Skateboards, Pot Holes, Indiana, and the Village People

health RIGHT 360
The Best of Walden House and Haight Ashbury Free Clinics

Andrew Desruisseau, MD, MSc
Healthright360
San Francisco, CA, USA

Case 1: Kai

- 48 year old Asian MSM seen at another clinic in the City, undocumented, on HSF is referred to our clinic for new HIV diagnosis
- “Doc, I had been trying for the last year to get on PrEP”

Case 2: The Skateboarder

- “Bizz” is a 48 year old homeless man with AIDS, T cells 50 (8), VL 120,000 copies/ml, Hep C GT 1a with cirrhosis, personality disorder, polysubstance abuse, including opioid dependence with IV Heroin use
- Fired from several local HIV clinics, the last for threatening to kill his provider
- Walks in with a shooter’s abscess from muscling heroin

All Bizz

- He wants to keep his HIV status private living in SRO's/ on streets
- "I don't want to take a boat load of pills a day"
- Currently on multi pill regimen per day
- What kind of clinic (with which services) is likely to improve his outcome?

Key Points Today

- Appreciate current HIV data
- Engage in risky conversations
- Realize you can prevent HIV, now!
- Have a vision for your clinic

Background Issues

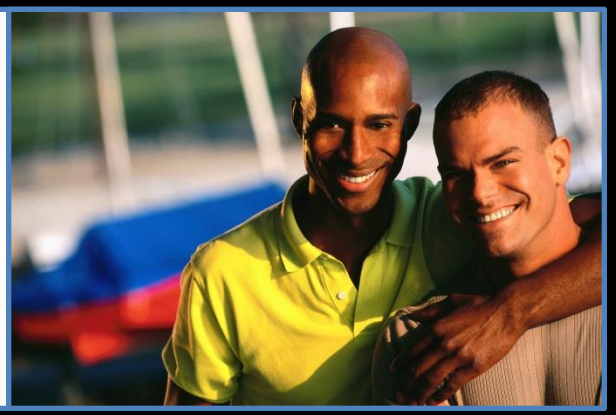
- What people do and want
- What clinicians say

What Patients Want

- Survey of 500 men and women over 25
- 85% expressed an interest in talking to their doctors about sexual concerns
- 71% thought their provider would likely dismiss their concerns
- A history of sexual health followed by appropriate, targeted discussion can enhance the patient-provider relationship

Proportion of Physicians Discussing Topics with HIV-Positive Patients

Adherence to ART	84%
Condom use	16%
HIV transmission and/or risk reduction	14%



(AmJPublicHealth. 2004;94:1186-92)

Discomfort as a Barrier

"Ironically, it may require greater intimacy to discuss sex than to engage in it."

The Hidden Epidemic

Institute of Medicine, 1997

People, Practices, Outcomes:

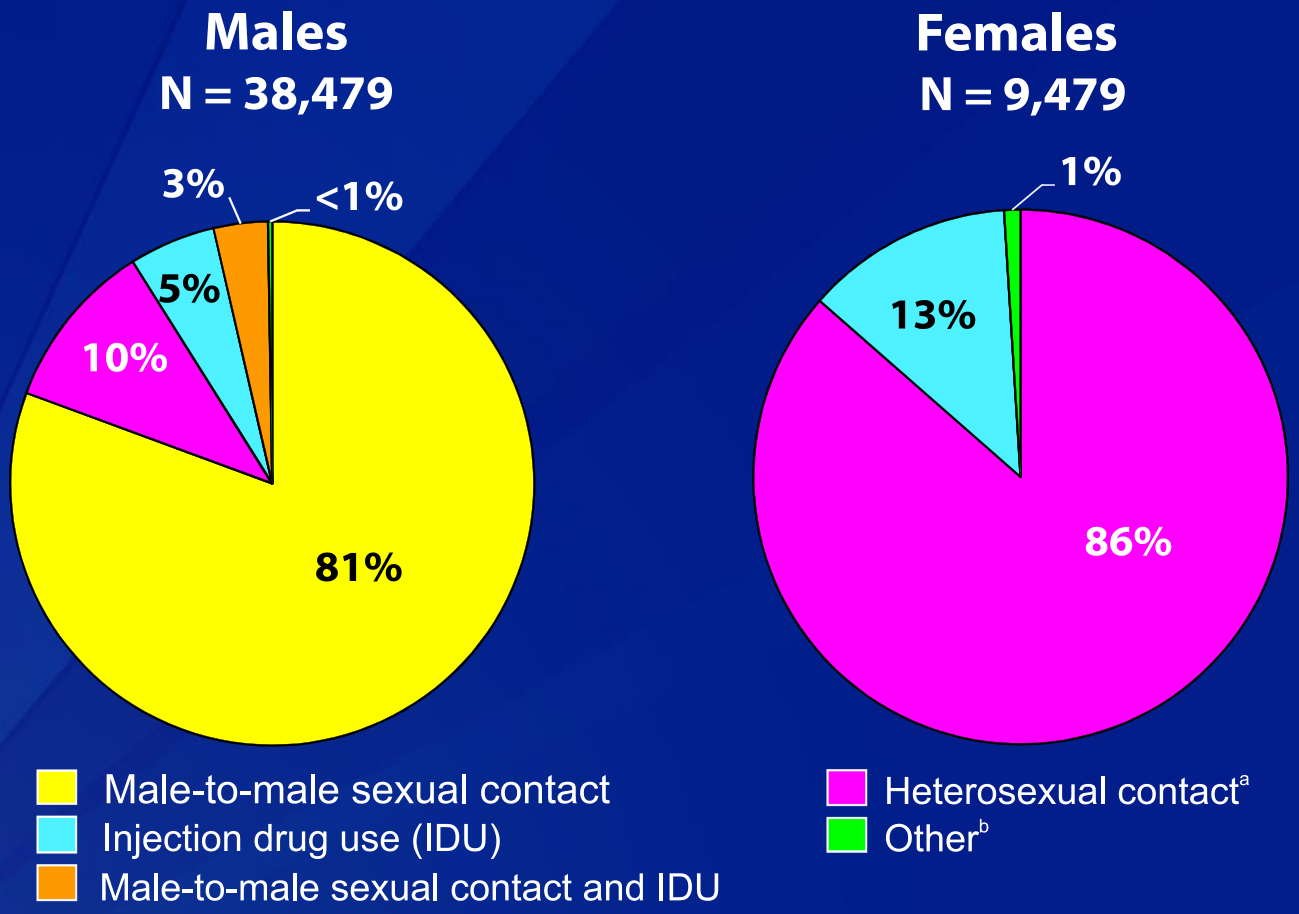
HIV/AIDS in The United States

HIV/AIDS in the United States and Worldwide

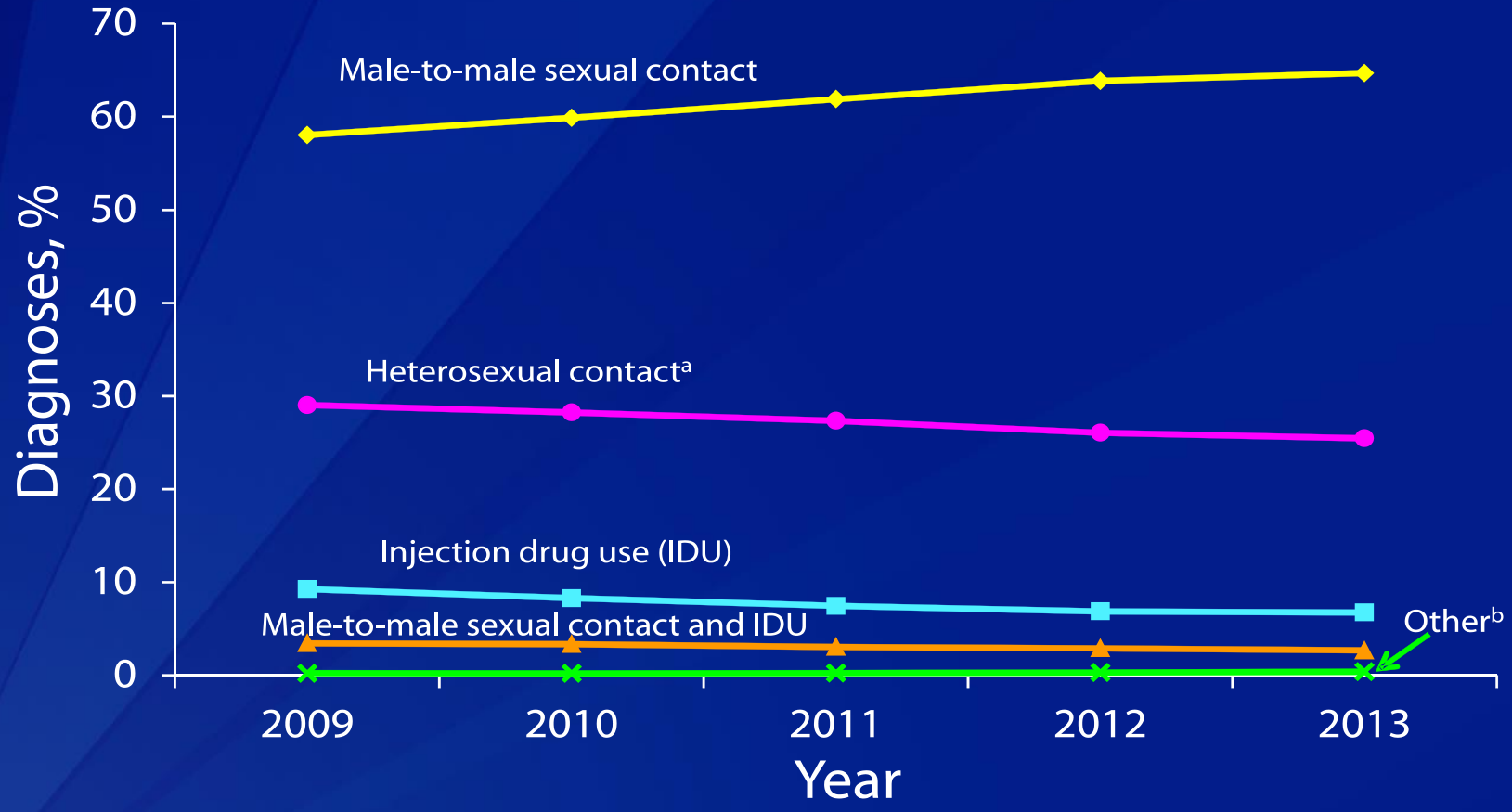
- Approximately 1.1 million people are living with HIV/AIDS in the United States
  - An estimated 1 in 6 (15.8%) of those people are undiagnosed
  - Since the start of the epidemic, 636,000 people have died of AIDS
  - An estimated 50,000 new HIV infections occur in the US every yr
- More than 35 million people are living with HIV/AIDS worldwide, of whom 3.3 million are younger than 15 yrs of age
  - In 2012, an estimated 2.3 million people were newly infected with HIV

CDC. HIV Surveillance Report. 2013;18(no.5). CDC. HIV Surveillance Report, 2011; vol. 23.
UNAIDS Report On the Global AIDS Epidemic 2013.

Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Transmission Category, 2013—United States and 6 Dependent Areas



Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2009–2013 — United States and 6 Dependent Areas

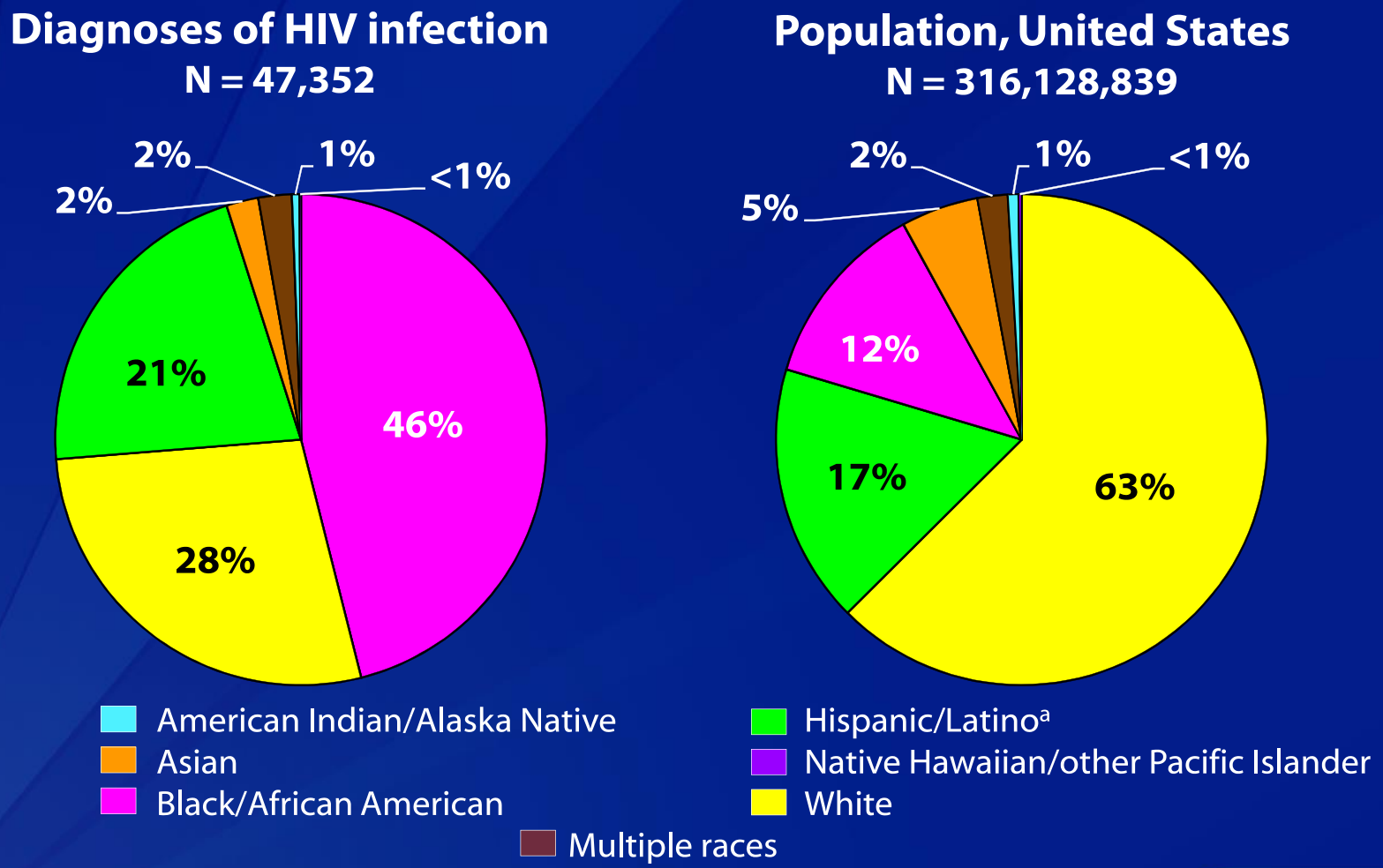


Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing transmission category, but not for incomplete reporting.

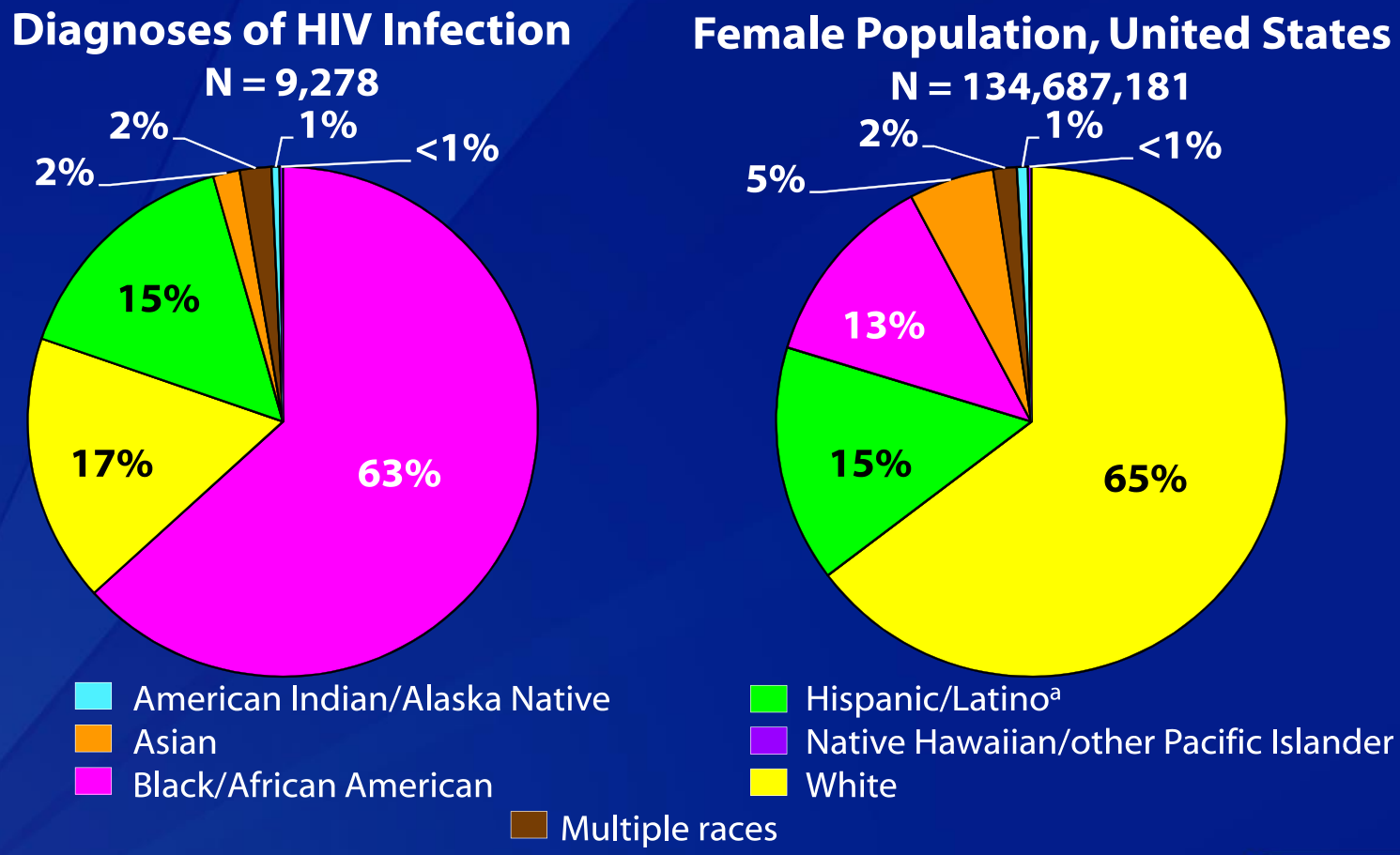
[a] Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

