Let’s Talk About PrEP

Jorge Mera, MD, FACP
Whitney Essex, MSN, FNP-BC

Outline

- What is PrEP? and why do we need it?
- HIV Status in the USA
- What now?

What is PrEP?

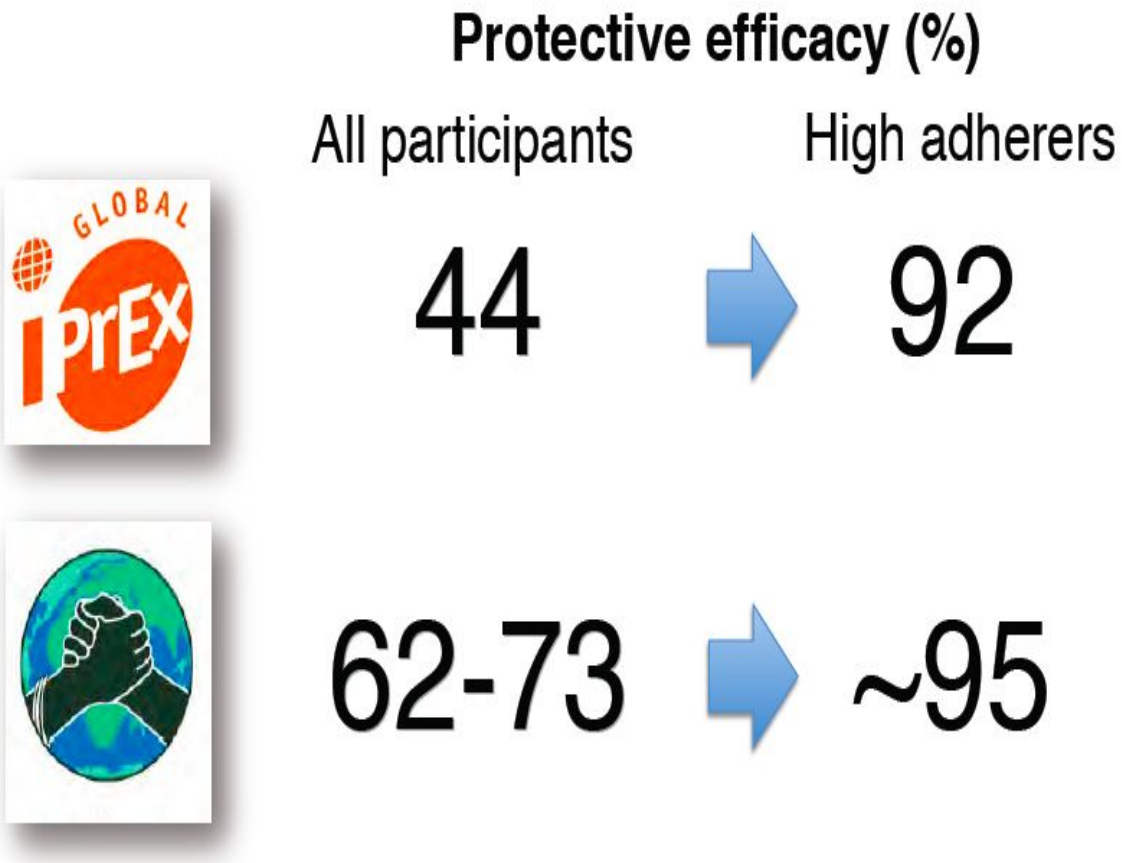
- ***PrEP is*** when HIV negative people at very high risk for acquiring HIV take one pill daily (tenofovir/emtricitabine) to lower their chances of getting infected when exposed sexually or through injection drug use.
  - **Taken daily PrEP** can lower the risk of getting HIV from sex by more than 90% and from injection drug use by more than 70%

- ***PrEP Is not a substitution*** for other HIV prevention interventions such
  - Condoms
  - Behavioral risk reduction

