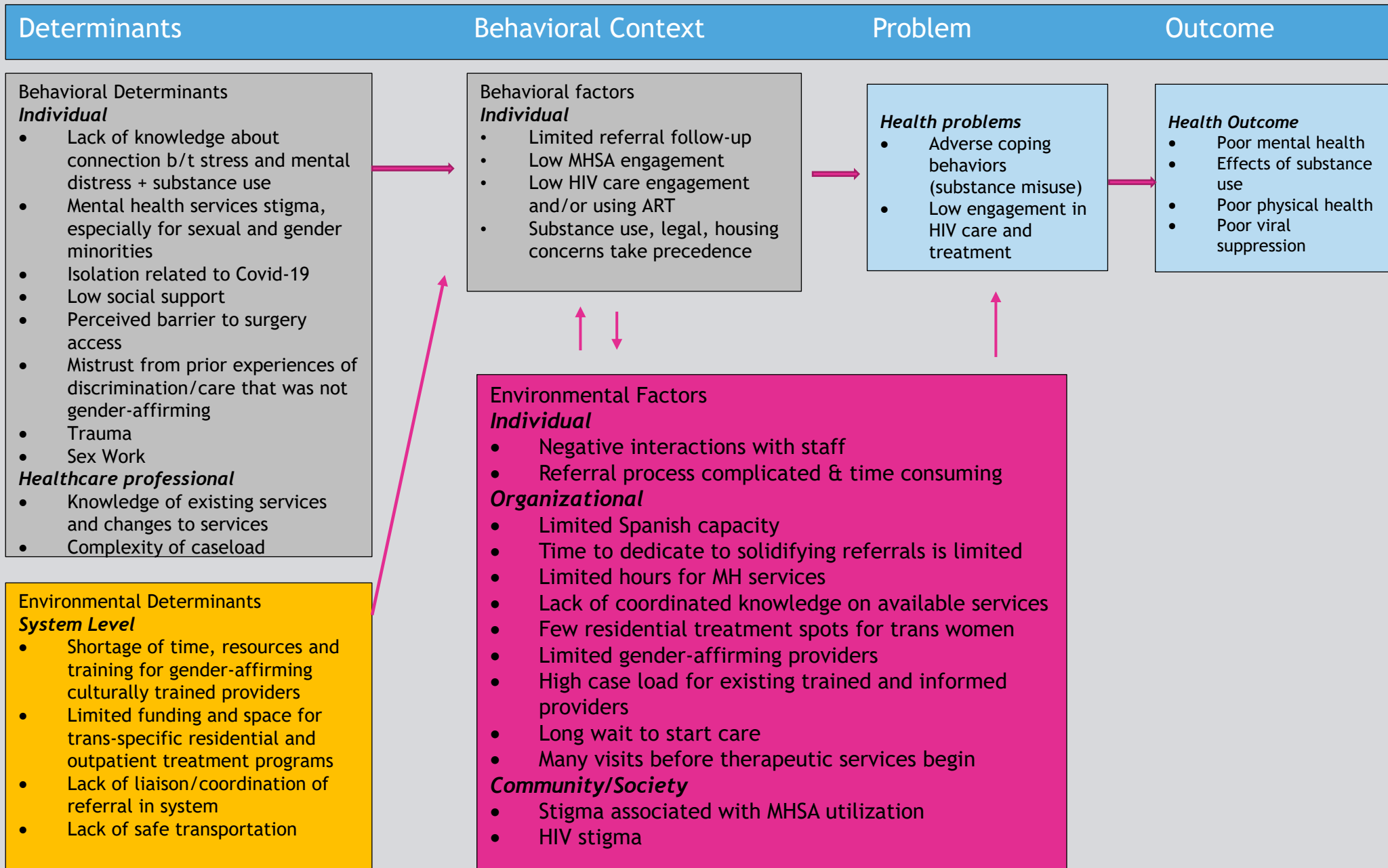


Dr. Royce Lin MD (SFDPH)  
Acting Medical Director,  
Tom Waddell Urban Health  
Center  
[Royce.Lin@sfdph.org](mailto:Royce.Lin@sfdph.org)

**MSN  
INTERVENTION**  
(NIMH, R34MH124626)



# LOGIC MODEL FOR BARRIERS TO MENTAL HEALTH AND SUBSTANCE USE SERVICES FOR TRANS WOMEN



# INTERSECTIONAL INTERVENTIONS IN HIV PREVENTION AND CARE MUST ADDRESS...

## **Systemic**

- Address anti-trans discrimination and racism
- Visibility and Leadership
- Quality assurance in existing services

## **Structural**

- Housing
- Education
- Income
- Employment
- Legal services (civil, criminal and immigration)

## **Psycho-social**

- Reduce medical mistrust
- Ensure trauma-informed care
- Substance use harm reduction and treatment access
- Mental health care

## **Human Rights**

- Access to gender-affirming care
- Prioritize trans communities in the response to HIV (on demand PrEP, injectables)
- Addressing violence