[b] Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

Diagnoses of HIV Infection and Population by Race/Ethnicity, 2013—United States



Diagnoses of HIV Infection and Population among Adult and Adolescent Females, by Race/Ethnicity 2013—United States



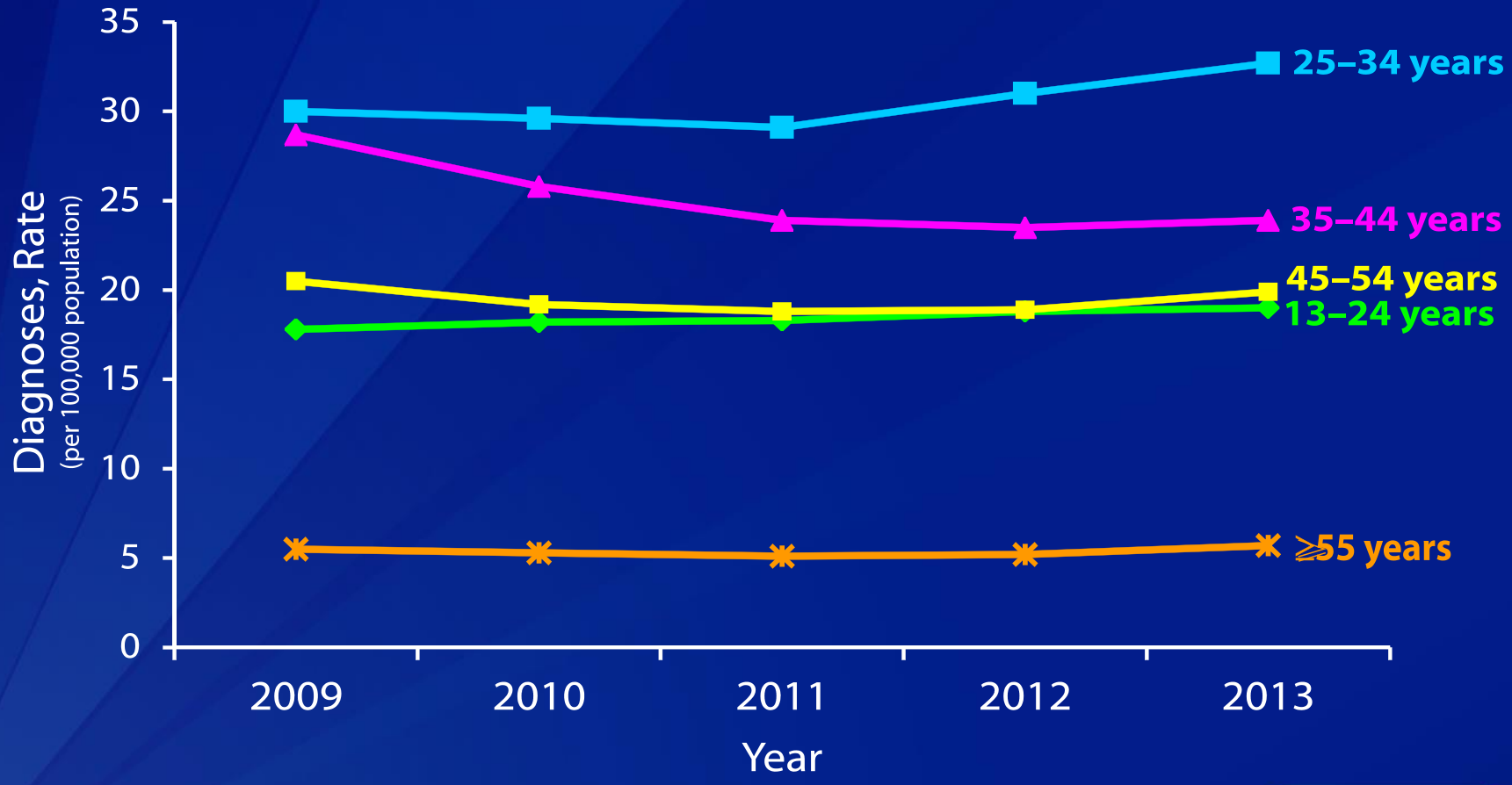
Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.

[a] Hispanics/Latinos can be of any race.

Why is HIV Incidence Highest Among Black MSM?

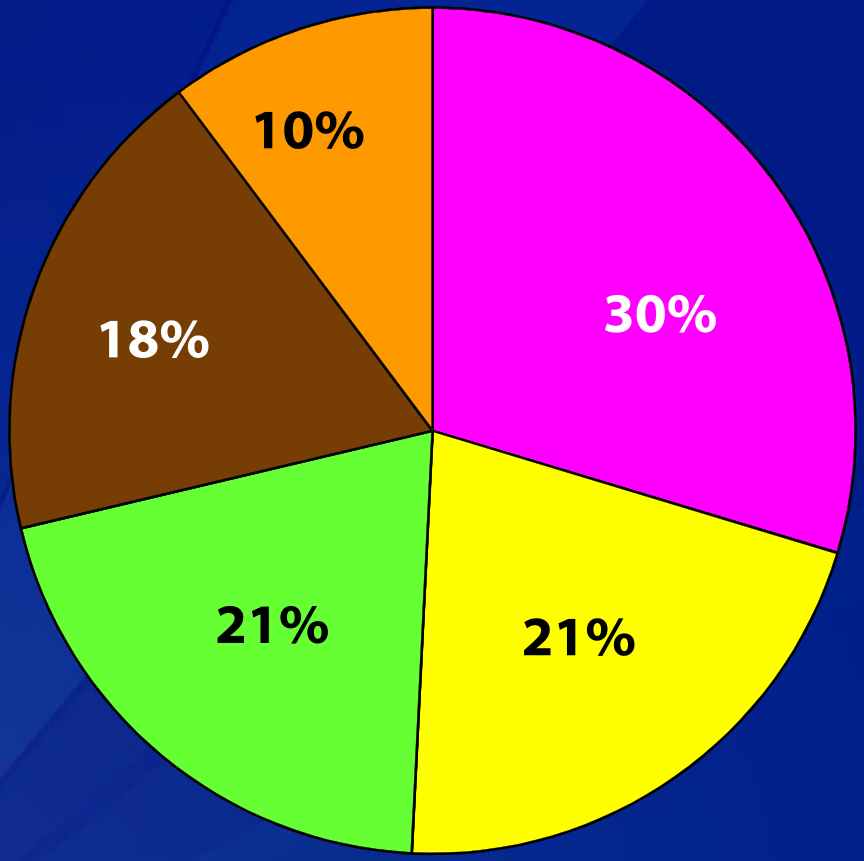
- Sexual risk behaviors and substance use ***do not*** explain the differences in HIV infection between Black and white MSM
- The most likely causes of disproportionate HIV infection rates are:
  - Barriers to access health care
  - Less awareness of HIV status
  - Delayed treatment of STI's which facilitate HIV transmission
  - High HIV prevalence in Black MSM networks especially among those who identify as gay.

Rates of Diagnoses of HIV Infection among Adults and Adolescents, by Age at Diagnosis, 2009–2013 —United States



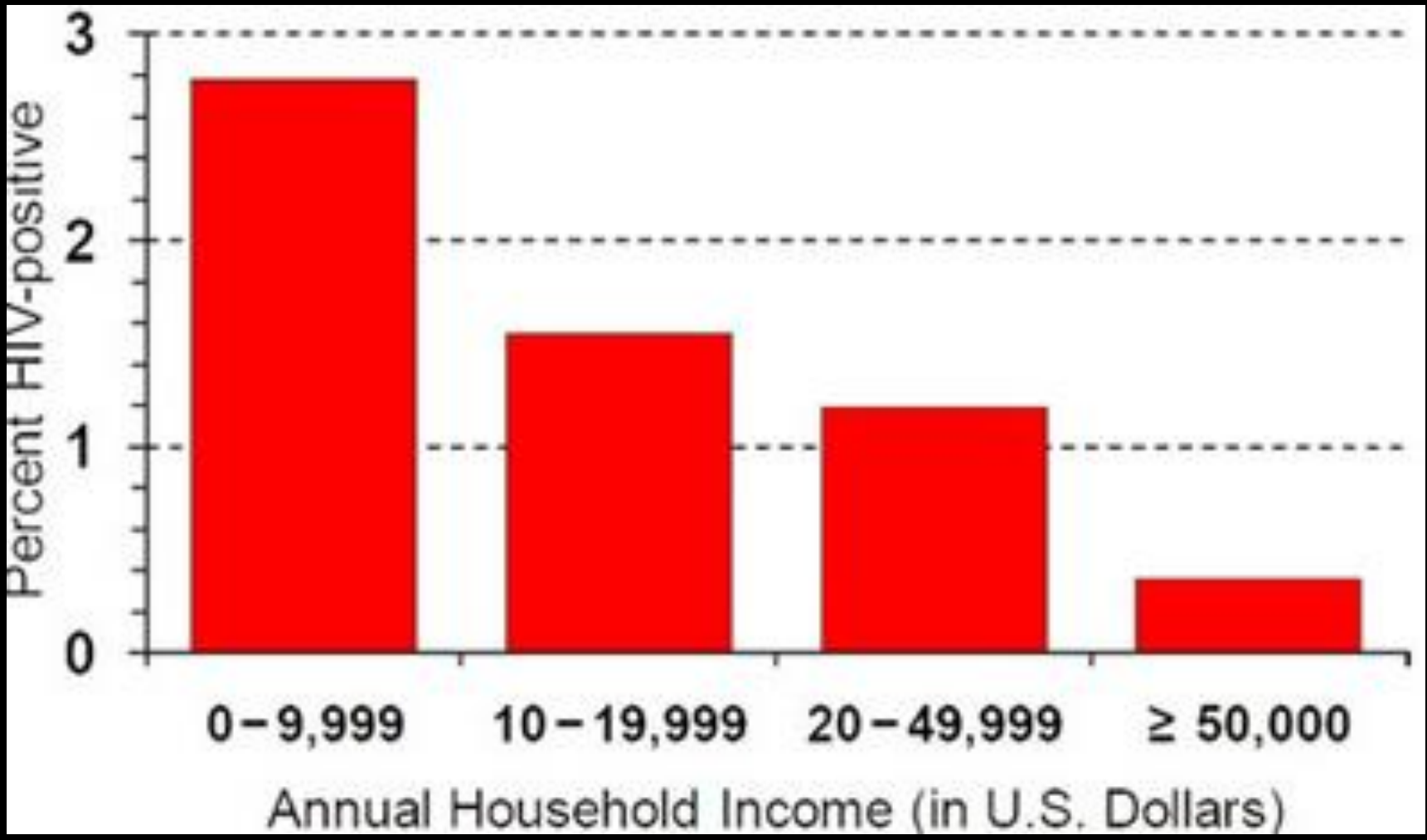
Diagnoses of HIV Infection among Adults and Adolescents, by Age at Diagnosis, 2013—United States

N = 47,165



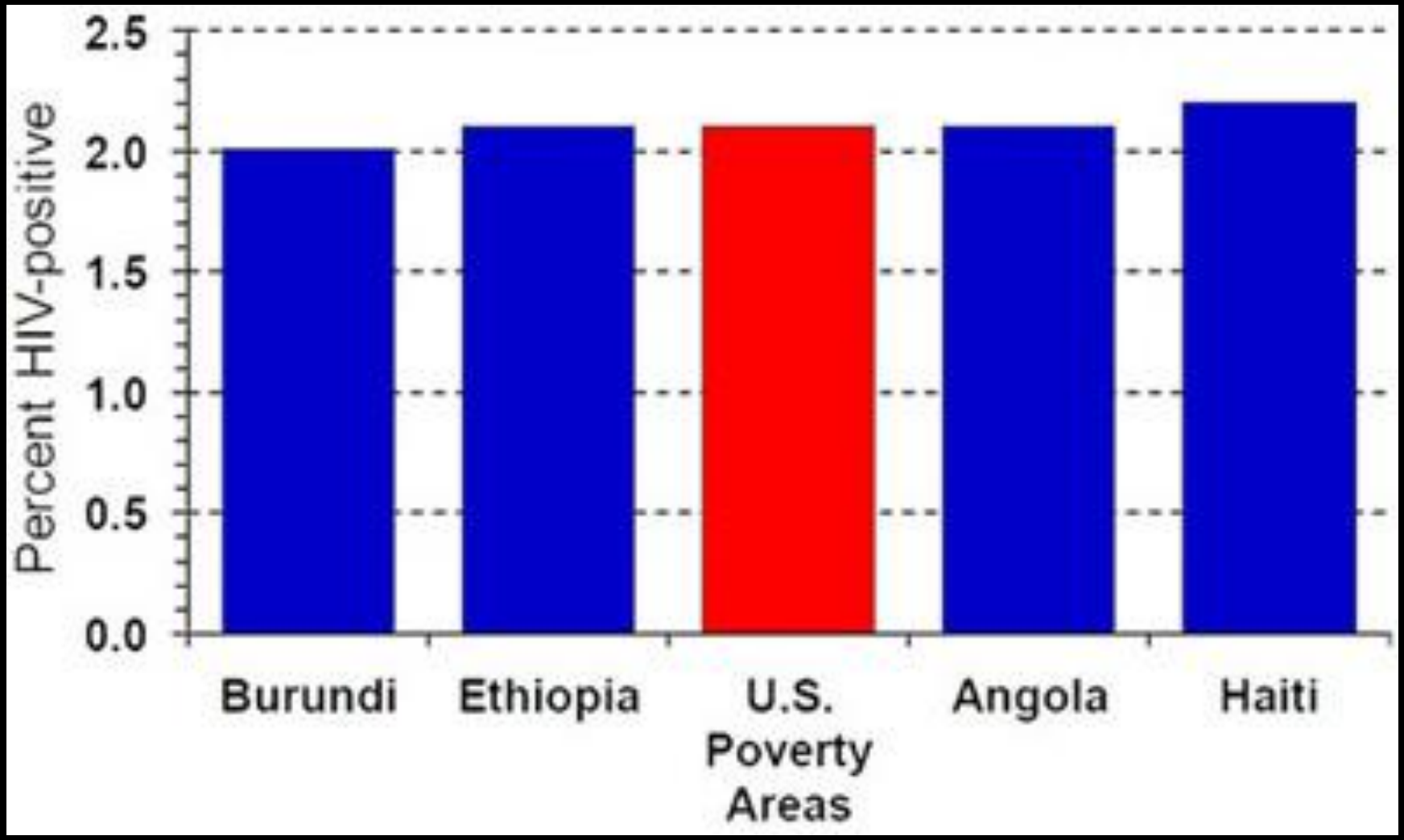
- 13–24 years
- 25–34 years
- 35–44 years
- 45–54 years
- ≥55 years

