

# HIV Infection

## 2015 US Trans Survey

Self-reported incidence of HIV infection

- 1.4% overall
- 3.4% in trans women
- 19% of black trans women and 4.5% of Latina and American Indian trans women
- Rate of 0.3% in the general population



# ART Adherence

Multiple studies demonstrate ART adherence rates lower than amongst cis-gender persons living with HIV

Measures of low adherence:

48.5% Sevelius, et al, 2010

21.6% Mizuno, et al, 2015

32% Berguso, et al, 2016



# DRUG INTERACTIONS

- PIs: Increase or decrease ethinyl estradiol levels
- NNRTIs: Efavirenz increases EE; Nevirapine decreases EE
- Integrase Inhibitors: Elvitegravir can decrease EE
- NRTIs and maraviroc: No interactions
  
- Estrogen can decrease serum concentrations of amprenavir and fosamprenavir
  
- TMP-SMX + spironolactone leading to severe hyperkalemia



# Factors related to HIV Risk in Transmen

Reisner, et al, 2015

173 transmasculine adults with cis-male partners in Massachusetts

- Incidence of condomless anal/vaginal sex was higher in younger, non-binary-identified individuals
- But, syndemic factors (binge drinking, polysubstance abuse, depression, anxiety, childhood abuse, intimate partner violence) had a more significant impact in patients who had socially affirmed their gender



# Transwomen & PrEP

- Project Life Skills: Kuhns, 2015
  - 180 transwomen age 18–29 enrolled in an on-going HIV prevention intervention
  - Analyzed factors associated with PrEP indication
  - 62% met criteria for PrEP
    - PrEP interest, number of recent anal sex partners,
    - But only 5 % reported ever taking PrEP
    - lower collective self-esteem scores
- Despite HIGH indication, there is LOW awareness!



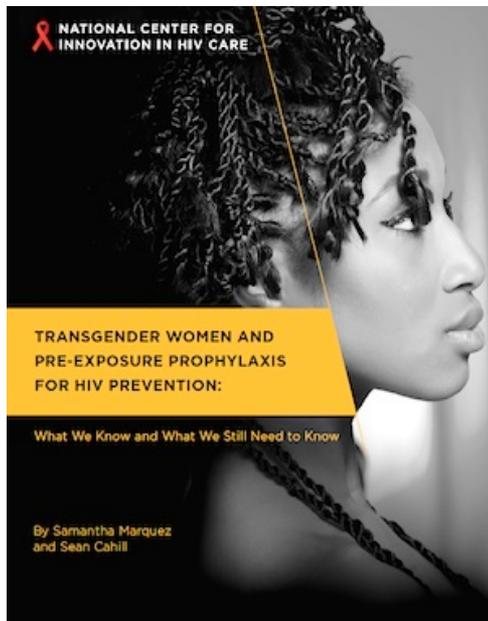
# iPrEx Trial

- New analysis of previous study identified 339 trans women in iPrEx: Deutsch, et al. Lancet, Nov. 5, 2015
- Compared with MSM, transwomen had lower drug levels in their blood and were less likely to take PrEP on a daily basis.
  - None of the 11 transwomen who seroconverted in the randomized trial had detectable blood drug levels.
- While MSM who reported sexual practices with the highest risk of contracting HIV were more likely to have drug detected in their blood → the opposite was true for trans women.



# Transgender Women and PrEP: What We Know and What We Still Need to Know

National Center for Innovation in HIV Briefing: Dec 1, 2015



- PrEP is effective in reducing the risk of HIV among MSM, heterosexual men and women, and people who inject drugs.
- More research is needed to show that PrEP is effective for preventing HIV among transwomen engaging in anal sex with men.
- Research is needed to **better understand the interaction between PrEP and hormones.**
  - Potential impact on ability of PrEP to build up sufficiently in rectal tissue.
- In the meantime, PrEP is a preventive option that transwomen should consider with their medical providers!



**SAVE** Stay tuned for details about the  
**THE** **INAUGURAL NATIONAL**  
**DATE** **TRANSGENER**  
HIV TESTING DAY  
**April 18, 2016**



# Case presentation

- Carla is a now 32 yo African-American transfemale
- Her first visit to the clinic was 10 years ago. At that time, she identified as a gay male (though she was never asked about her gender identity at initial visits)
- Two years after her initial visit, she “came out” as transgender to her PCP and sought hormone therapy. She had been using injectable estradiol that she had bought on the street for at least a year prior
- She reported that her family had punished her for expressing feminine behavior when younger
- She has been homeless off and on, when not living with boyfriends, over the past 10 years
- Has had short-lived retail jobs, but has often resorted to sex work because she has lost jobs due to “discrimination”. She has often been without health insurance
- She has been incarcerated several times, once for carrying her vial of injectable estradiol, when she was accused of “trafficking in steroids”



# Case presentation

- Carla was diagnosed HIV positive in 2006 (prior to coming out as trans)
- She has been on and off different HIV meds with multiple drug resistance developing over time
- CD4 was 713 at diagnosis, lowest CD4 was 57 in 5/2015
- Hx of PCP, Mycobacterium, disseminated herpes zoster
- Relapsing substance abuse, initially EtOH, MJ and cocaine; later intranasal and then IV heroin
- In and out of recover programs over past 7 years
- Hepatitis C positive as of 2010, failed a short course of interferon tx
- H/o domestic violence in relationships
- Assaulted with several fractures requiring surgical fixation, 2013. Assault was related to transgender identity.



# Case presentation

- Carla again entered inpatient drug treatment program in May, 2015 and was then transferred to a residential treatment program.
- She has been off heroin and other substances since May 2015, and is actively participating in a methadone maintenance program
- She graduated from the residential treatment program in March 2016 and is now living in her own apartment with her current boyfriend
- She stopped smoking cigarettes in December 2015
- She is currently taking Combivir and Prezista and her last CD4 was 513 with an undetectable viral load
- She started treatment for Hepatitis C with Daklinza and Sovaldi in May 2016. Her Hep C PCR 12 weeks after finishing treatment was undetectable
- Carla had breast augmentation surgery in April of 2016
- She had genital reconstruction with vaginoplasty in December of that same year

