



# PRE-EXPOSURE PROPHYLAXIS FOR HIV

---

Sean Kelly, MD

Vanderbilt Division of Infectious Diseases

January 27, 2022



# Objectives

- Background of PrEP
- Importance of PrEP in the Southeast
- Provider and patient barriers to PrEP
- PrEP eligibility
- PrEP prescribing
  - Counseling
  - Adverse effects
  - Lab monitoring



# Secondary Objectives

- Increase your confidence in providing PrEP!
- Provide PrEP!





# What is PrEP



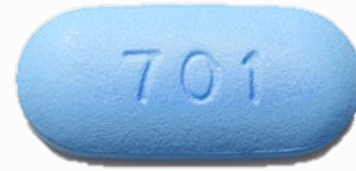
# PrEP is primary prevention

It is intended to  
**PREVENT** the onset of a  
disease in those who are  
**AT RISK**

It is a concept, fulfilled by  
medication that has been FDA-  
approved for this purpose



# TDF/FTC



- Fixed dose combination of tenofovir disoproxil fumarate (**TDF**) 300mg/emtricitabine (**FTC**) 200mg
- Developed by Gilead and marketed as Truvada®
- FDA-approved for use as PrEP for adults on June 6, 2012
- FDA-approved for use as PrEP for adolescents on May 15, 2018
- Generic TDF/FTC approved June 2017
  - Became available September 2020



# TAF/FTC (Descovy®)



- Similar to TDF/FTC
  - Truvada® = tenofovir **disoproxil fumarate** (TDF) + emtricitabine
  - Descovy® = tenofovir **alafenamide** (TAF) + emtricitabine
- Approved for PrEP October 2, 2019 **for non-vaginal sex**
- TAF achieves high intracellular concentrations, but lower (>10-fold) plasma and tissue concentrations than TDF
  - Lower risk of BMD loss and reduced creatinine clearance
  - Can be used in chronic kidney disease (CrCl >30 mL/min)



# LA cabotegravir

- Long-active injectable
  - Optional oral lead-in
  - 2 doses 1 month apart, then every 2 months
    - Consecutive doses can be given 7 days before or after target date
- Approved 12/20/21
- Demonstrated superiority to TDF/FTC
- Injection site reactions are common



[https://gskpro.com/content/dam/global/hcpportal/en\\_US/Prescribing\\_Information/Apretude/pdf/APRETUDE-PI-PIL-IFU.PDF](https://gskpro.com/content/dam/global/hcpportal/en_US/Prescribing_Information/Apretude/pdf/APRETUDE-PI-PIL-IFU.PDF)





# LA cabotegravir

- Long-active injectable
  - Optic
  - 2 dos  
mont
  - Co  
be
- Approv
- Demor
- Injection site reactions are common

Since LA cabotegravir is not yet widely used, this talk will focus on oral PrEP



[https://gskpro.com/content/dam/global/hcpportal/en\\_US/Prescribing\\_Information/Apretude/pdf/APRETUDE-PI-PIL-IFU.PDF](https://gskpro.com/content/dam/global/hcpportal/en_US/Prescribing_Information/Apretude/pdf/APRETUDE-PI-PIL-IFU.PDF)



Which should I use???



TDF/FTC (TRUVADA®)		TAF/FTC (DESCOVY®)	
Pros	Cons	Pros	Cons
More data on efficacy, PK, dosing strategies...	Low risk of renal dysfunction	Lower risk of renal dysfunction	Fewer data, less experience
More experience	Reversible bone mineral density loss	Lower risk of bone mineral density loss	Can't be used for vaginal sex yet
Covered by all insurance	Larger pill size	Smaller pill size	Less insurance coverage
Can be used for vaginal and anal sex	Can't be used if eGFR <60	Faster time to therapeutic level	No data on 2-1-1 dosing
More brand recognition		Can be used if eGFR >30	Weight gain?
Generic available			Not cost effective