HIV: A Disease of Poverty

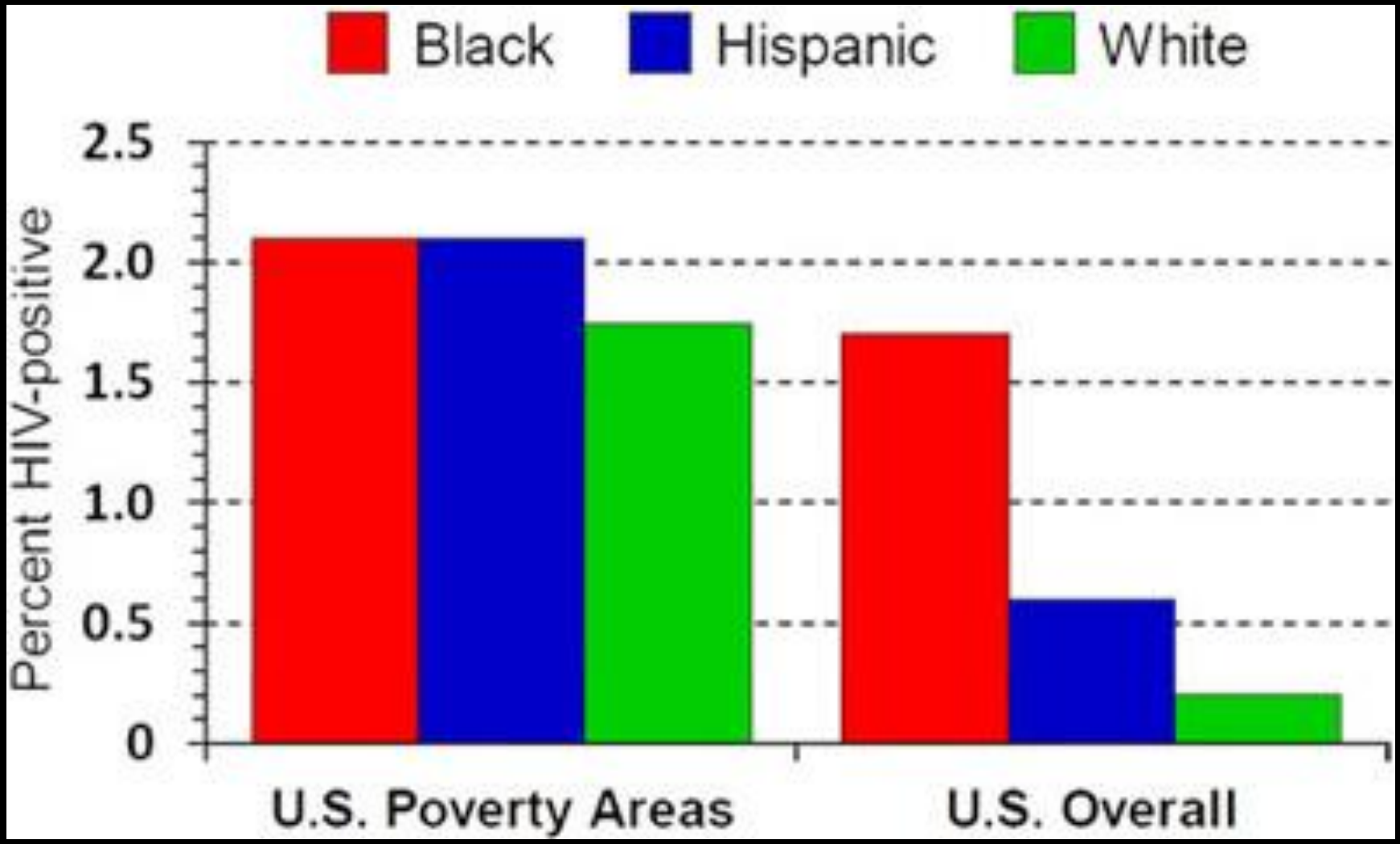


Denning, P et al @ cdc.gov

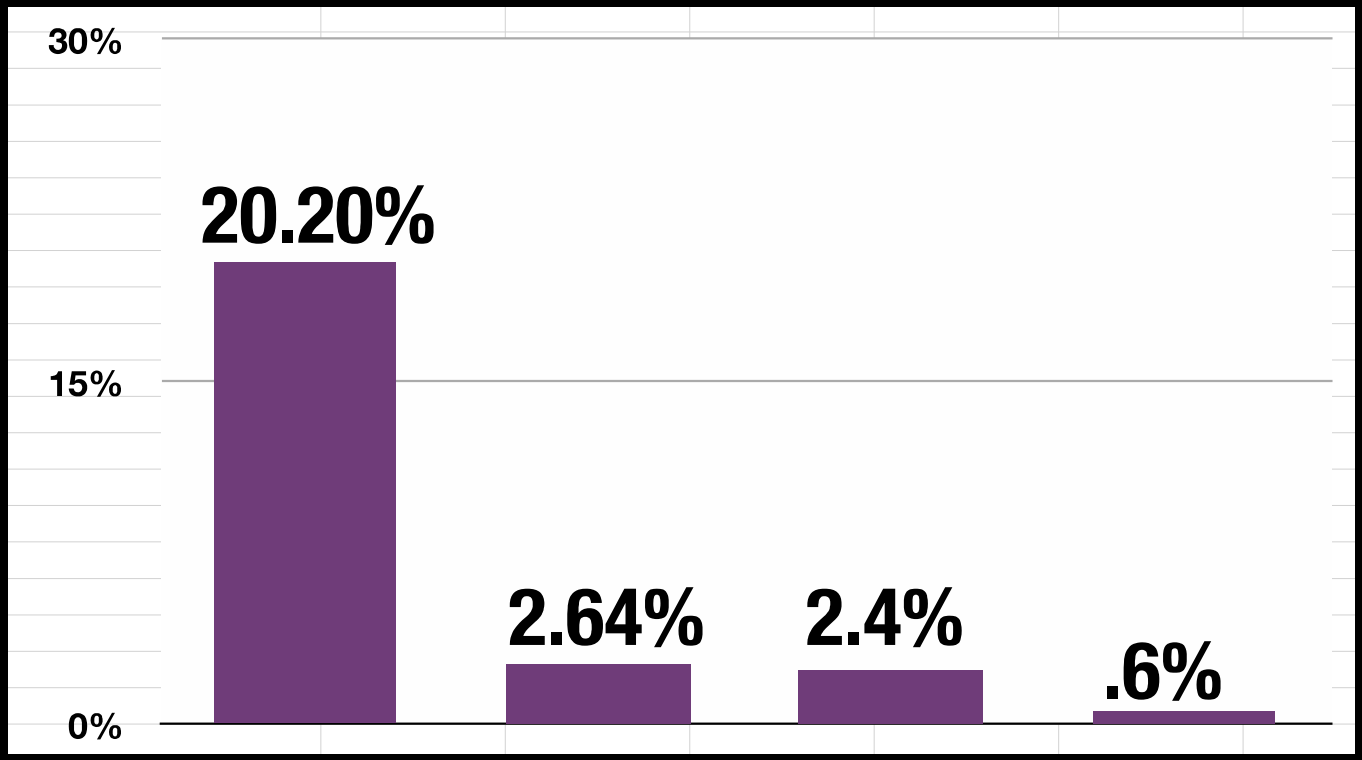
HIV Rates in US Poor Rivals PEPFAR Countries



HIV Rates Don’t Differ By Race in Poor US Areas



Sexual Minorities: The AA Transgendered



Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO)"2007 AIDS Epidemic Update" (2007)

Transgender Women are Also at High Risk

- Estimated HIV prevalence in trans women
  - 28% in US
  - 56% in African-Americans
  - 18-22% worldwide

Blacks Overrepresented in Homeless Population

- In 2010, nearly one-quarter (23.3 percent) of black families lived in poverty, three times the rate of white families (7.1 percent).
- In 2010, *one out of every 141 black family members* sought refuge in a homeless shelter, a rate **seven times higher than members of white families.**
- Black persons in families make up 12.1 percent of the U.S. family population, but represented 38.8 percent of sheltered persons in families in 2010.

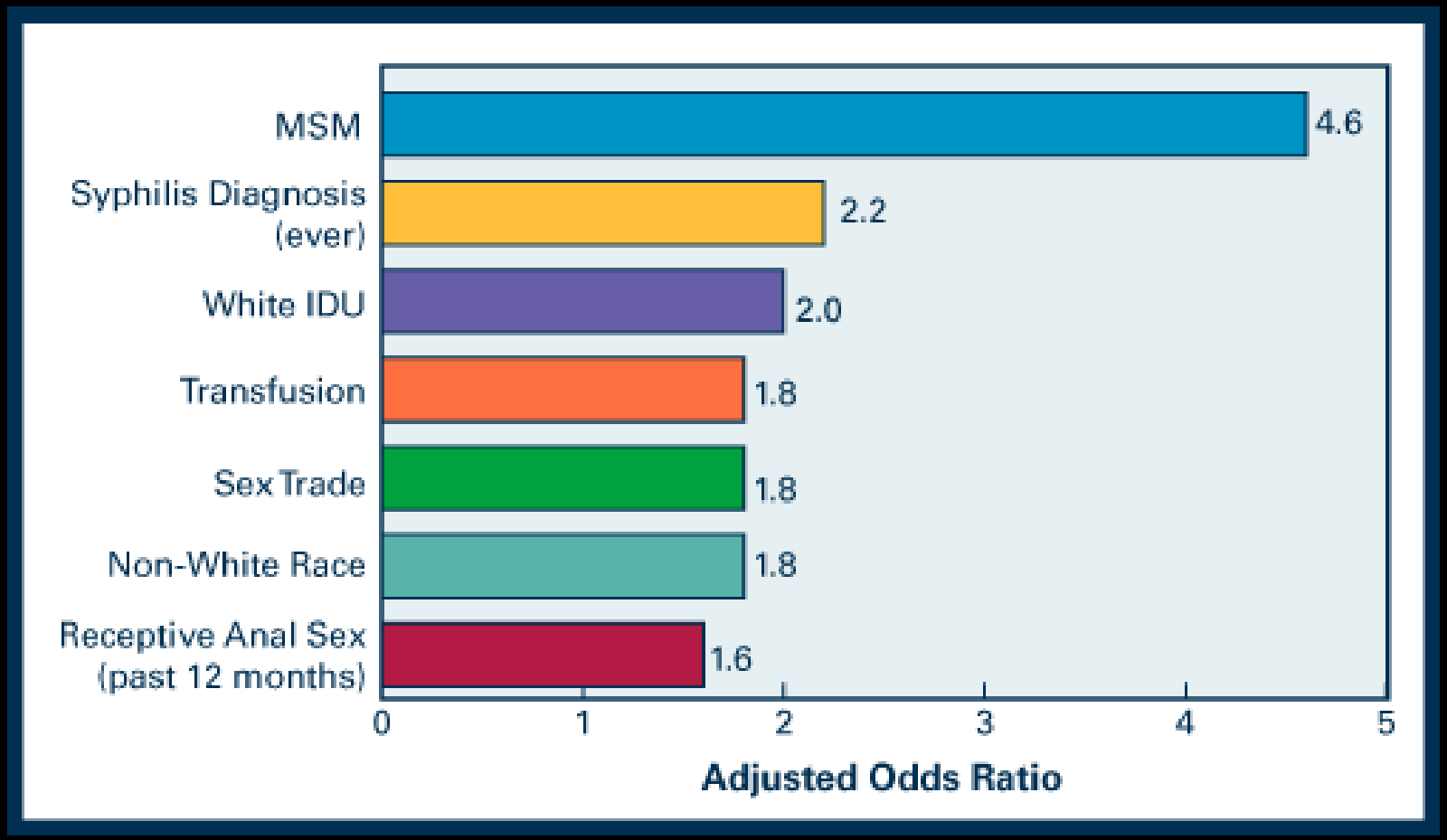
"Intergenerational Disparities Experienced by Homeless Black Families," 2012

HIV Prevalence Higher in Homeless Population

- Seroprevalence of HIV in homeless/marginally housed populations is estimated to be 5-10X higher than among housed populations, or approximately 3-10% of the homeless population

Robertson et al AM J Public Health 2004

Relative Risk of HIV Infection Among Homeless and Marginally Housed Adults in San Francisco, by Risk Group

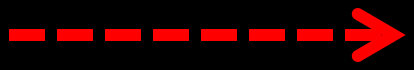


Robertson et al. Am J Public Health. 2004

Homelessness in PLWHA

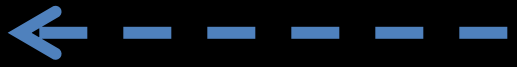
A TWO WAY ROAD

HIV  HOMELESSNESS



COST OF MEDS AND HEALTHCARE
RISK OF LOSING JOB (STIGMA, ABSENCES)
=up to 50% of PLWHA in the United States are at risk of becoming homeless

INCREASED SUBSTANCE ABUSE
IDU
SEX TRADE
LESS PREVENTION….



PLWHA and Shelter

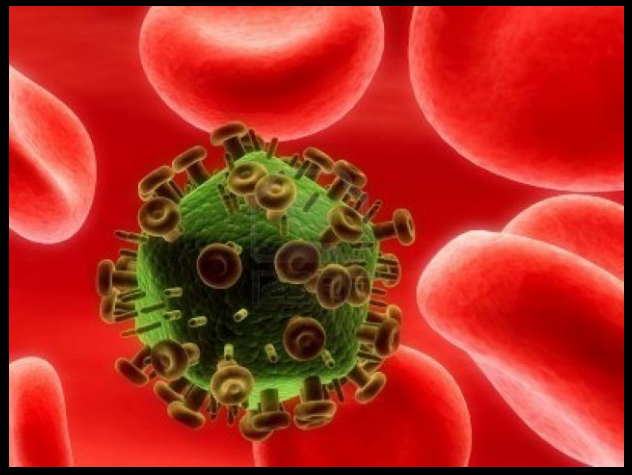
- NYC: 33% of PLWHA were found to be homeless/marginally housed
- 18% in unstable/temporary/transitional housing
- 15% homeless (living in the street/shelter/jail/halfway house)
- Study of 8000 PLWHA from 19 sites in USA found 4% were living in streets/in a shelter

Aidala et al AIDS Behav 2007,
Kidder et al ADIS Behav 2007

Effect of Lack of Housing

- Large multi-site study showed that a larger portion of homeless individuals had CD4 + cell counts below 200 cells/ml (43% vs 32%, P value <0.001)
- And detectable plasma HIV-1 RNA viral loads (65% vs 51%, P value < 0.001)

Kidder et al 2007



Which of the following is correct?

1. HIV positive homeless individuals don't receive optimal HIV care
2. HIV positive homeless individuals are less likely to be engaged and retained in care
3. HIV positive homeless individuals are less likely to be prescribed ARV's
4. HIV positive homeless individuals are less likely to be adherent to ARV's
5. All of the above

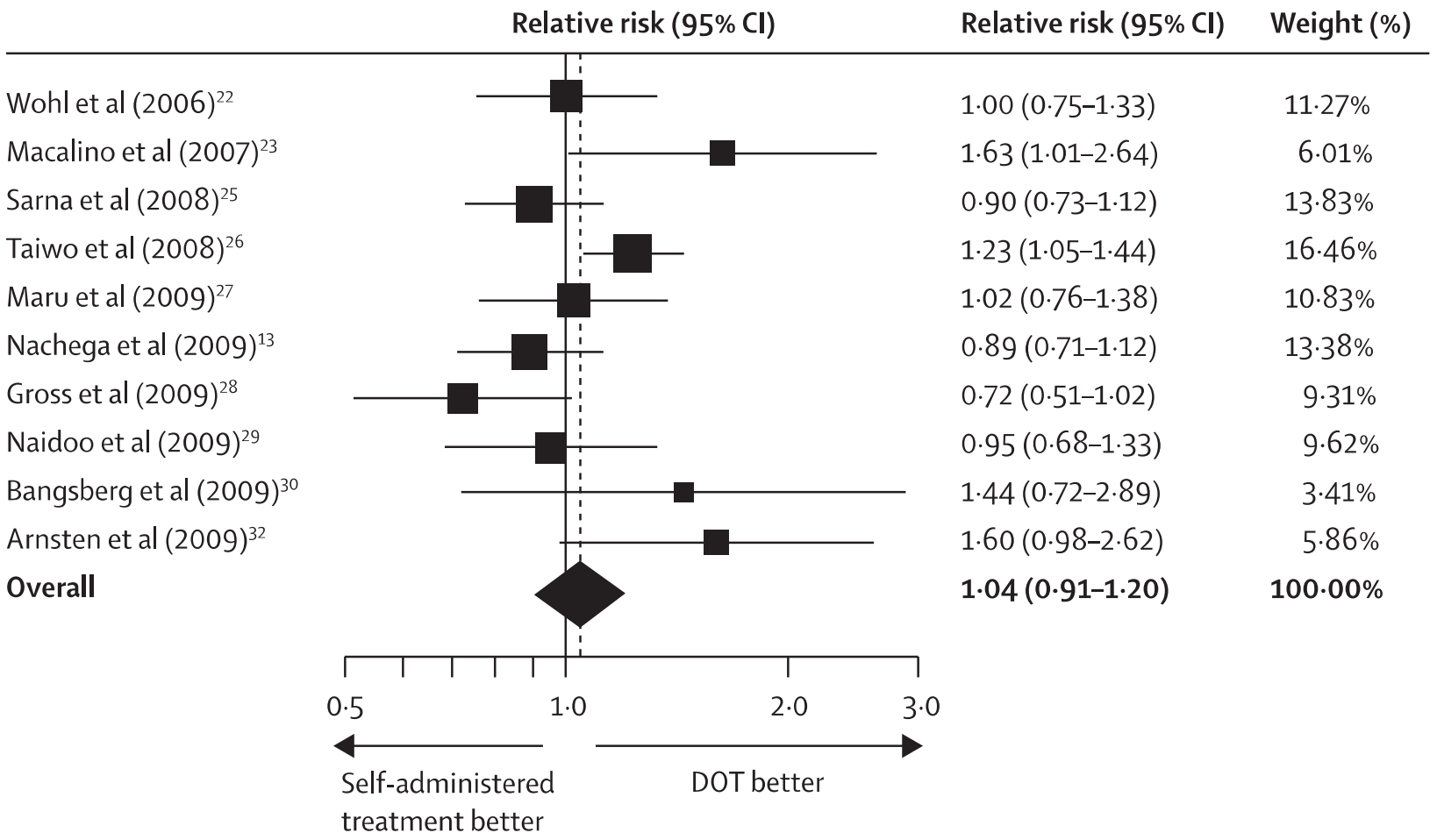
Aviremia and Adherence

- Homelessness associated with lower rates of viral suppression
- Mediated by lower rates of adherence
- Even after controlling for other known factors associated with lower adherence rates

Interventions

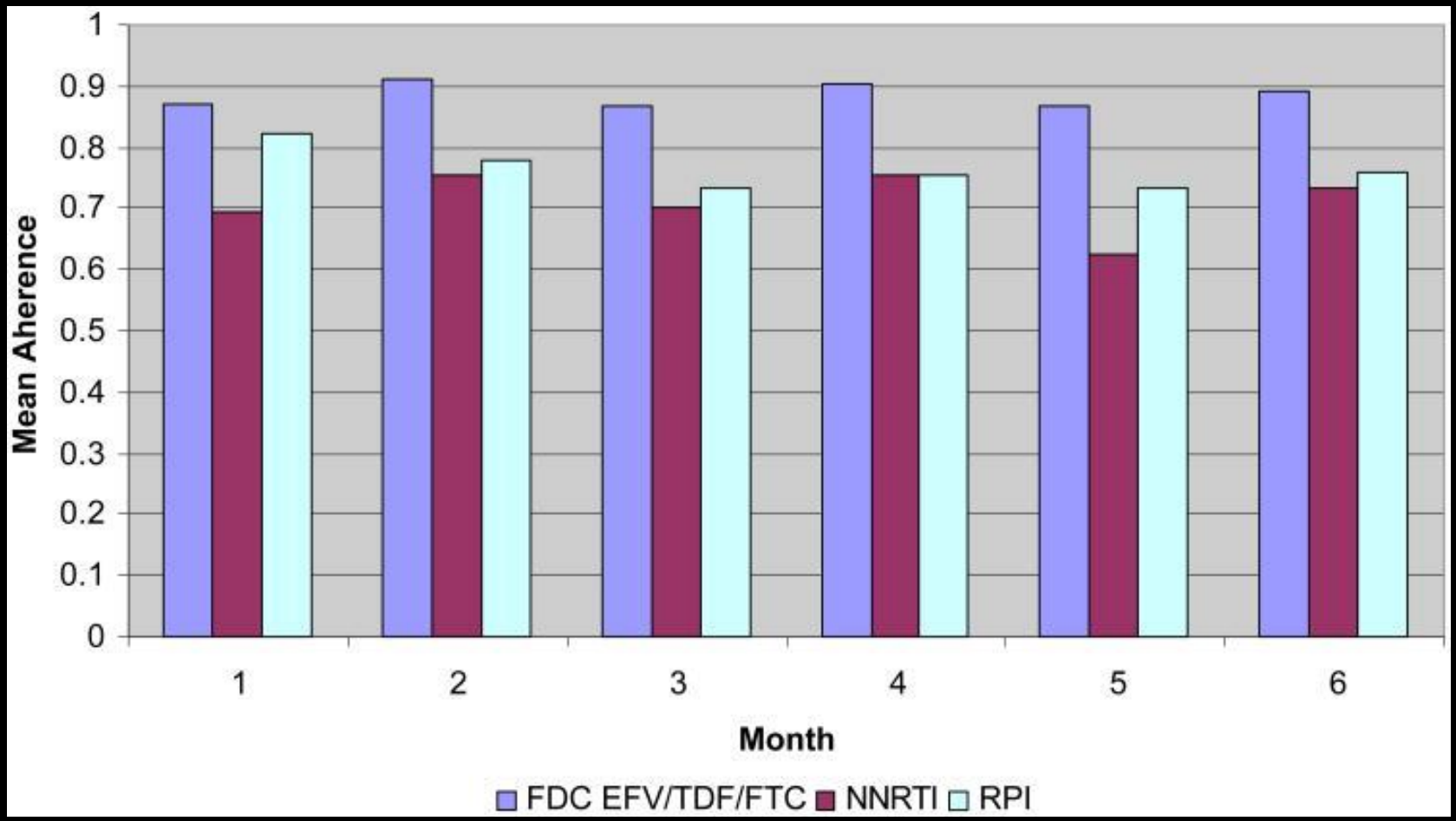
- Individual-focused pharmacologic programs(Bangsberg et al AIDS 2010, Tsai et al Arch Gen Psych 2010)
- Supportive housing and case management(Buchanan et al AM J Public Health 209)
- Housing assistance (Wolitski et al AIDS Behav 2010)
- Directly-observed therapy (Parashar et al AIDS Behav 2011)
- Outreach and case management (Cameron et al Health Soc Care Commun 2009)
- Housing-first harm reduction (Hawk et al AIDS Care 2012)

DOT FOR HIV+ HOMELESS?