- ***PrEP does not protect*** against other STIs

https://www.cdc.gov/hiv/basics/prep.html. **Accessed 1/26/2019**

Adherence is critical



iPrex – MSM
Partners PrEP – Heterosexual men and women

Grant RM, et al. *NEJM*. Dec 2010;363(27):2587-99
Baeten JM, et al. *NEJM*. Aug 2012;367(5):399-410

HIV in the US: The Facts

700,000
American lives lost to HIV since 1981

$20 billion
Annual direct health expenditures by U.S. government for HIV prevention and care

Without intervention and despite substantial progress another

400,000

Americans will be newly diagnosed over 10 years despite the available tools to prevent infection

EARLY DIAGNOSIS IS ESSENTIAL TO END THE HIV EPIDEMIC

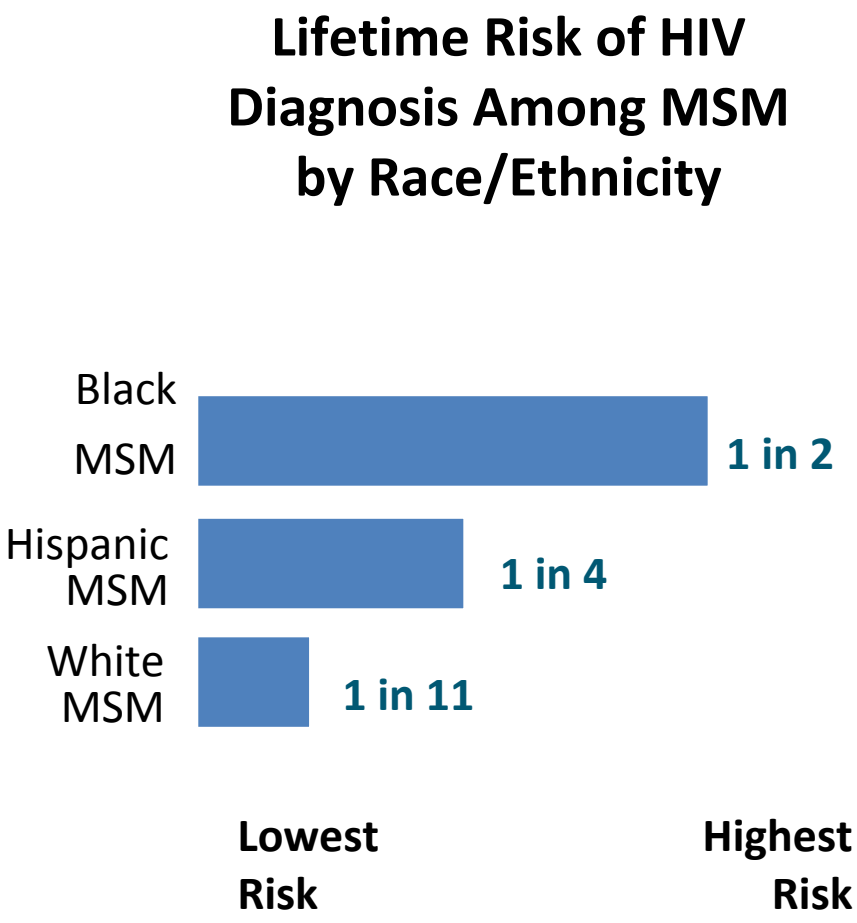
- **1 in 2** people with HIV have the virus at least 3 years before diagnosis
- **1 in 4** people with HIV have the virus at least 7 years before diagnosis
- **1 in 5** people with HIV are diagnosed with advanced disease (AIDS)
- **7 in 10** people with HIV saw a healthcare provider in the 12 months prior to diagnosis and failed to be diagnosed