# Primary Prevention

	HIV	Myocardial infarction or Stroke
Assess risk	Take a sexual history	Take a past medical, family, social history, check cholesterol and screen for diabetes, calculate 10-year ASCVD risk by 2013 ACC/AHA guidelines
Laboratory evaluation	Serum creatinine, HIV screen	Comprehensive metabolic panel, cholesterol profile, hemoglobin a1c
Further risk reduction	Condom use, sexual health and substance use counseling, STI screening	Lifestyle and diet modification counseling, treat comorbid conditions (hypertension, diabetes), smoking cessation
Medication options	Truvada® Descovy®	Atorvastatin Rosuvastatin Pravastatin Pitavastatin Simvastatin Fluvastatin Aspirin



# Primary Prevention

	HIV	Myocardial Infarction
Assess risk	Take a sexual history	Take a family history, assess risk factors for the 10-year ASCVD risk by 2013 guidelines
Laboratory evaluation	Serum creatinine	Comprehensive metabolic panel, cholesterol profile, hemoglobin a1c
Further risk reduction	Counseling	Lifestyle and diet modification counseling, treat comorbid conditions (hypertension, diabetes), smoking cessation
Medication options	PrEP (e.g., Truvada®)	Atorvastatin Rosuvastatin Pravastatin Pitavastatin Simvastatin Fluvastatin Aspirin

**PREP IS EASY**



# PrEP is a PROGRAM

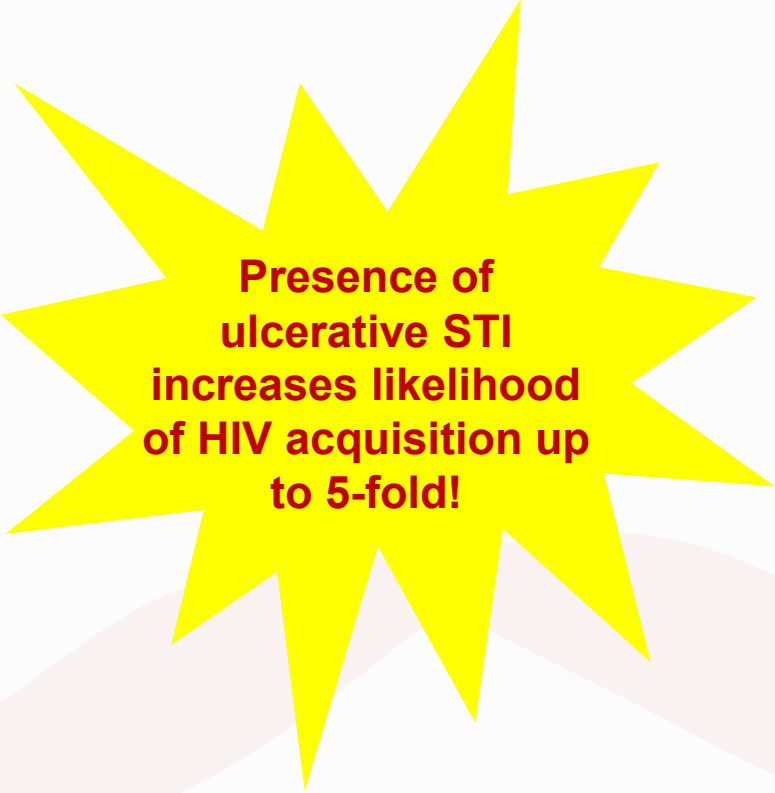
- Not only HIV prevention
- Involves comprehensive sexual healthcare
  - Screening and treatment for STIs
  - Hepatitis A and B vaccination
  - Counseling on STI prevention strategies





# STIs Facilitate HIV Transmission

- Disruption of mucosal integrity
- Increase HIV target cells in genital tract due to immune reaction to infection
- STIs promote HIV shedding in the genital tract