Ford et al ***Lancet* 2009; 374: 2064–71**

Single Pill Regimen Leads to More Viral Suppression in HIV + Homeless



Bangsberg et al AIDS 2010

Interventions

- Individual-focused pharmacologic programs (Bangsberg et al AIDS 2010, Tsai et al Arch Gen Psych 2010)
- Supportive housing and case management (Buchanan et al AM J Public Health 209)

Modest or no effects on HIV-related measures were observed

- Outreach and case management (Cameron et al Health Soc Care Commun 2009)
- Housing-first harm reduction (Hawk et al AIDS Care 2012)

But How About If We House Them?

Effect of Housing On ARV's?

- Study of 807 HIV + active injection drug users
- Multisite
- Assessed individual, social and structural factors associated with ARV uptake
- Found stable housing was associated with being on ARV's

Doshi et al AIDS Res Hum Retrovir 2012
Milloy et al AIDS Patient Care STDs 2012
Palepu et al J Urban Health 2011

Summary Slide: Homelessness Among PLWHA

- Delayed and poorer access to medical care
- Decreased likelihood of receiving optimal antiretroviral therapy
- Poorer adherence to therapy
- Lower CD4/higher VL
- Resource intense care structure

Kidder 2007, Leaver 2007, Smith 2000, Aidala 2007, Royal 2009

Which Leads To…

- Homeless PLWHA having a 10x higher odds ratio of death compared to those stably housed PLWHA

Lieb et al JAIDS 2002

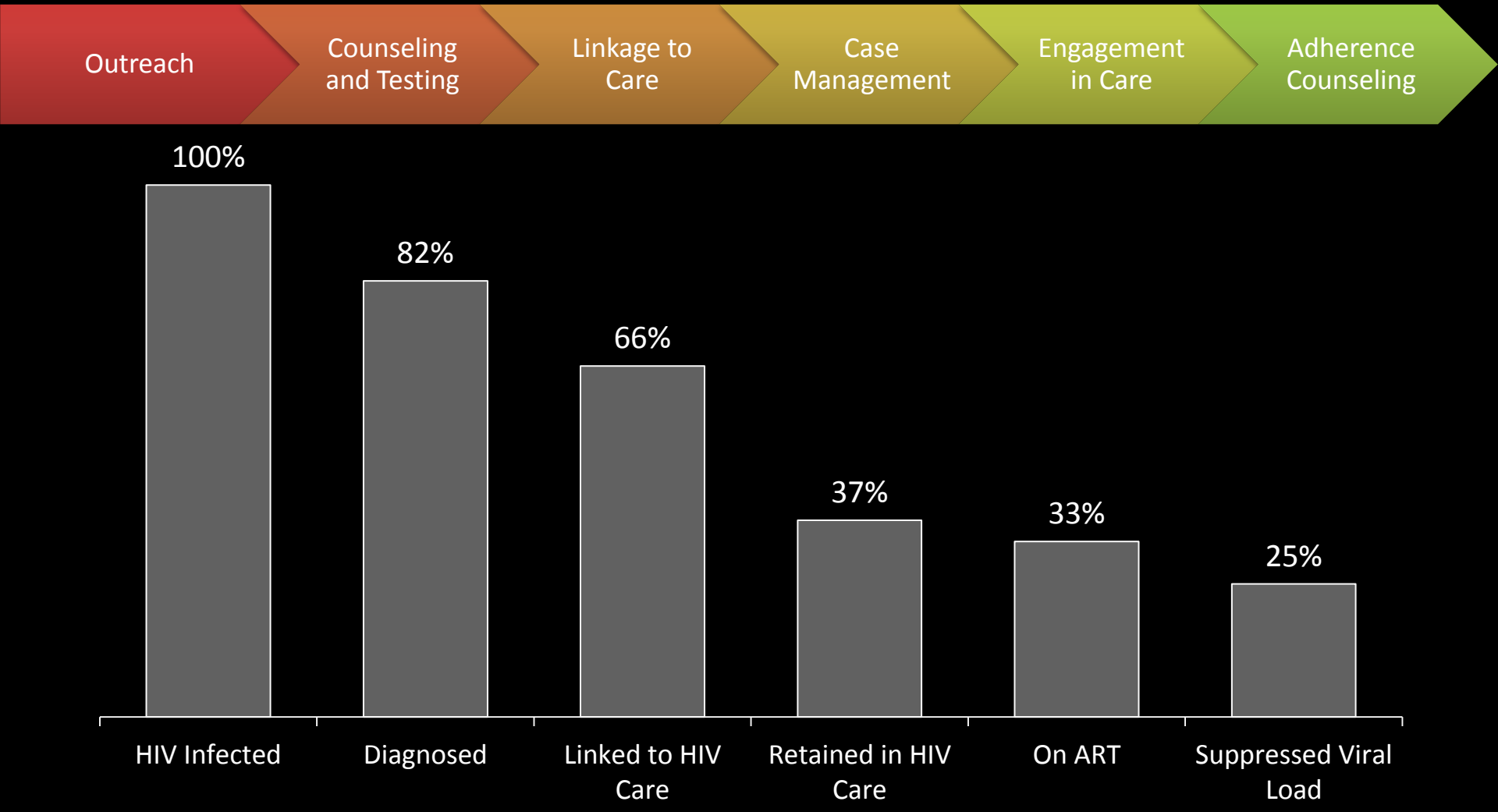
Overdoses Overtake HIV Related Mortality

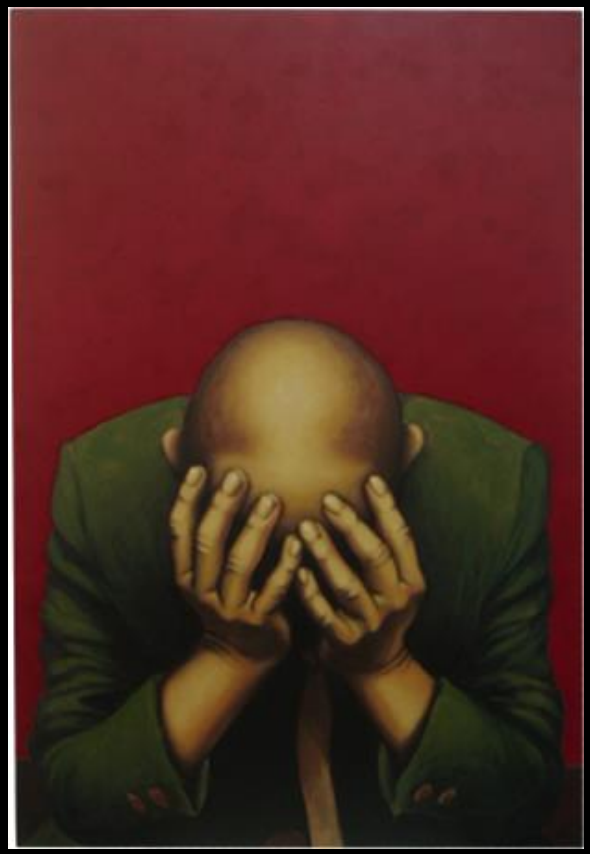
- 28,033 homeless adults from 2003 through 2008, found that of those who died, *17 percent died of drug overdoses*, while 6 percent died of causes related to HIV
- 15 years earlier, 6 percent of deaths were due to drug overdose and 18 percent due to AIDS.

Baggett et al JAMA Internal Medicine 2013

So What Can We Do?

Opportunities Along the HIV Continuum





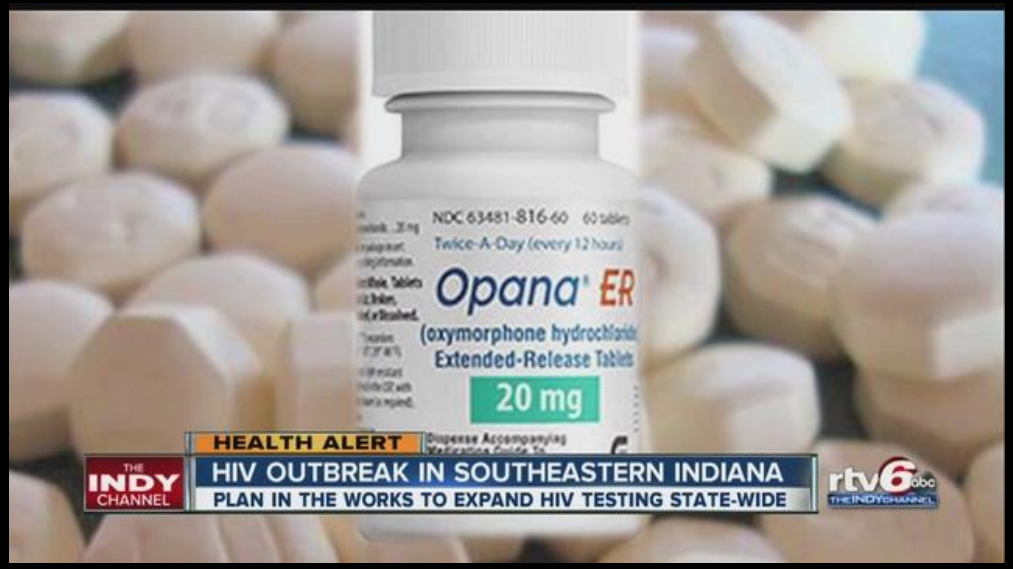
We **CAN** Prevent *New HIV Infections*

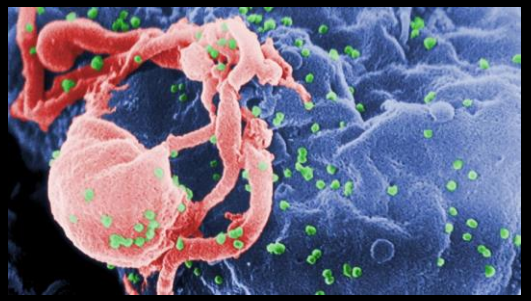
Medical Cost Savings Associated With HIV Prevention in the United States

- Investigators used Cost-Effectiveness of Preventing AIDS Complications Model to project discounted lifetime medical costs, assuming HIV infection at 35 yrs of age
- The medical cost savings of averting 1 HIV infection was found to be $229,800
- Cost savings are higher if taking secondary infections into account and lower if infection is delayed vs totally averted

Schackmann R, et al. CROI 2015. Abstract 1104.

What Happened in Indiana?

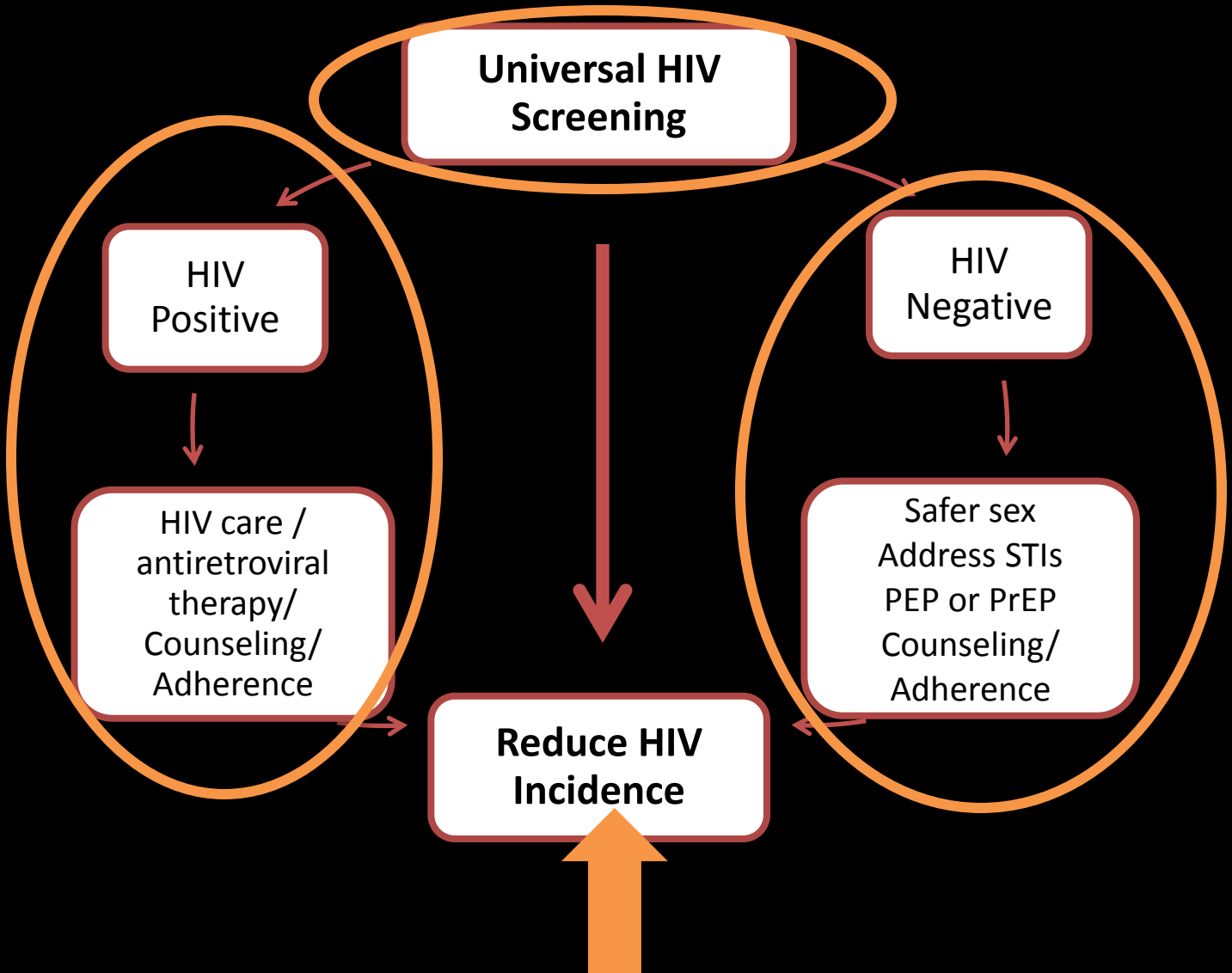




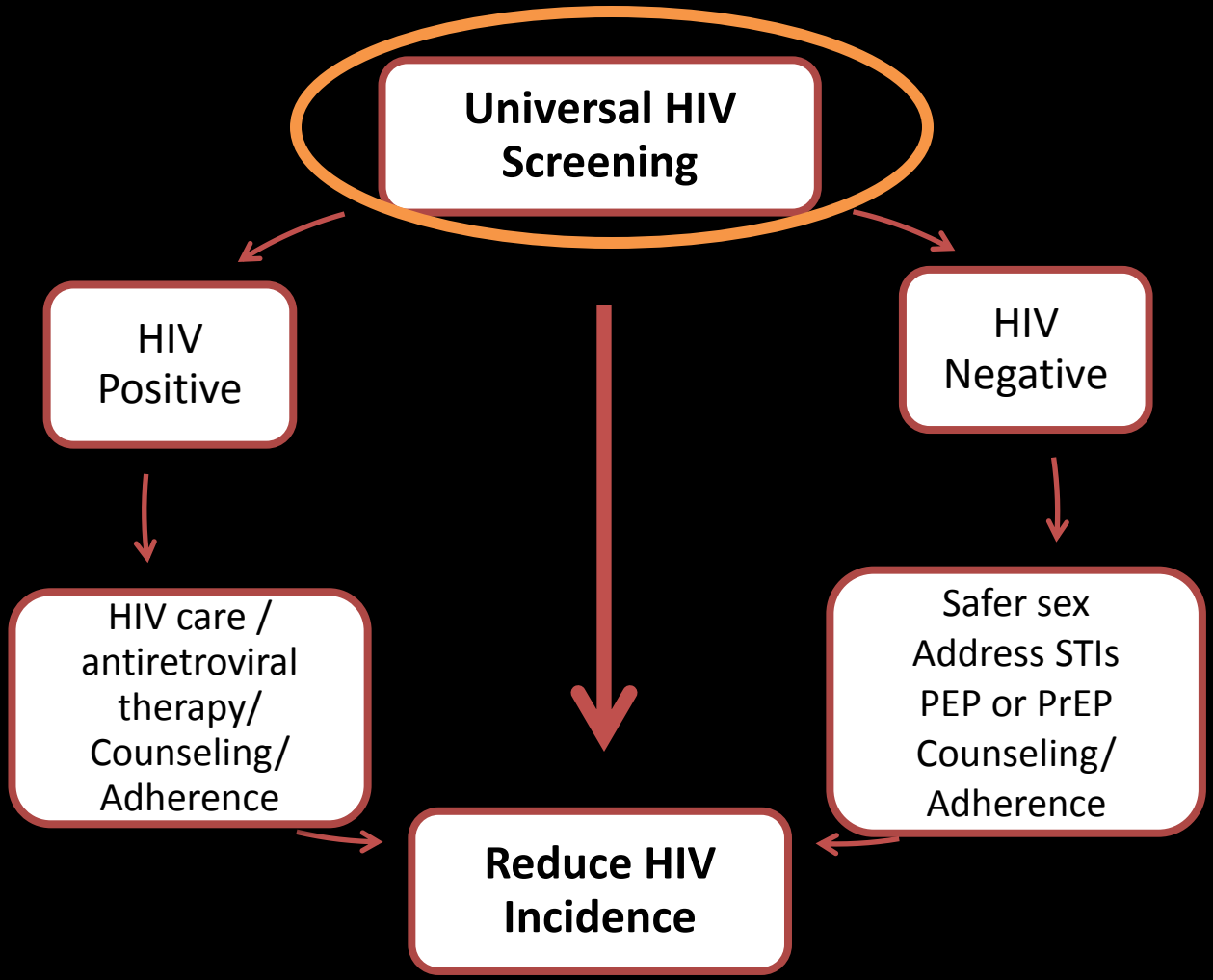
CDC Release April 24, 2015

- Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015
- As of April 21, ISDH had diagnosed HIV infection in **135 persons** (129 with confirmed HIV infection and six with preliminarily positive results from rapid HIV testing that were pending confirmatory testing) in a community of 4,200 persons
- **Hepatitis C** coinfection diagnosed in 114 (**84.4%**) patients
- Short-term authorization of syringe exchange

Prevention of HIV



Is he HIV Infected at Baseline?