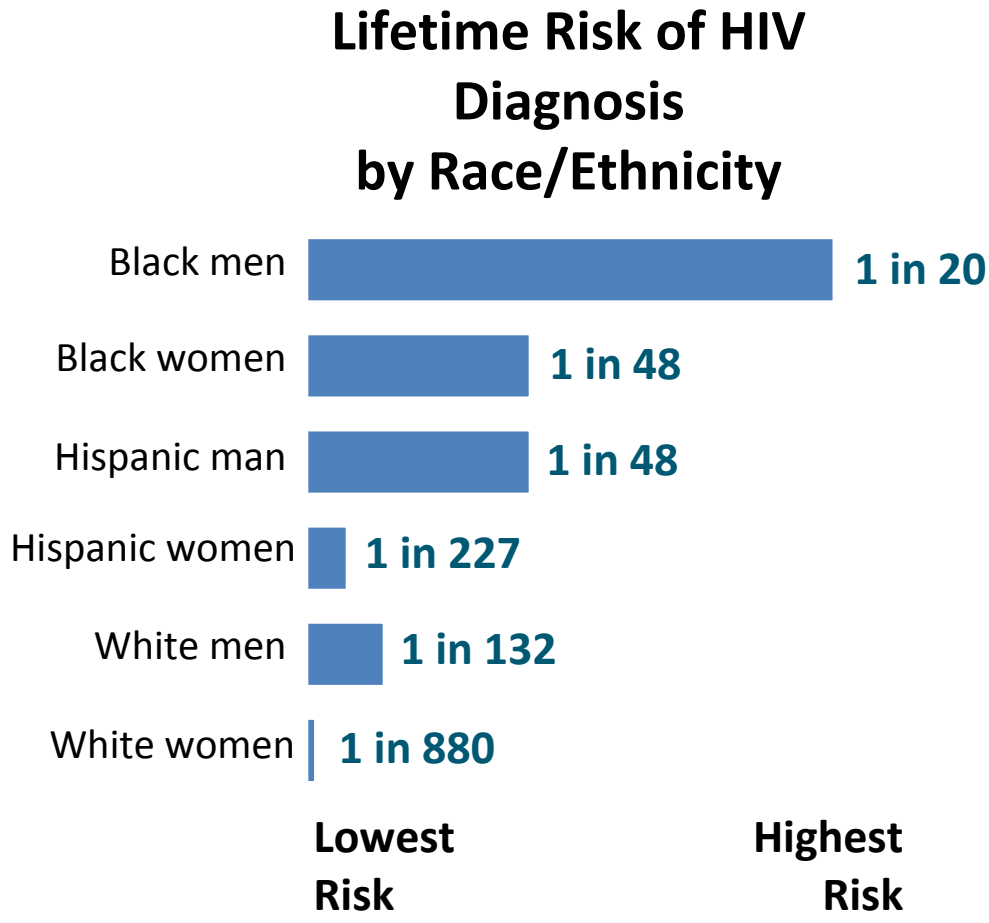
87% of new HIV infections are transmitted from people who don't know they have HIV or are not retained in treatment

Daily et al., MMWR Weekly Report, 2017; Skarbinski et al., JAMA, 2015; Gopalappa et al., Med Decision Making, 2017