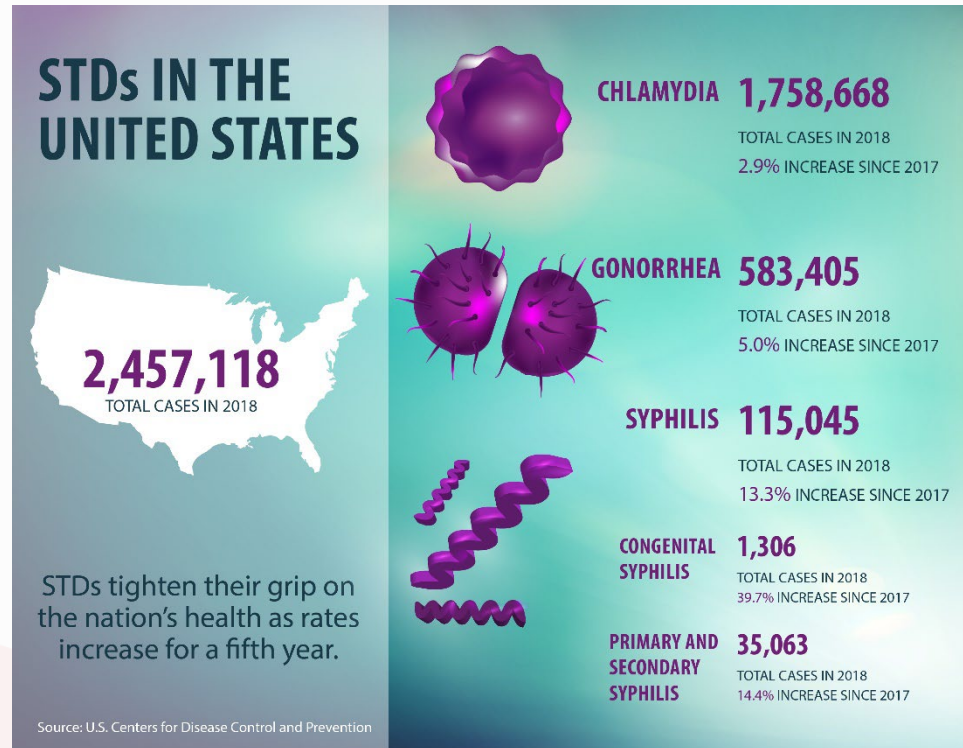
**Presence of ulcerative STI increases likelihood of HIV acquisition up to 5-fold!**

<https://www.cdc.gov/std/hiv/stds-and-hiv-fact-sheet-press.pdf>



# Be afraid!

- PrEP does NOT protect against bacterial and other STIs
- These are at record highs!