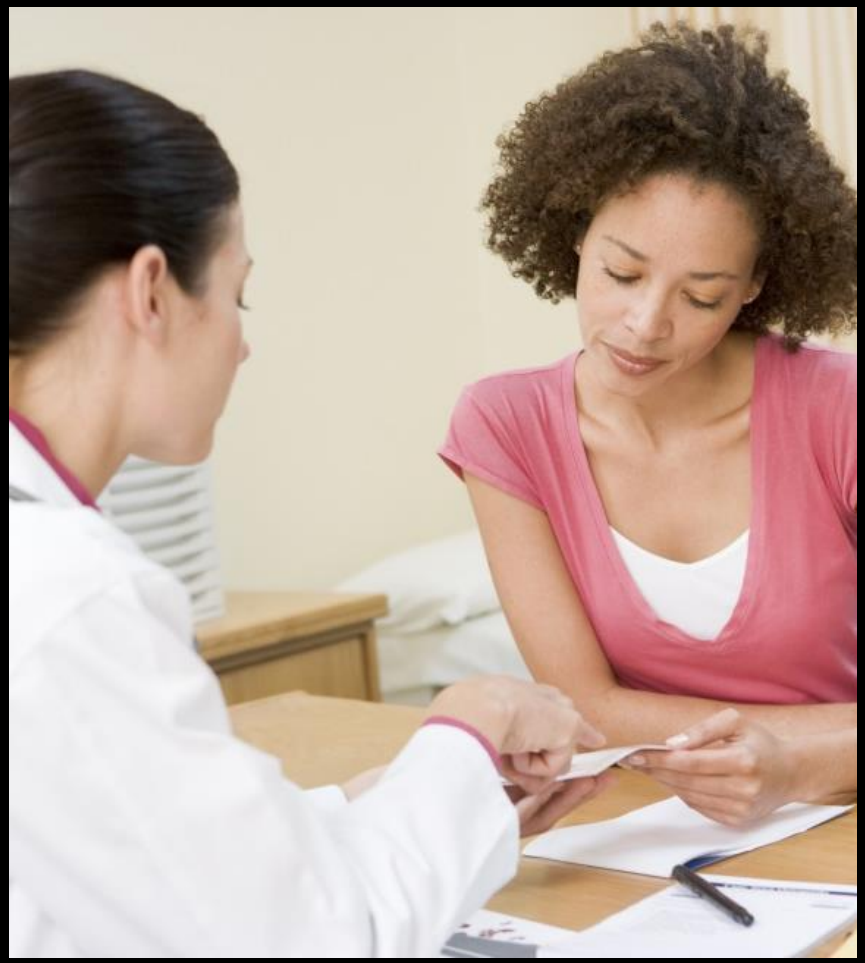


More Testing is Needed

- 15-20% of those with HIV do not know they are infected.
- 32% receive an AIDS diagnosis within one year of HIV diagnosis.

Screening and testing are prevention interventions

- USPSTF Grade A Recommendation: Test all once
- Those who test positive need evaluation and treatment.
- People who are negative but at high risk need ongoing testing
- Testing is a pre-requisite for:
  - Treatment as prevention
  - Pre-exposure prophylaxis



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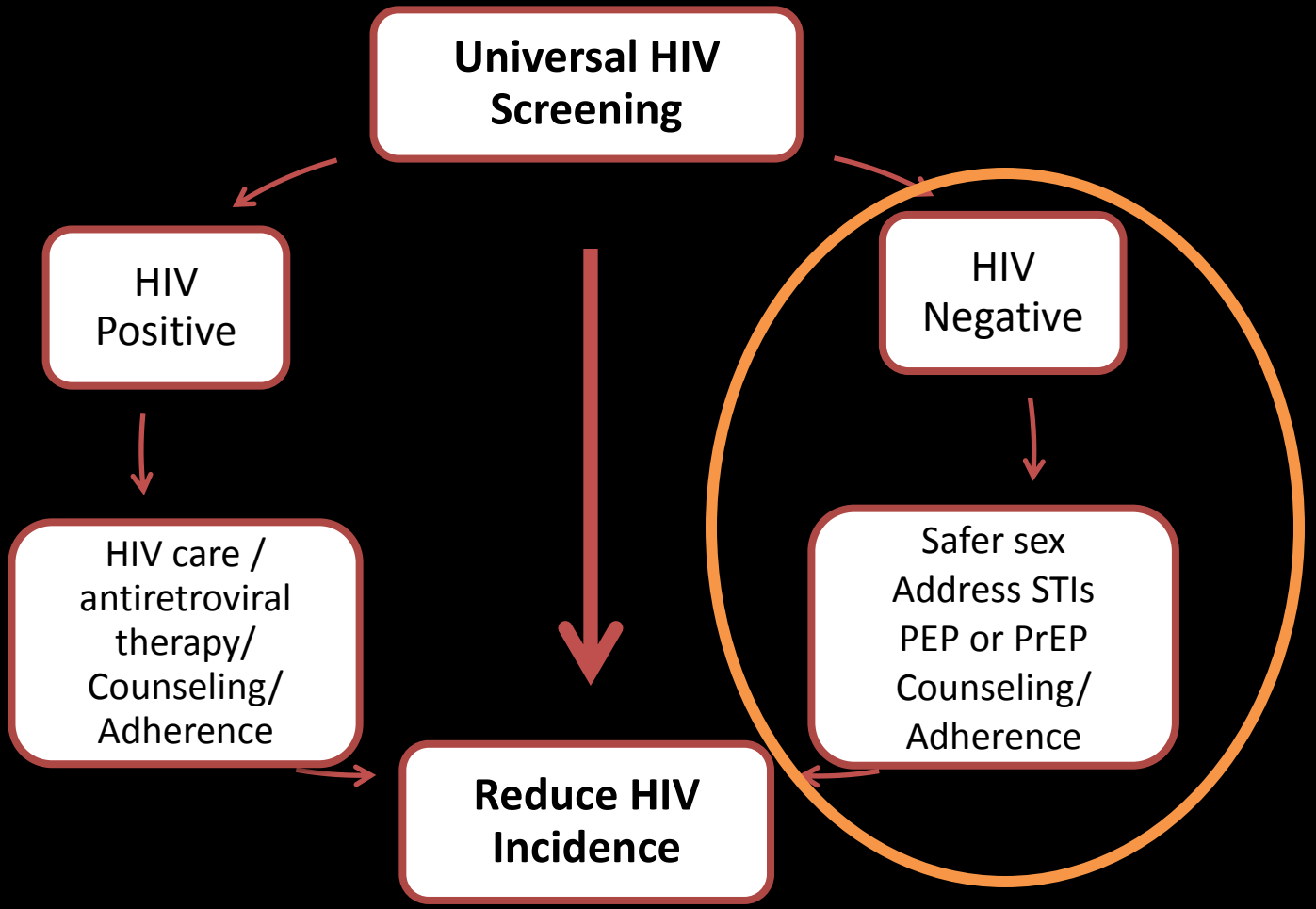


Post-Exposure Prophylaxis (PEP)

- Indicated for high-risk exposures to HIV-infected individuals
- Consists of 28 days of antiretrovirals (usually tenofovir-emtricitabine +/- others, often raltegravir)
- Earlier initiation = better efficacy (likely not useful after 72 hours)
- HIV testing at baseline, 1, and 3 months

PrEP: Can That Pill Really Prevent HIV?

PrEP Trials Have Shown Efficacy in MSM, Heterosexual Men and Women, and IDUs

Trial	Population/Setting	Intervention	HIV Infections, n		Reduction in HIV Infection Rate, % (95% CI)
			PrEP	Placebo	
iPrEX[1] (N = 2499)	MSM, transgender women, 11 sites in US, South America, Africa, Thailand	TDF/FTC	36	64	44 (15-63)
Partners PrEP[2] (N = 4747)	Serodiscordant couples in Africa	TDF	17	52	67 (44-81)
		TDF/FTC	13		75 (55-87)
TDF2[3] (N = 1219)	Heterosexual males and females in Botswana	TDF/FTC	9	24	62 (21-83)
Thai IDU[4] (N = 2413)	Volunteers from 17 drug Thai treatment centers	TDF	17	33	49 (10-72)

- 2 additional trials of PrEP (FEM-PrEP[5] and VOICE[6]), both conducted among high-risk African women, did not demonstrate protection against HIV; in both trials, PrEP adherence was very low

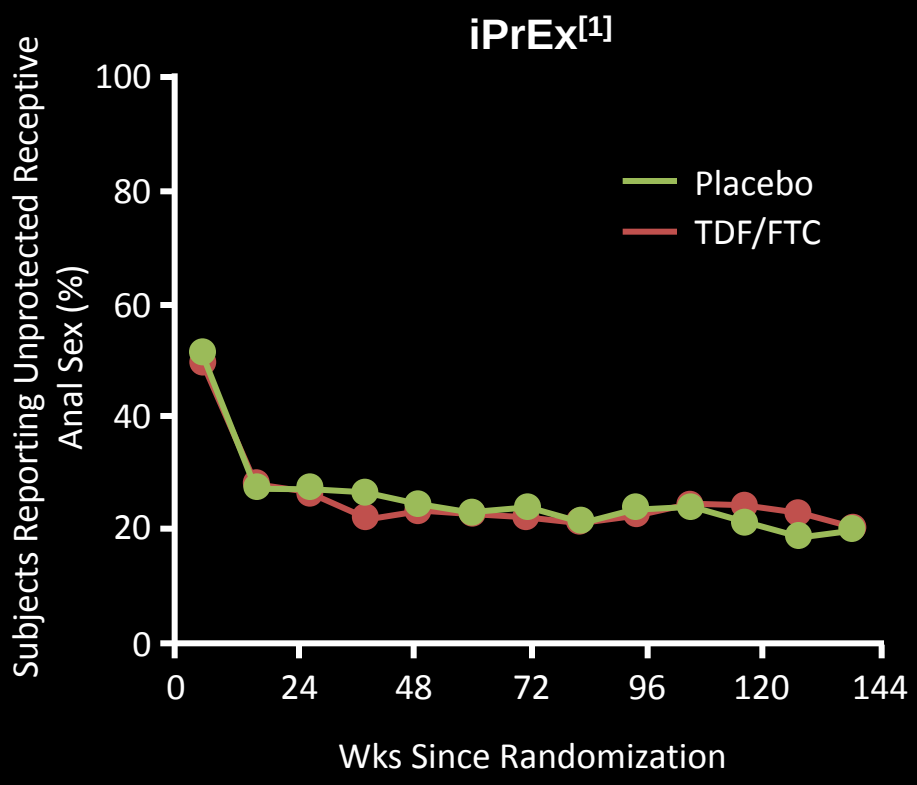
1. Grant RM, et al. N Engl J Med. 2010;363:2587-2599. 2. Baeten JM, et al. N Engl J Med. 2012;367:399-410. 3. Thigpen MC, et al. N Engl J Med. 2012;367:423-434. 4. Choopanya K, et al. Lancet. 2013;381:2083-2090. 5. Van Damme L, et al. N Engl J Med. 2012;367:411-422. 6. Marrazzo J, et al. CROI 2013. Abstract 26LB.

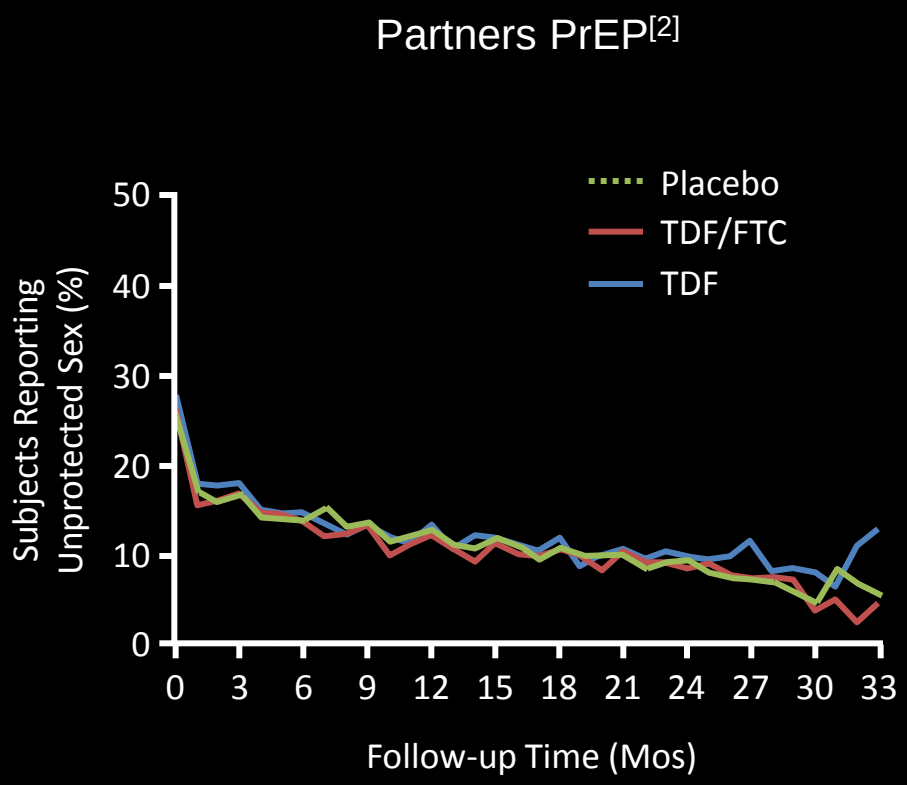
PrEP Works, but Adherence Is Critical

Study	Efficacy Overall, %	Blood Samples With TFV Detected, %	Efficacy By Blood Detection of TFV, %
iPrEx[1]	44	51	92
iPrEx OLE[2]	49	71	NR
Partners PrEP[3]	67 (TDF) 75 (TDF/FTC)	81	86 (TDF) 90 (TDF/FTC)
TDF2[4]	62	80	85
Thai IDU[5]	49	67	74
Fem-PrEP[6]	No efficacy	< 30	NR
VOICE[7]	No efficacy	< 30	NR

1. Grant RM, et al. N Engl J Med. 2010;363:2587-2599. 2. Grant RM, et al. Lancet Infect Dis. 2014; 14:820-829. 3. Baeten JM, et al. N Engl J Med. 2012;367:399-410. 4. Thigpen MC, et al. N Engl J Med. 2012;367:423-434. 5. Choopanya K, et al. Lancet. 2013;381:2083-2090. 6. Van Damme L, et al. N Engl J Med. 2012;367:411-422. 7. Marrazzo J, et al. CROI 2013. Abstract 26LB.

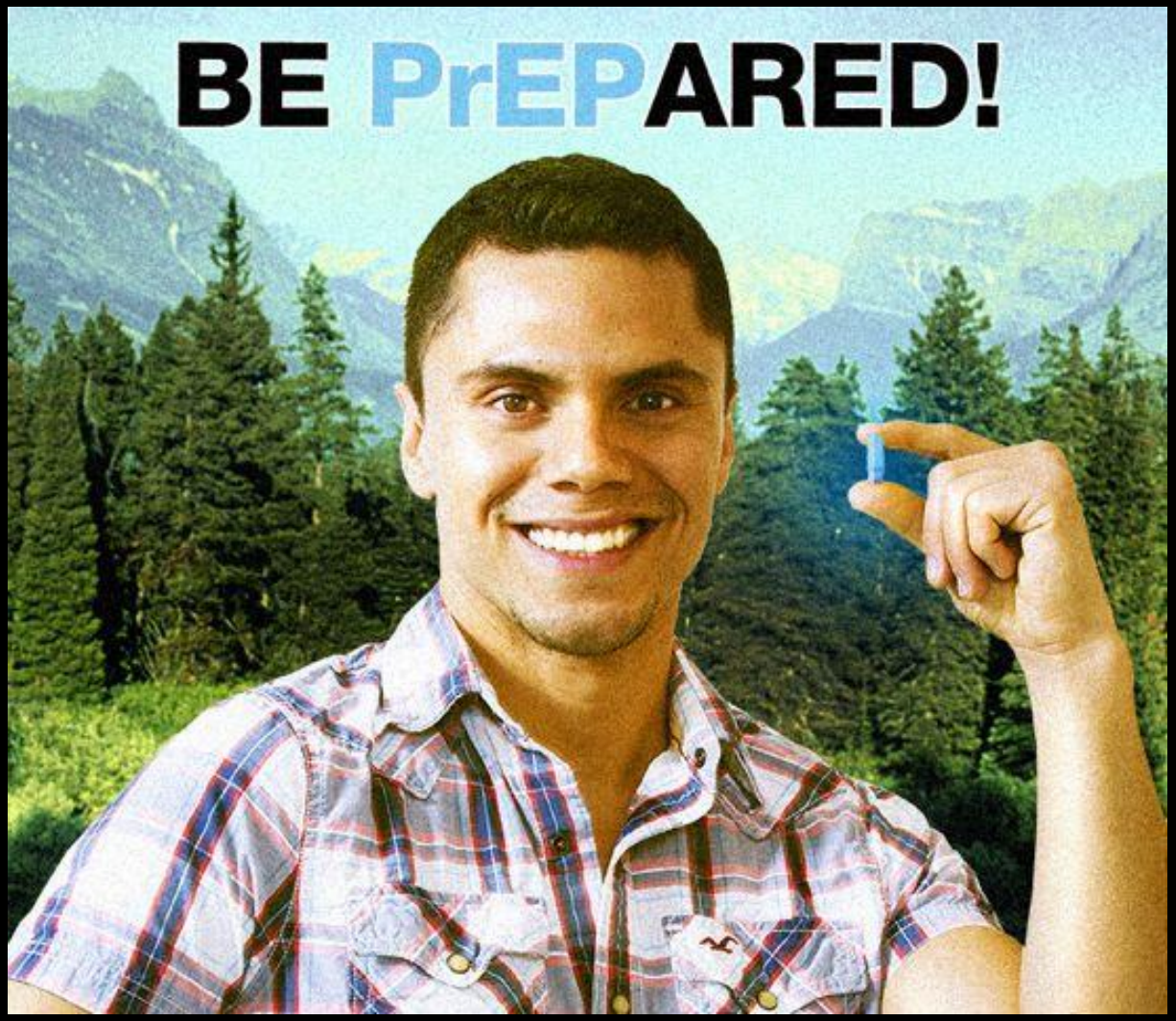
PrEP Trials Found *Decreasing* Risk Behavior Over Time





1. Grant RM, et al. N Engl J Med. 2010;363: 2587-2599.
2. Baeten JM, et al. N Engl J Med. 2012;367:399-410.

PrEP in 2015?