Ending the HIV Epidemic | www.hiv.gov

Lifetime Risk of HIV Diagnosis by Race/Ethnicity in the United States

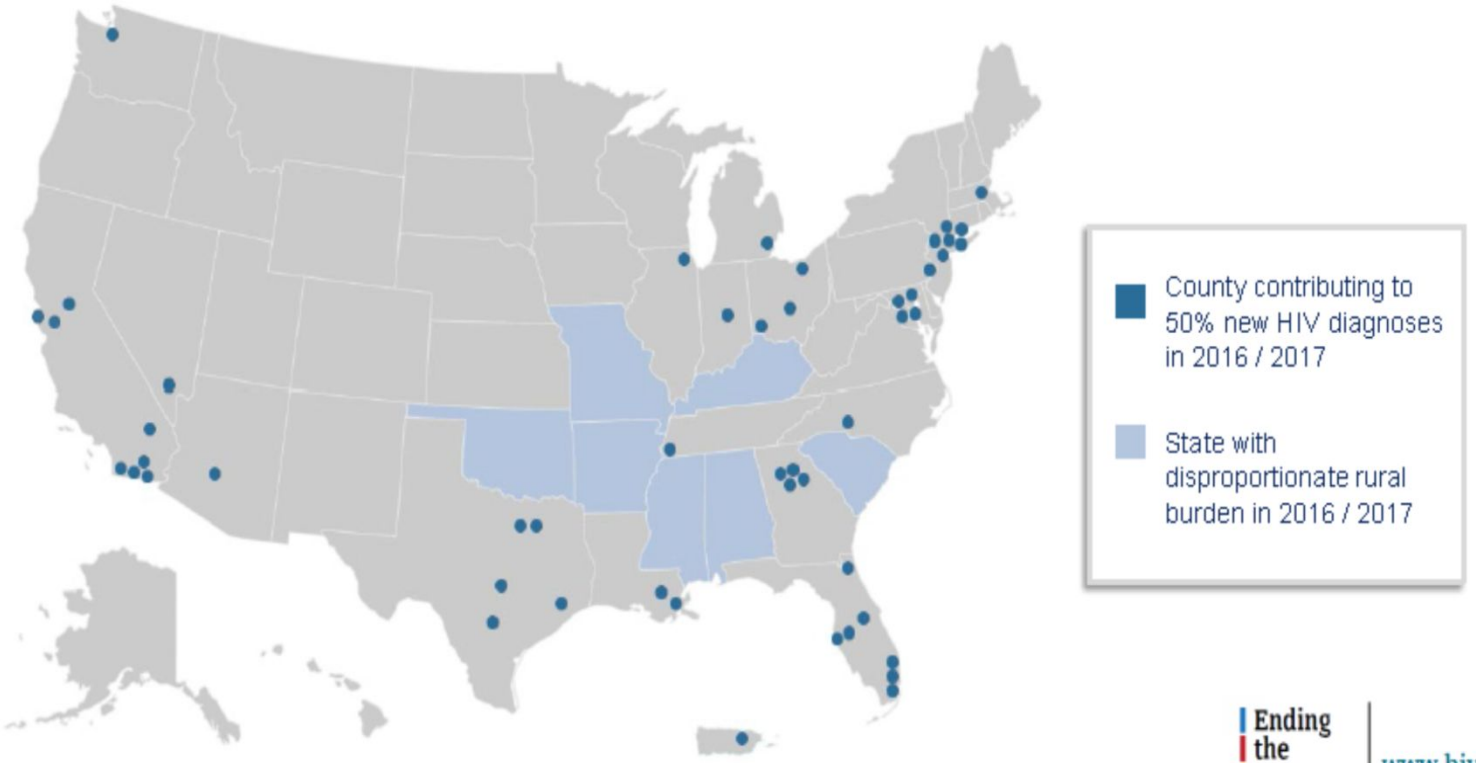




CDC. CROI 2016 resources. Van Handel. CROI 2016. Abstr 966. Hoover. CROI 2016. Abstr 967.