# SHINE Strong

the first undergraduate training program for HIV prevention science  
and trans and nonbinary scholarship

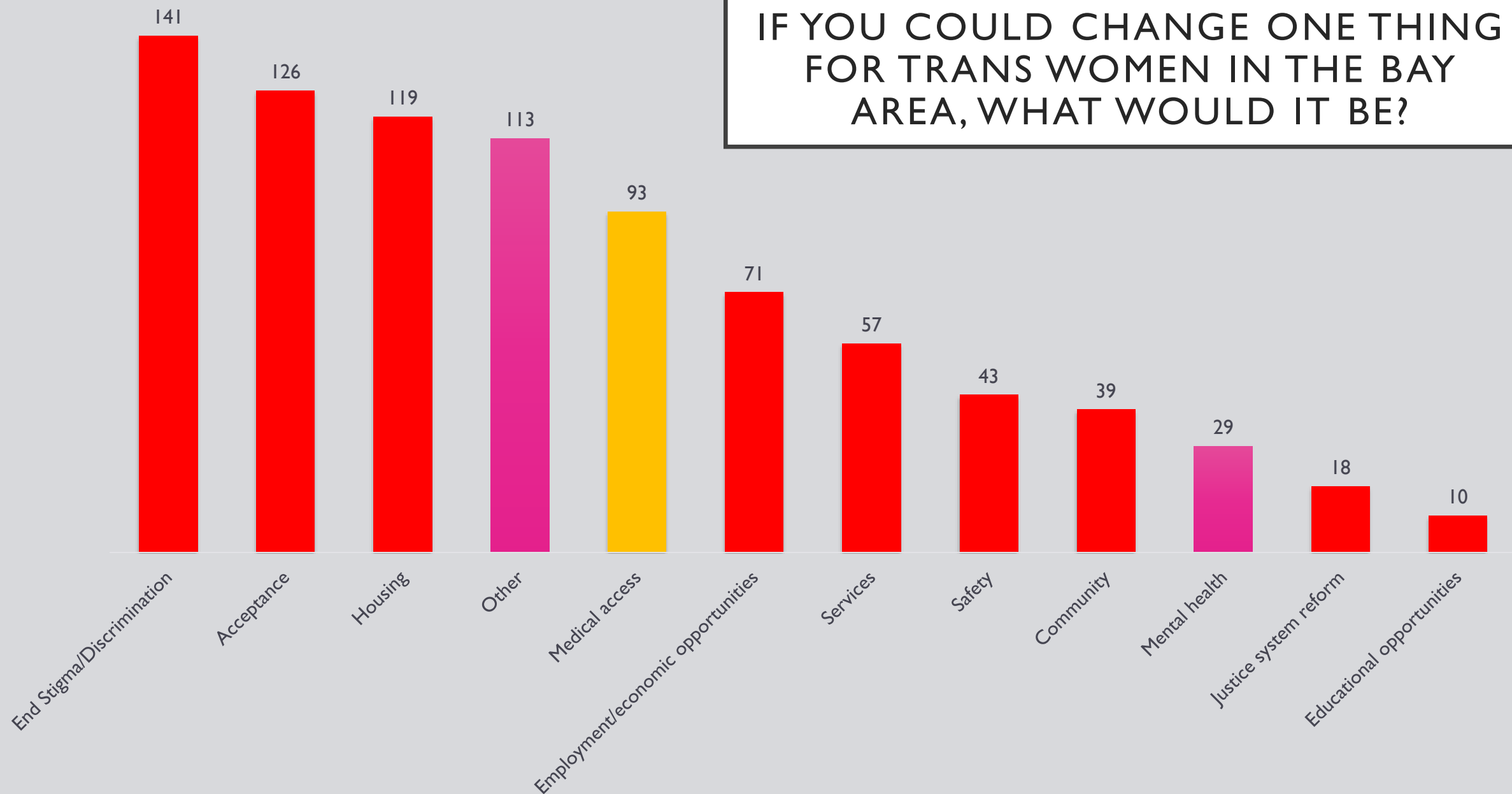
## OUR PRIORITIES

Train the next generation of scholars and leaders in HIV  
research who are from trans communities

## RESEARCH APPROACHES TO INTERSECTIONAL NEEDS

- Engaging partners
- Re-visiting surveillance to make trans people visible in our data
- Inclusion of trans masculine people in studies of MSM and lobbying for inclusion of non-binary people in trans studies
- Working with partners to support the services in the SFDPH
  - mHealth Systems Navigation Project
  - Ending the HIV Epidemic
- Leadership engagement at NIH on issues related to violence

IF YOU COULD CHANGE ONE THING  
FOR TRANS WOMEN IN THE BAY  
AREA, WHAT WOULD IT BE?





# ALL THANKS TO OUR AMAZING TEAM OF RESEARCHERS



Victory Le  
Joaquin Meza  
Christina Sanz Rodriguez  
Sofia Sicro  
Paul Wesson  
Mackie Bell  
Caitlin Turner  
Dillon Trujillo  
Paul Wesson  
Willi McFarland