Public Health England

PROUD

MRC Clinical Trials Unit

Pragmatic Open-Label Randomised Trial of Pre-Exposure Prophylaxis: the PROUD study

Immediate open label daily oral FTC/TDF vs deferred PrEP after 48 weeks.

http://www.proud.mrc.ac.uk/

Baseline demographics[1]

Characteristics		Immediate	Deferred
Age, median (IQR)		35 (30 – 43)	35 (29 – 42)
Ethnicity	White	80%	82%
Born UK	No	40%	40%
Education	University	59%	60%
Employment	Full-time	70%	73%
Sexuality	Gay	96%	94%
Current relationship	No	53%	55%
Recreational drug use	Yes	76%	64%

[1] 539/545 (99%) questionnaires returned
[2] in the last 90 days

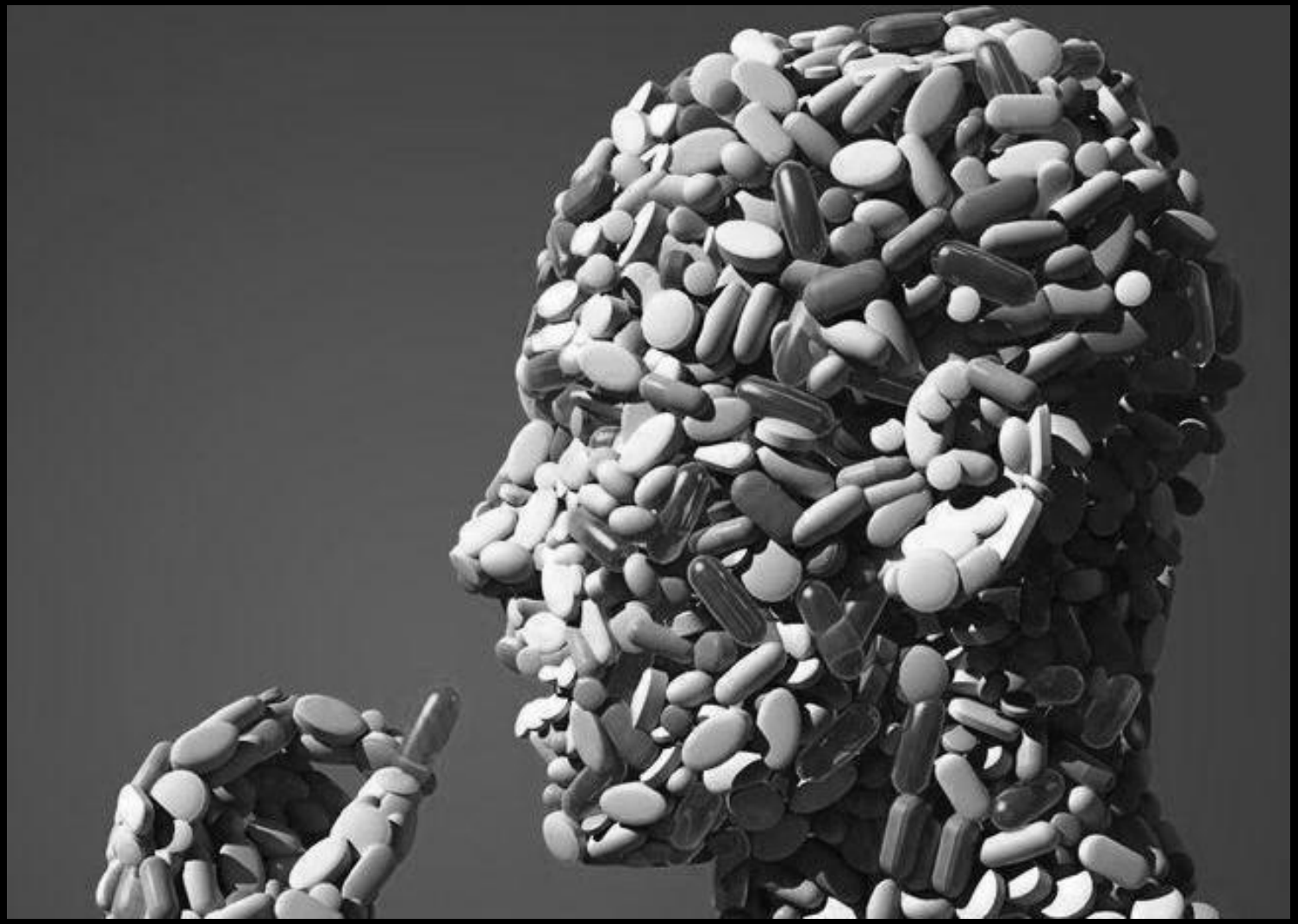
HIV Incidence

Group	No. of infections	Follow-up (PY)	Incidence (per 100 PY)	90% CI
Overall	22	453	4.9	3.4–6.8
Immediate	3	239	1.3	0.4–3.0
Deferred	19	214	8.9	6.0–12.7

Efficacy =86% (90% CI: 58 – 96%)
P value =0.0002

Rate Difference =7.6 (90% CI: 4.1 – 11.2)
Number Needed to Treat =13 (90% CI: 9 – 25)

“I Want PrEP but I Don’t Want to Take it Every Day”



On Demand PrEP with Oral TDF/FTC in MSM Results of the ANRS Ipergay Trial

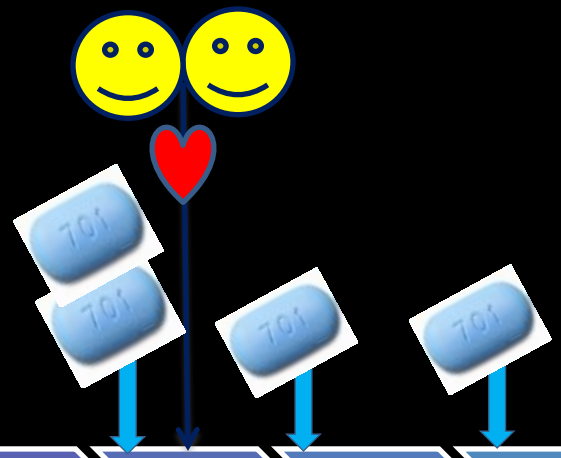
Molina JM, Capitant C, Spire B, Pialoux G, Chidiac C, Charreau I, Tremblay C, Meyer L, Delfraissy JF, and the ANRS Ipergay Study Group

Hospital Saint-Louis and University of Paris 7, Inserm SC10-US019 Villejuif, Hospital Tenon, Paris, Hospital Croix-Rousse, Lyon, UMR912 SEAS Marseille, France, CHUM, Montreal, Canada and ANRS, Paris, France

ipergay
ANRS
Intervention Préventive de l'Exposition aux Risques avec et pour les Gays

Ipergay : Event-Driven iPrEP

- ✓ 2 tablets (TDF/FTC or placebo) 2-24 hours before sex
- ✓ 1 tablet (TDF/FTC or placebo) 24 hours later
- ✓ 1 tablet (TDF/FTC or placebo) 48 hours after first intake



Friday | Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday

anrs France REcherche Nord & sud Sida-hiv Hépatites
Agence autonome de l'Inserm

ipergay
ANRS
Intervention Préventive de l'Exposition aux Risques avec et pour les Gays

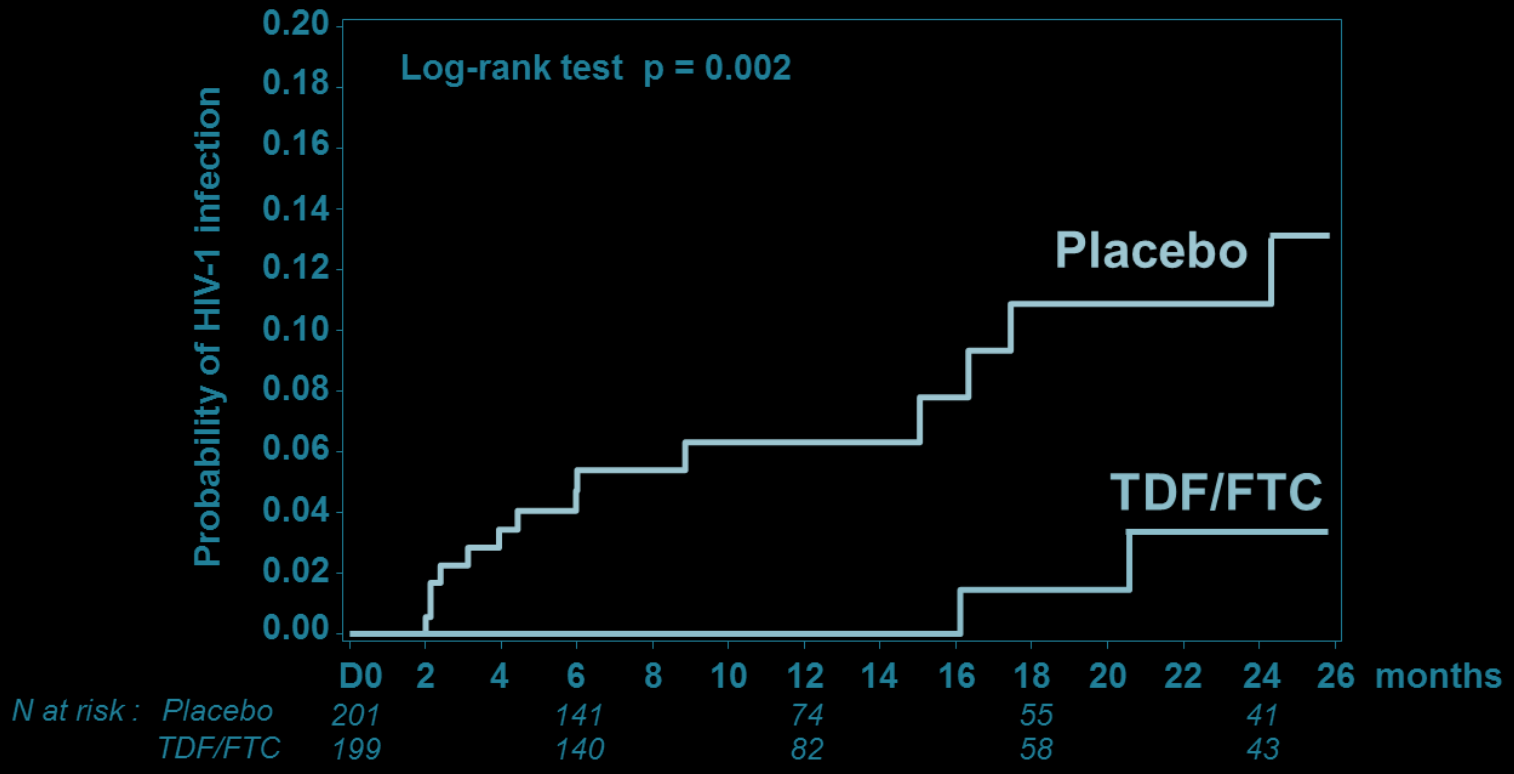
Baseline Characteristics

Characteristics (Median, IQR) or (n, %)	TDF/FTC n = 199	Placebo n = 201
Age (years)	35 (29-43)	34 (29-42)
White	190 (95)	184 (92)
Completed secondary education	178 (91)	177 (89)
Employed	167 (85)	167 (84)
Single	144 (77)	149 (81)
History of PEP use	56 (28)	73 (37)
Use of psychoactive drugs*	85 (44)	92 (48)
Circumcised	38 (19)	41 (20)
Infection with NG, CT or TP**	43 (22)	59 (29)
Nb sexual acts in prior 4 weeks	10 (6-18)	10 (5-15)
Nb sexual partners in prior 2 months	8 (5-17)	8 (5-16)

in last 12 months: ecstasy, crack, cocaine, crystal, speed, GHB/GBL

** NG: Neisseria gonorrhoeae, CT: Chlamydia trachomatis, TP: Treponema pallidum

KM Estimates of Time to HIV-1 Infection (mITT Population)



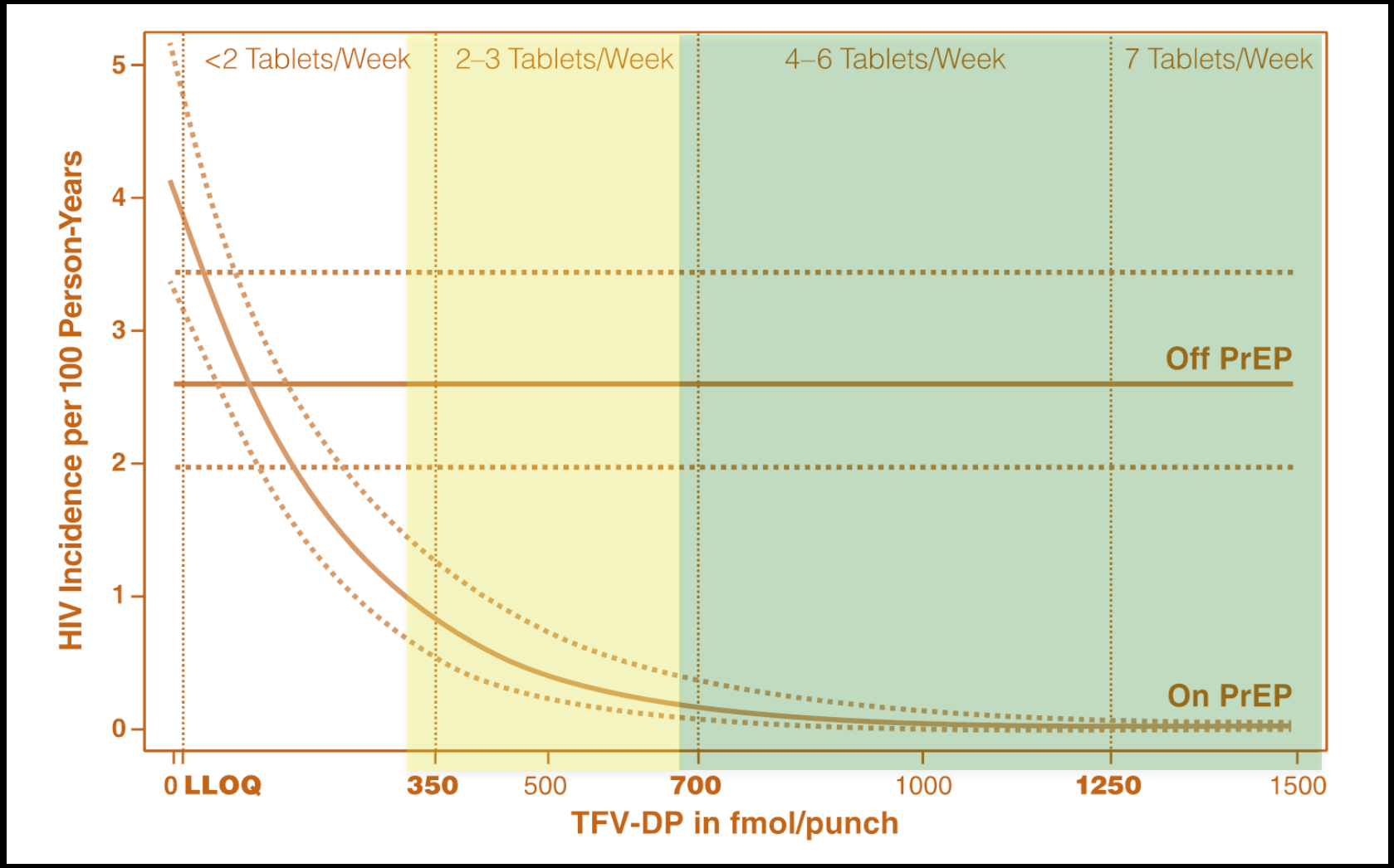
Mean follow-up of 13 months: 16 subjects infected

14 in placebo arm (incidence: 6.6 per 100 PY), **2 in TDF/FTC arm** (incidence: 0.94 per 100 PY)

86% relative reduction in the incidence of HIV-1 **(95% CI: 40-99, p=0.002)**

NNT for one year to prevent one infection : 18

HIV Incidence and Drug Concentrations



Follow-up %	**26%**	**12%**	**21%**	**12%**
Risk Reduction	**44%**	**84%**	**100%**	**100%**
95% CI	**-31 to 77%**	**21 to 99%**	**86 to 100% (combined)**	