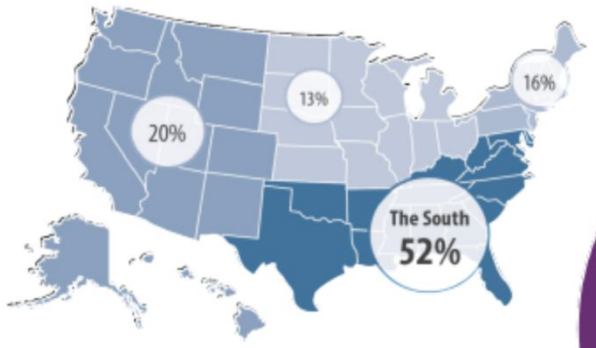
Slide credit: clinicaloptions.com

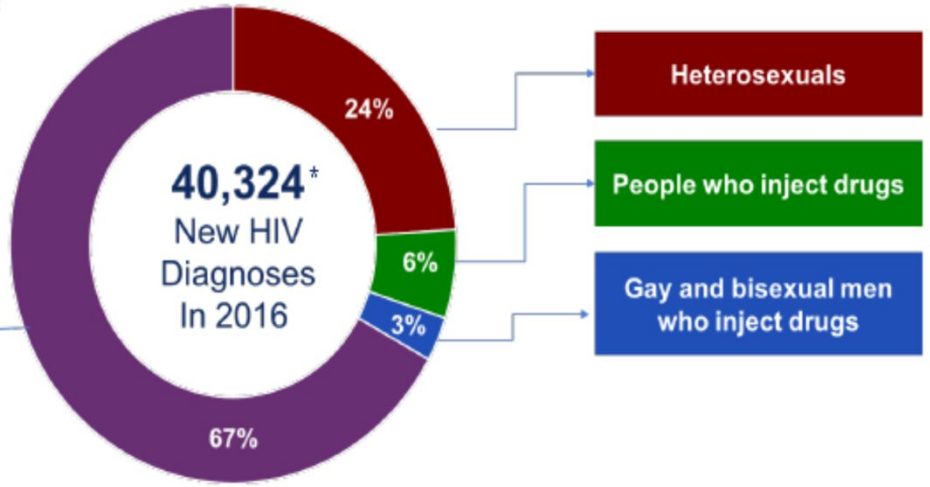
48 COUNTIES, 7 STATES WITH SUBSTANTIAL RURAL HIV BURDEN, DC AND SAN JUAN ACCOUNT FOR 50% OF NEW DIAGNOSES



HIV: More Facts

HIV DIAGNOSES ACROSS SPECIFIC GROUPS





In 2016, **African Americans** accounted for 44% of HIV diagnoses, but comprised 12% of U.S. population

From 2012-2016, HIV diagnoses among **Hispanic/Latino** MSM age 25-34 years increased 22%

From 2012-2016, HIV diagnoses among **American Indian / Alaska Native** MSM increased 58%

* www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-supplemental-report-vol-23-4.pdf, all other data from https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2017-vol-29.pdf

Ending the HIV Epidemic | www.hiv.gov

ENDING THE HIV EPIDEMIC: A PLAN FOR AMERICA

GOAL:

75%
reduction in new HIV infections in 5 years

and at least

90%
reduction in 10 years.

PHASE 1: Focused effort to reduce new infections by 75% in 5 years

PHASE 2: Widely disseminated effort to reduce new infections by 90% in the following 5 years

PHASE 3: Intense case management to maintain the number of new infections at < 3,000 per year

ACHIEVING THE GOALS

DIAGNOSE
All people with HIV as early as possible after infection

TREAT
The infection rapidly and effectively to achieve sustained viral suppression

PROTECT
People at highest risk of HIV with potent evidence-based interventions

RESPOND
Rapidly and effectively to clusters and outbreaks of new HIV infections

HIV WORKFORCE
A boots-on-the-ground team ensures implementation of Ending the HIV Epidemic plans

Ending the HIV Epidemic | www.hiv.gov

Ask yourself: How do I fit in to the *Ending the Epidemic* plan?

Will I be able to find at risk patients?

Will I refer my patients to pharmacy or will I treat them myself?

Indications for PrEP

Men Who Have Sex With Men (MSM)	1. HIV positive partner* 2. Recent STI (particularly syphilis) 3. Multiple sex partners 4. Inconsistent/no condom use 5. Commercial Sex Work
Heterosexual Men & Women	1-5. Same as above 6. High prevalence area
People Who Inject Drugs (PWID)	1. HIV positive injection partner 2. Shares injection equipment 3. Recent drug treatment + still injecting

*Particularly if HIV-partner does not have an undetectable HIV viral load on HAART