Grant et al, *Lancet Infectious Diseases*, published online July 22, 2014

Near Elimination of HIV Transmission in a Demonstration Project of PrEP and ART

Jared M. Baeten, Renee Heffron, Lara Kidoguchi, Nelly Mugo,
Elly Katabira, Elizabeth Bukusi, Stephen Asiimwe,
Jessica E. Haberer, Deborah Donnell, Connie Celum,
for the Partners Demonstration Project Team

CROI 2015, Seattle

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PrEP as a Bridge to ART

- For couples initiating ART at enrollment, PrEP is offered through 6 months, then stopped:

- For couples in which the infected partner delays or declines ART, PrEP is continued until 6 months after ART initiation:

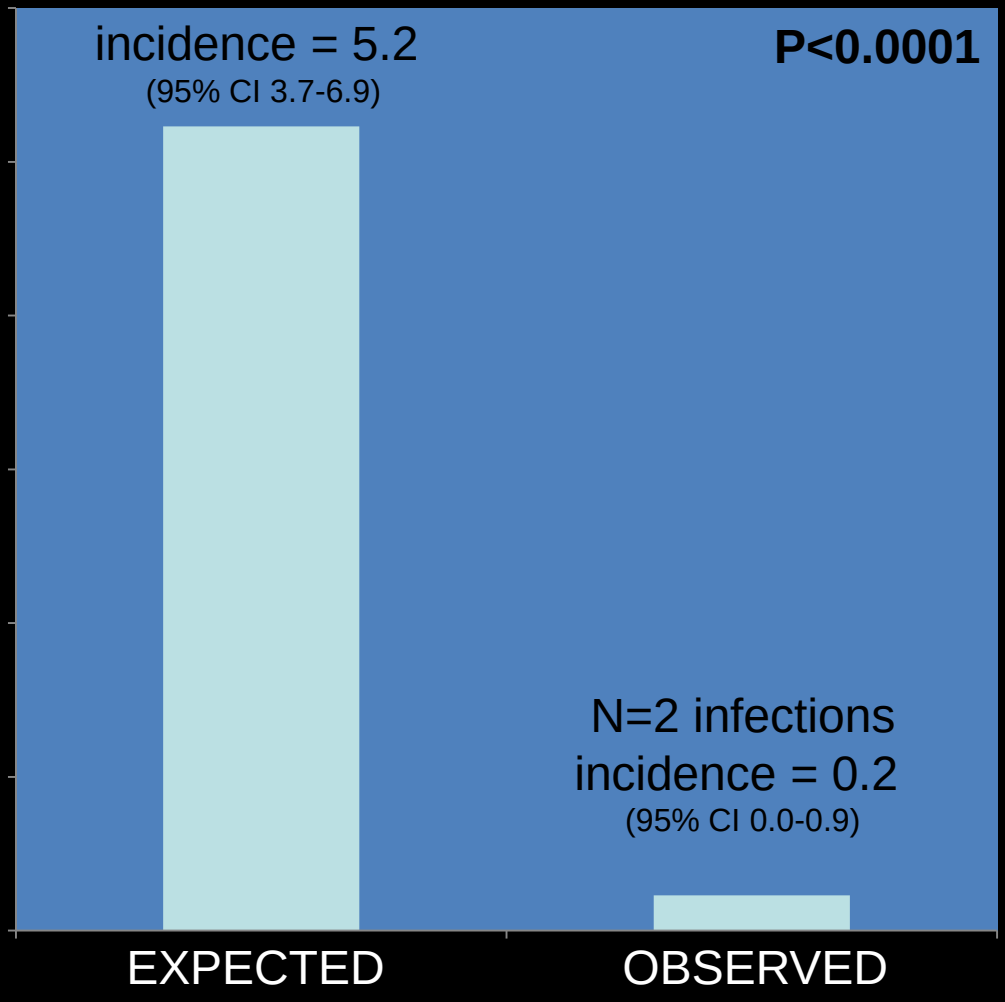
Results: Participant Characteristics

- Between Nov 2012 and Aug 2014, 1013 couples were enrolled. Characteristics are consistent with elevated HIV risk:

Characteristic	% or median (IQR)
Gender, HIV- partner	33% female / 67% male
Age	Median 30 years (IQR 26-36), *with 20% <25 years*
No children with study partner	56%
Unprotected sex in the prior month	65%
CD4 count, HIV+ partner	Median 436 (IQR 272-638), *with 41% >500 cells/μL*
Plasma HIV RNA, HIV+ partner	Median 37,095 (IQR 7058-104,462), *with 41% >50,000 copies/mL*

HIV Incidence

- The observed incidence is a **96% reduction** compared to expected, a result that was highly statistically significant



PrEP in Your Clinic?

- Open
- Special but not specialty
- Cost
- Systems

PrEP in Clinical Practice: What Are the Barriers to PrEP Uptake?

- Users
  - Unaware of HIV risk, PrEP availability, or how to access it
  - No or delayed access to clinical preventive care
  - Uninsured or unable to pay
  - Adherence challenges
  - Concern about disclosure and stigma
- Providers
  - Unaware of intervention
  - Uncertain how to deliver the intervention
  - Wary of complexity and time involved
  - Discomfort with assessing candidacy
  - Uncertain how to bill for intervention

CDC PrEP Guideline: For Which Patients Is PrEP Recommended?

- PrEP is recommended as one prevention option for the following adults at substantial risk of HIV acquisition
  - Sexually active MSM
  - Heterosexually active men and women
  - Injection drug users

	MSM	Heterosexual Women and Men	Injection Drug Users
Potential indicators of substantial risk of acquiring HIV infection	▪ HIV-positive sexual partner ▪ Recent bacterial STI ▪ High number of sex partners ▪ History of inconsistent or no condom use ▪ Commercial sex work	▪ HIV-positive sexual partner ▪ Recent bacterial STI ▪ High number of sex partners ▪ History of inconsistent or no condom use ▪ Commercial sex work ▪ In high-prevalence area or network	▪ HIV-positive injecting partner ▪ Sharing injection equipment ▪ Recent drug treatment (but currently injecting)

CDC. PrEP Guideline. 2014.

HIV Pre-Exposure Prophylaxis (PrEP) Risk Assessment Tool: Individual Risk Calculator

https://ictrweb.johnshopkins.edu/ictr/utility/prep.cfm

1. What percent of the time do you use condoms when having anal sex, including both receptive (bottom) and insertive (top)? **50** %

2. What percent of the time are you the insertive partner (top) when having anal sex? **50** %

3. On average, how many times per month do you have anal sex? **5**

4. Are you in a monogamous relationship with an HIV positive partner? Yes ○ No ●

4b. What is the HIV prevalence in your community? (click here for CDC estimates of HIV prevalence among MSM by metropolitan area, age, and race/ethnicity. If left blank, the national average of 19% will be used) **23** %

Risk of acquiring HIV this year:	
Without PrEP	1 in 36 (2.7%)
PrEP, expected adherence[1]	1 in 65 (1.5%)
PrEP, expected adherence + increase in risky behavior[2]	1 in 50 (2.0%)
PrEP, high adherence[3]	1 in 449 (0.2%)
PrEP, high adherence and 100% condom use	1 in 1347 (0.1%)

SFGH Family Health Center PrEP Essentials

Created by Lauren Wolchok & Robert Grant Contact: Robert.Grant@ucsf.edu

Indications (by history in the past 6 months):

Not in a mutually monogamous relationship with a recently tested HIV-partner, AND
any condomless vaginal or anal intercourse, OR
any h/o STI by lab testing or self report, OR
any HIV positive partner, OR injection drug use and sharing needles, OR
used PEP >=2x in the past year, OR asking for PrEP.

Caution:

1) HBV infx (can flare on d/c'ing PrEP; check HBsAb/Ag prior to initiating),
2) DM or uncontrolled HTN (consider checking Cr monthly),
3) Acute viral syndrome (send HIV RNA or defer PrEP for 4 weeks),
4) Pregnancy or Breastfeeding (discuss risks/benefits).

Contraindications:

1) eGFR < 60, **2)** HIV+, **3)** HIV exposure < 72hrs (PEP, then consider PrEP!)

Rx: Truvada 1 tab PO qday # 30, refill 3.

Counseling: address importance of daily adherence and follow-up, contraception, STI prevention, and should notify you if stops and restarts.

Efficacy key messages:

Rectal exposure: >96% effective w/ daily dosing, protection after 7 days.
Vaginal exposure: about 90% effective w/ daily dosing, protection after 20 days.

Side Effects:

1 in 10 may have GI side effects (N/V/abd pain); usually resolves by 1 month,
1 in 200 may have renal dysfunction (typically reversible if d/c PrEP),
1% average loss of bone mineral density; No increased risk of fractures.

Follow-up and monitoring:

Day 0: **HIV Ab, Cr, GC/CT, RPR**; consider HIV RNA, Upreg, A1C, HBsAg, HBV & HPV vax.
Week 1: Call, check if prescription filled, adherence, and insurance copay.
Month 1: HIV Ab, Cr, side effects, adherence.
Q 3 Months: HIV Ab, Cr, GC/CT, RPR, Upreg q3mos or prn, adherence, PrEP indications.

Documentation: ICD-9 V01.79: Viral Exposure; ICD-10 Z20.6: HIV Exposure.

Need Help? PrEPline, 855-448-7737. http://www.cdc.gov/hiv/basics/prep.html.

rev Jan 2015, card PDF available at http://hiv.ucsf.edu/care/perinatal.html

But How Is It Working So Far?

Scale-up of pre-exposure prophylaxis in San Francisco to impact HIV incidence

Robert M Grant, Jennifer Hecht, Henry Fisher Raymond, Stephanie Cohen, Albert Liu, Pierre Crouch,
Susan Buchbinder, Shannon Weber, Steven Gibson,
David Glidden.

Department of PUBLIC HEALTH

SAN FRANCISCO AIDS FOUNDATION

UCSF

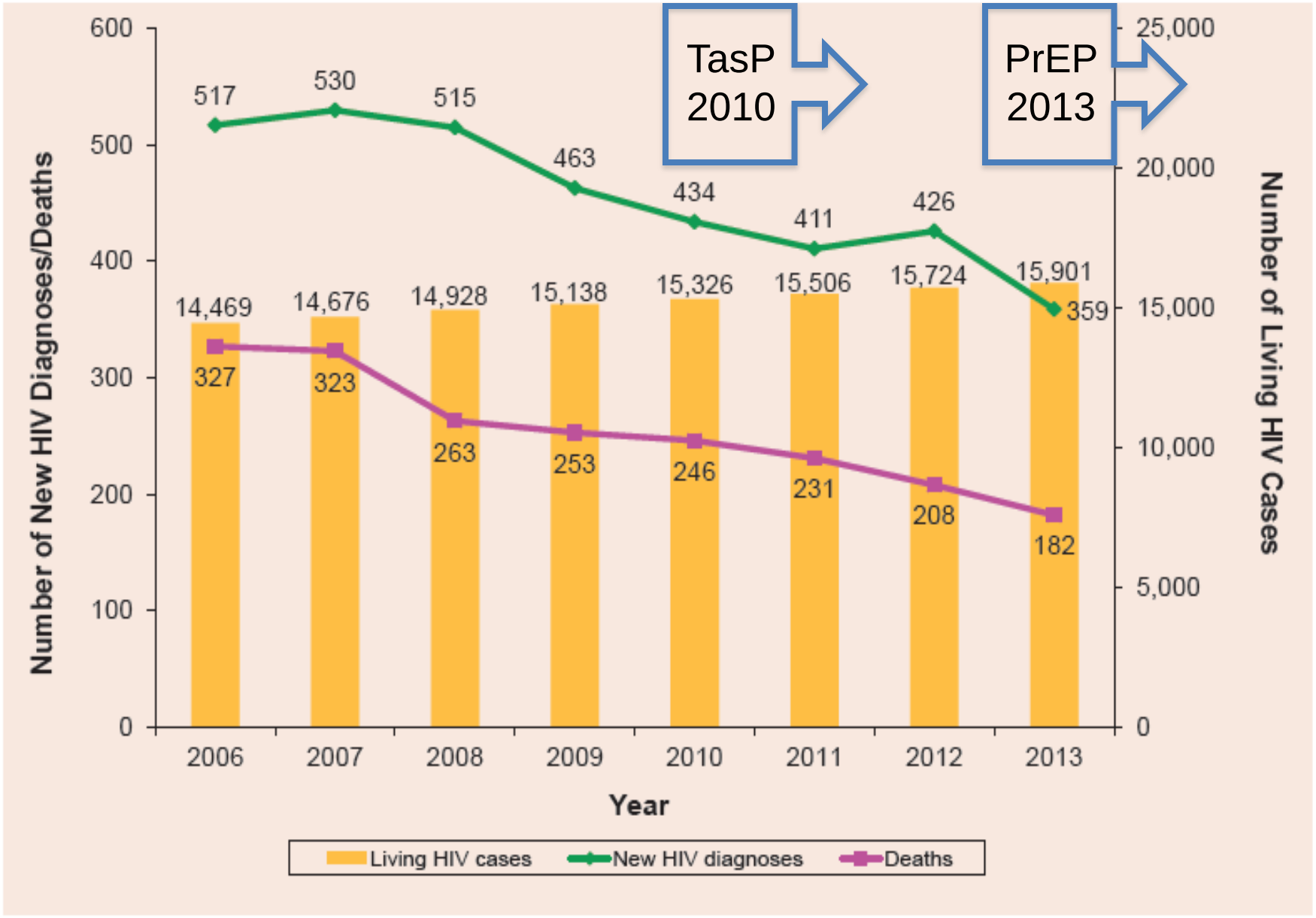
Grant CROI Abstract 25 Seattle 2015.

Background

- San Francisco (SF) is an early adopter and sentinel of HIV prevention strategies, including routine HIV testing, NAT testing, early HIV treatment, and grassroots initiatives such as seroadaptive sexual practices.
  - 94% of people living with HIV are diagnosed,[1]
  - 84 to 91% of diagnosed people received ART (some stop),[1]
  - 88% of those in care had VL < 200 copies/ml,[1]
  - Overall, 62% of people with HIV are virologically suppressed.[1]
- PrEP use started to rise in San Francisco in 2013.[2]
- Goals for PrEP scale-up have not yet been established.

1. SF DPH *HIV/AIDS Epidemiology Annual Report – 2013*, Published online Aug 2014;
2. Liu *PLoS Med* 2014 11(3):e1001613.

Figure 1.2 New HIV diagnoses, deaths, and prevalence, 2006-2013, San Francisco



Adapted from SF DPH, *2013 HIV/AIDS Epidemiology Annual Report*, August 2014.

PrEP Use by Sexual Practices in MSM:
San Francisco, 2014

Condomless AI Partners last 6 months	Street Survey (% EVER on PrEP)	NHBS (% ANY PrEP In 12 mos)	SFCC (% CURRENT PrEP Use)[1]
0	9%	3%	8%
1	10%	4%	10%
2	11%	17%	16%
3-5	25%	30%[2]	33%
6 or more	63%		46%
% on PREP	**15.5%**	**10.1%**	**11.2%[4]**
No. on PrEP		5,059	

1. SFCC asked specifically about condomless receptive anal intercourse partners.
2. NHBS collected detailed information on no more than 5 partners.
3. Percent using any PrEP in the past 12 months x 50,000 HIV negative population size.
4. Includes clients with missing data regarding ncRAI.

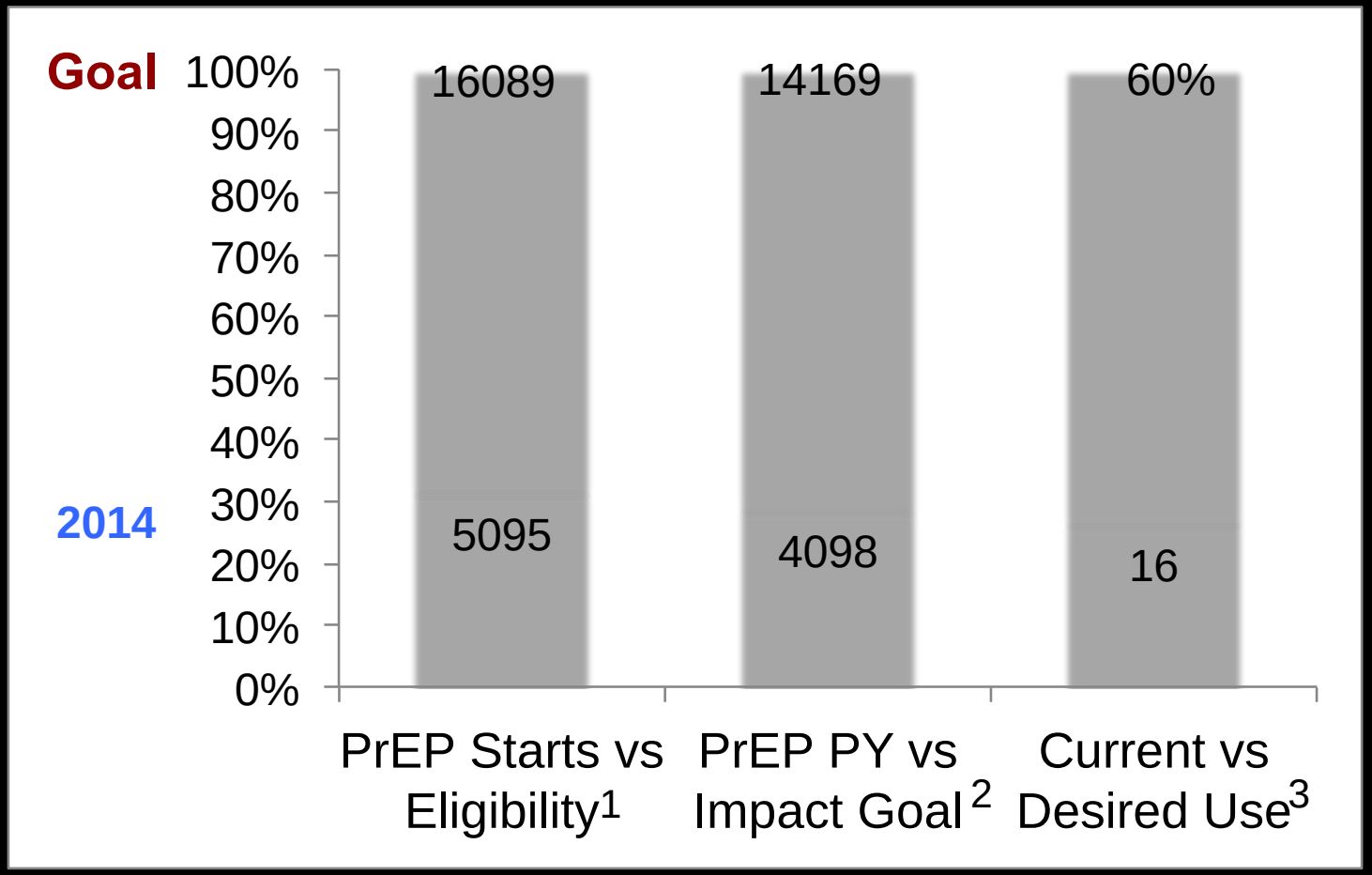
PrEP Eligibility and Use in SF

Group	People
HIV negative at substantial risk: MSM with 2+ non-condom anal sex (ncAI) partners[1] MSM with 0 ncAI and an STI in the last year[2] Female partners of HIV+ MSM[3] Trans women[4]	 12,589 2,325 653 522
TOTAL estimated PrEP eligibility	**16,089**
Estimated MSM reporting any PrEP in past year[5]	5,059
Percent of eligible people using PrEP in the past year	31%

Clinic 2014 survey x HIV negative MSM population of 50,000;

2. SF NHBS self report of STI among MSM with 0 ncAI in 2014 x HIV negative MSM population of 50,000;
3. SF NHBS MSM reporting female partners in 2014 x HIV positive MSM population of 14638.
4. IDU and ncRAI in est. 923 HIV negative trans women in SF, adapted from Wilson *BMCID* 2014 14:430.
5. SF NHBS 2014, data on file.

PrEP use increased in SF in 2013 and 2014, yet is still 1/3 of goals.



Any PrEP use in past year on NHBS in 2014 vs. number eligible.

2. PrEP py if 81% stay on PrEP, and py needed to reduce infections 70% relative to 2011,

3. Current and desired PrEP use at the SFAF STI clinic.

Conclusions: PrEP

- PrEP effectiveness was 86 to 96% when used in settings where ARV treatment is also available.
  - PrEP seroconversions occurred if already infected before PrEP is started, and after PrEP is stopped.
- New information is consistent with CDC guidance for how to start PrEP.
  - 7 tablets before full protection for rectal exposure,
  - 20 tablets for full protection for vaginal exposure,
  - May stop after 2 doses after last exposure?
- Demand (and need) for PrEP may be as large as demand (and need) for ARV treatment.
  - PrEP can be a bridge to treatment.
  - For couples and communities.

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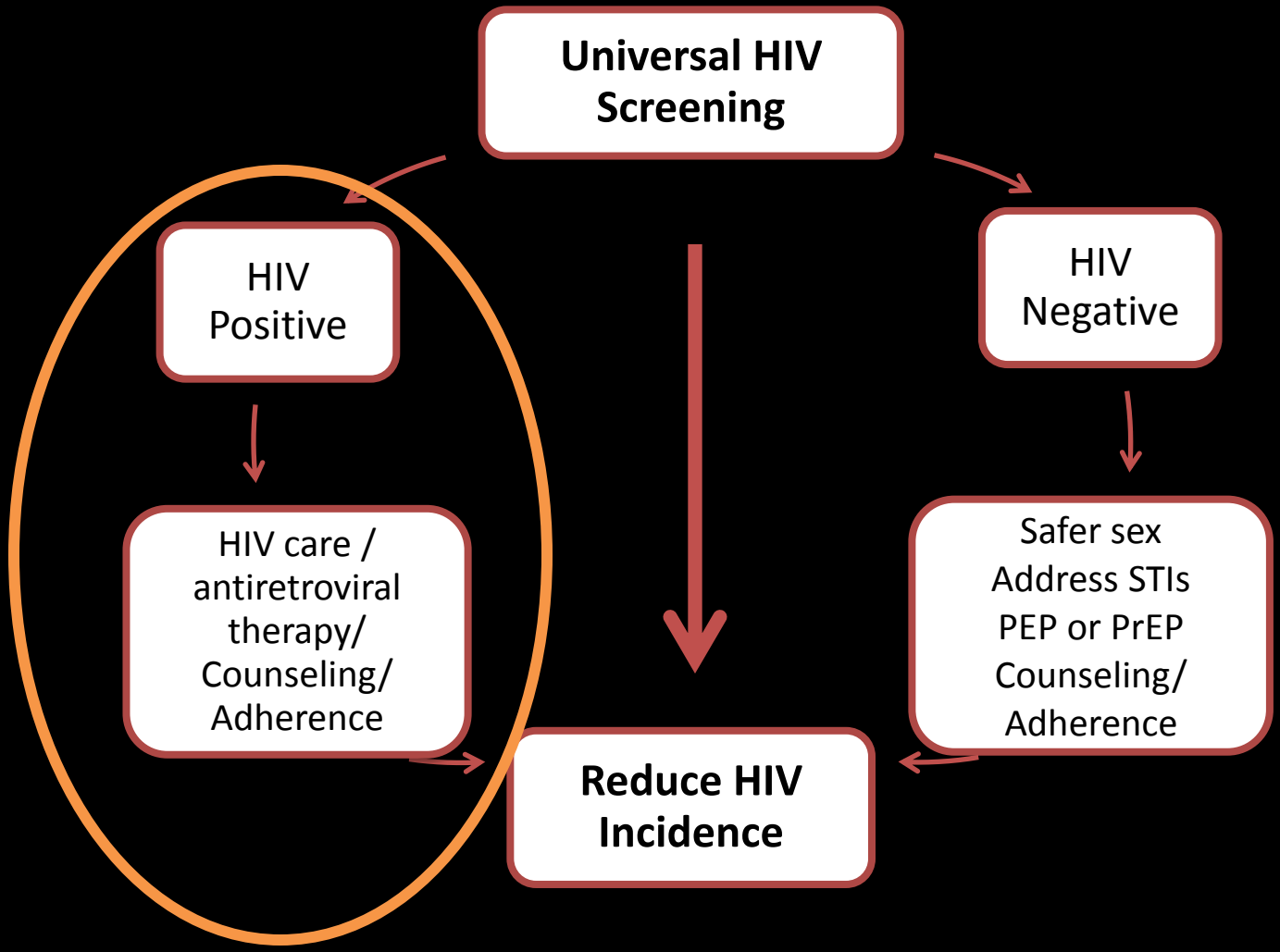
What if We Are Too Late?

HIV Infected at Baseline?



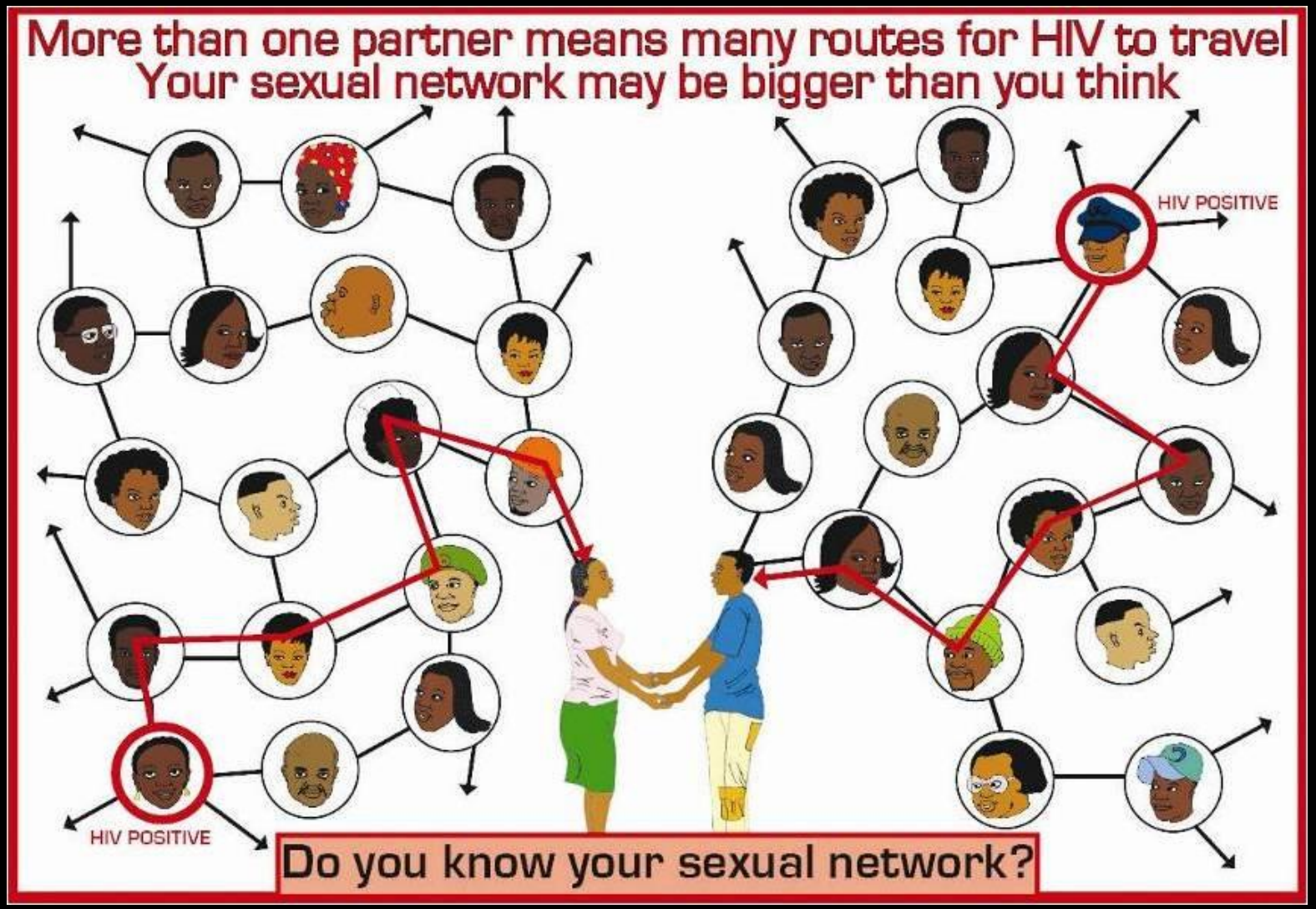
Early Antiretroviral Therapy Decreases HIV Transmission

1763 stable, healthy, serodiscordant couples, sexually active
CD4 count: 350 to 550 cells/mm^3

Early antiretroviral therapy CD4 350-550	Delayed antiretroviral therapy CD4 ≤250
4 infections	35 infections
1 linked, 3 unlinked	27 linked, 8 unlinked

96% relative risk reduction in <u>linked</u> transmissions

Seek, Test, Treat, and Retain



Barriers to STTR?

1. Competing needs of homeless/marginally housed
2. High prevalence of co-occurring mental and physical disorders
3. Sub-optimal access to healthcare
4. Limited funds for HIV care

Back to Bizz

- 48 year old homeless man with AIDS, T cells 50 (8), VL 120,000 copies/ml, Hep C GT 1a with cirrhosis, personality disorder, polysubstance abuse, including opioid dependence with IV Heroin use

Which of the following statements is most accurate regarding the management of this HIV-infected homeless individual?

A- Opioid replacement therapy (eg Buprenorphine) would not have an impact on his HIV control

B- Homeless (or marginally-housed individuals) have uniformly equal rates of adherence to ARV's as those adequately housed

C- In the USA, HIV infection is more prevalent among the homeless than it is in the overall population

D- Incentive programs such as cash and food have not been successful in improving adherence to ARV's

Bizz

- Abscess incised and drained
- Offered inpatient residential treatment program
- Adherence counseling
- Broke hip skating into pot hole
- Continues to use IV meth…

What Do *YOU* Think is The Ideal Clinic?

HIV Homeless Clinic Components

- Proximity
- Flexible with drop in hours
- Substance abuse treatment
- Psychiatry
- Intensive case management
- Colloaborative/link with jails
- Database Management
- Outreach/street medicine
- Pharmacist
- Dynamic HIV prevention program

It Doesn’t Take a Village….
It Takes the Village People

Bringing the Medical Home to HIV+ Homeless Populations

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Med-HEART
Medical Home-HIV Evaluation & Resource Team

Providing a medical home for people who are homeless and living with HIV

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Home

San Francisco Department of Public Health

The HOME Project: Building a medical home for people who are multiply diagnosed, HIV-positive, and homeless

Name of Grantee Organization: San Francisco Department of Public Health - HIV Health Services in partnership with the Tom Waddell Health Center and the Asian & Pacific Islander Wellness Center

Project Name: HIV Homeless Outreach Mobile Engagement (HOME) Project

Organization Description: A division of the San Francisco Department of Public Health

Goals/Objectives:
Key outcomes of the project include:

- Linking at least 90% of project clients to a patient-centered, culturally competent HIV medical home within one month of engagement in the program;
- Transitioning at least 65% of project clients to long term and supportive housing over the course of the program;
- Ensuring that at least 75% of clients with a psychiatric diagnosis will have seen a psychiatrist and will be on a monitored psychotropic regimen within three months of engagement with the multidisciplinary team;
- Ensuring that at least 50% of chronic substance users will be enrolled in a medical substance abuse treatment plan within three months of engagement with the multidisciplinary team.

Catchment Area: San Francisco, California

Recorded webinars for those who work to help clients who are homeless find and retain housing.

News

Webinar: What to Do When Housing is in Jeopardy?

Webinar: You're Housed! Now What? Keeping clients on track once they are housed

New Minority AIDS Initiative Funding Opportunity - May 2014

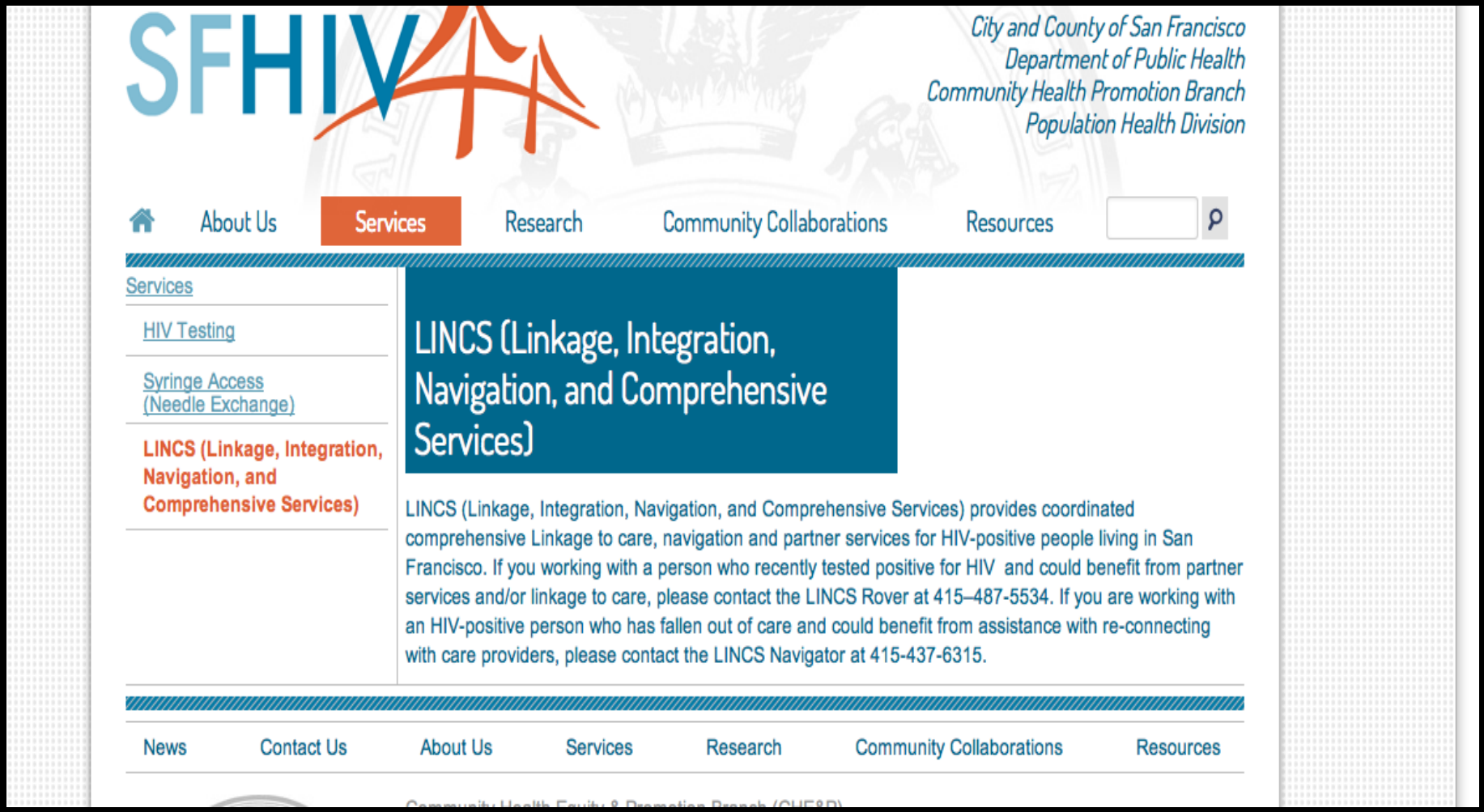
Housing and Health Connection Recorded Webinar Available

The ACA's Impact And The

Forensic AIDS Project (FAP)

FOTEP

LINCS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City and County of San Francisco
Department of Public Health
Community Health Promotion Branch
Population Health Division
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Syringe Access (Needle Exchange)
LINCS (Linkage, Integration, Navigation, and Comprehensive Services)
LINCS (Linkage, Integration, Navigation, and Comprehensive Services)
LINCS (Linkage, Integration, Navigation, and Comprehensive Services) provides coordinated comprehensive Linkage to care, navigation and partner services for HIV-positive people living in San Francisco. If you working with a person who recently tested positive for HIV and could benefit from partner services and/or linkage to care, please contact the LINCS Rover at 415–487-5534. If you are working with an HIV-positive person who has fallen out of care and could benefit from assistance with re-connecting with care providers, please contact the LINCS Navigator at 415-437-6315.
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