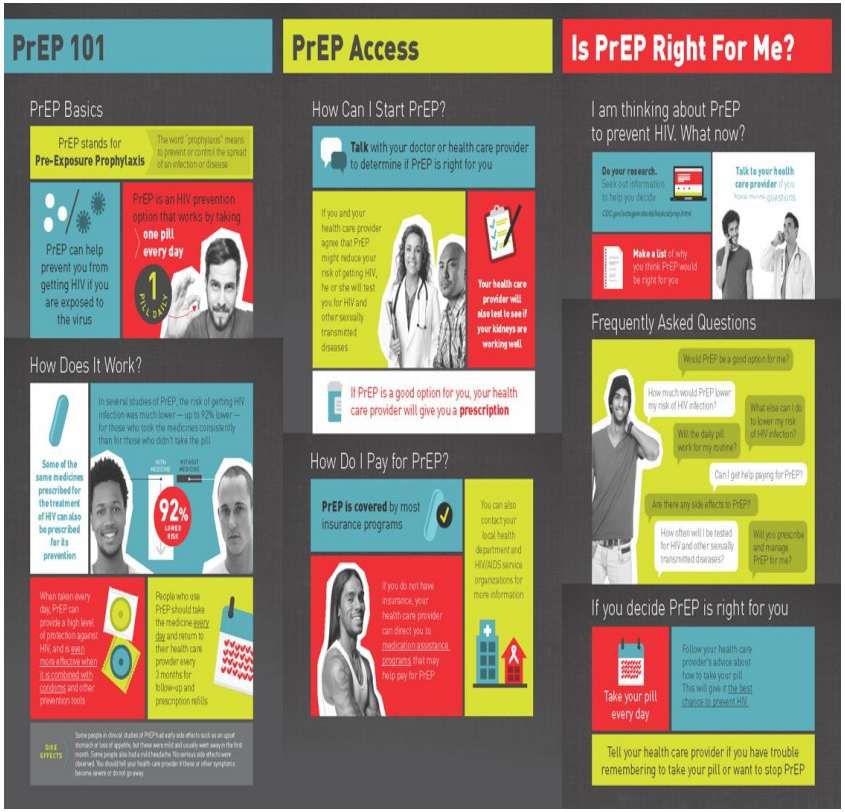
https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2017.pdf

Step 1: Assess Need

If you are a talker

- Get to know your patient and her/his risks
- Ask lots of questions!!
- Educate about signs and symptoms of STIs
- Ask about drug and alcohol use around sex
- Don't forget about shared paraphernalia

If you are a listener



Step 2: Determine clinical eligibility

Viral hepatitis

- ❑ HBsAg
- ❑ HBsAb
- ❑ HCV Ab

CAUTION if active HBV!

Renal function

- ❑ Creatinine
- ❑ eCrCl

eCrCl must be ≥ 60 mL/min

HIV status

- ❑ **Ag/Ab (4th gen)**
- ❑ Rapid **(blood)**
- ❑ ELISA / EIA

Must be HIV(–)

→ Maybe RNA, too?

US Public Health Service. PrEP Guideline – 2014.

Step 3: Screen for STIs

If not already done in prior 3-6 months:

- ❑ RPR for syphilis
- ❑ Gonorrhea and chlamydia
  - NAA testing preferred
  - **Extragenital sites too!**

Step 4: Counsel the patient

Establish ground rules

- Ongoing relationship – **quarterly** visits
- No HIV test? No prescription!

"Startup syndrome"

- Flatulence, nausea / GI upset, headache
- Symptoms resolve within first 30d, for most

US Public Health Service. PrEP Guideline – 2014.

Step 5: Prescribe & follow-up

First Rx: Thirty days, NO refills

Return to clinic in 30 days

- ❑ Adherence?
- ❑ Side effects?
- ❑ Risk behaviors?

2nd Rx: Thirty days, 2 refills

Step 6: Maintenance & reassessment

At least every 3 months

- ❑ Assess adherence, side effects, risk behavior
- ❑ Repeat HIV testing
- ❑ Prescription renewal

At least every 6 months

- ❑ Check creatinine and eCrCl
- ❑ Screen for STIs, if not already done
- ❑ Determine need – "**seasons of risk**"

Conclusion

- PrEP is one component of the HIV preventive care continuum
- PrEP should be considered for all individuals who are at risk for HIV acquisition
  - Includes subgroups of MSM, heterosexual men and women, and PWIDs as well as subgroups of special populations such as adolescents, pregnant/ breastfeeding women, and transgender persons
- More than **90%** reduction in risk of sexual HIV acquisition and **> 70%** reduction among PWIDs with high adherence to recommended daily dosing