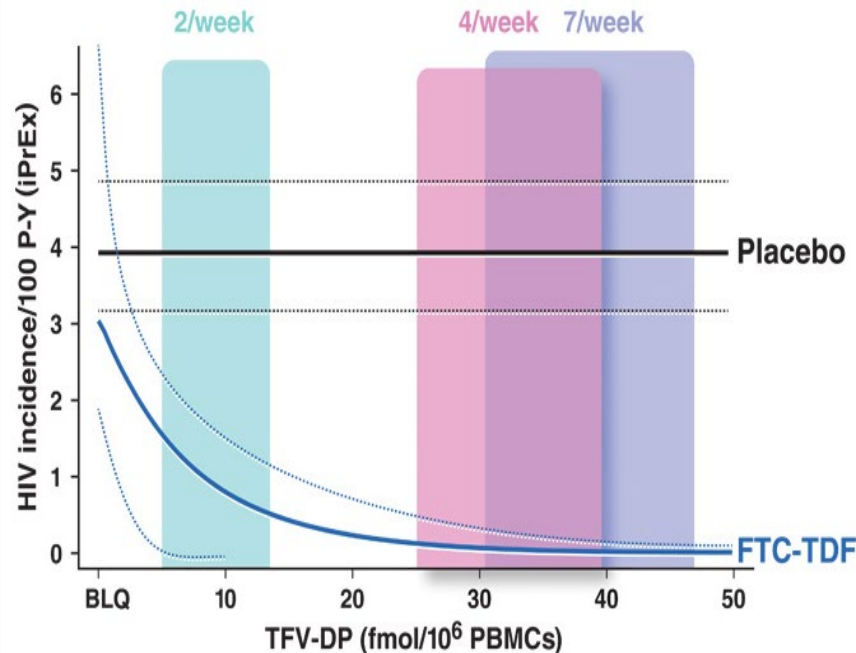
# PrEP efficacy studies summary

Study	Population	Dosing	Risk Reduction
iPrEX	MSM	Daily	44% (92% with ideal adherence)
TDF2	Heterosexual men and women	Daily	62.2% (100% in open-label extension with regular follow-up)
Partners	Sero-discordant heterosexual couples	Daily	75% (90% with ideal adherence)
Bangkok Tenofovir Study Group	Intravenous drug users	Daily	48.9% (74% with ideal adherence)
IPERGAY	MSM	On-demand	86%





# Dosing matters

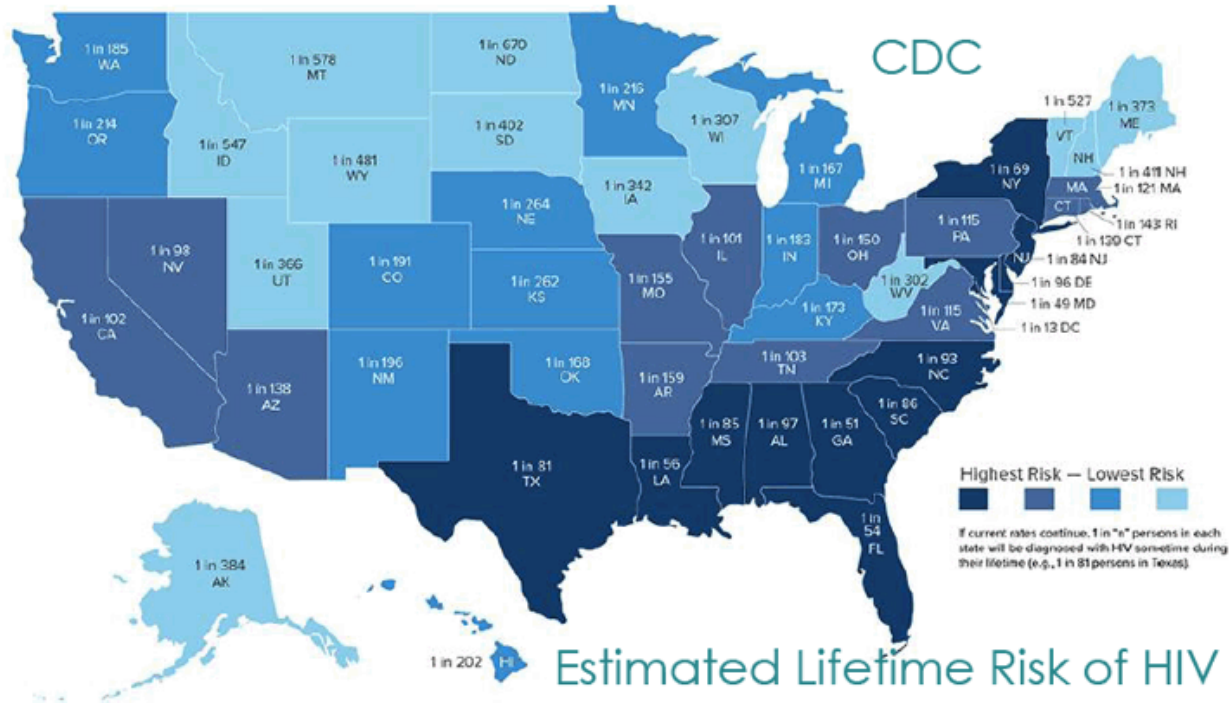


- Using drug concentrations in iPrEX and STRAND, pharmacokinetic models predict:
  - **76%** risk reduction with 2 doses/week
  - **96%** with 4 doses/week
  - **99%** with 7 doses/week.

Anderson PL, Glidden DV, Liu A, Buchbinder S, Lama JR, Guanira JV, et al. Sci Transl Med. 2012;4: 151ra125.



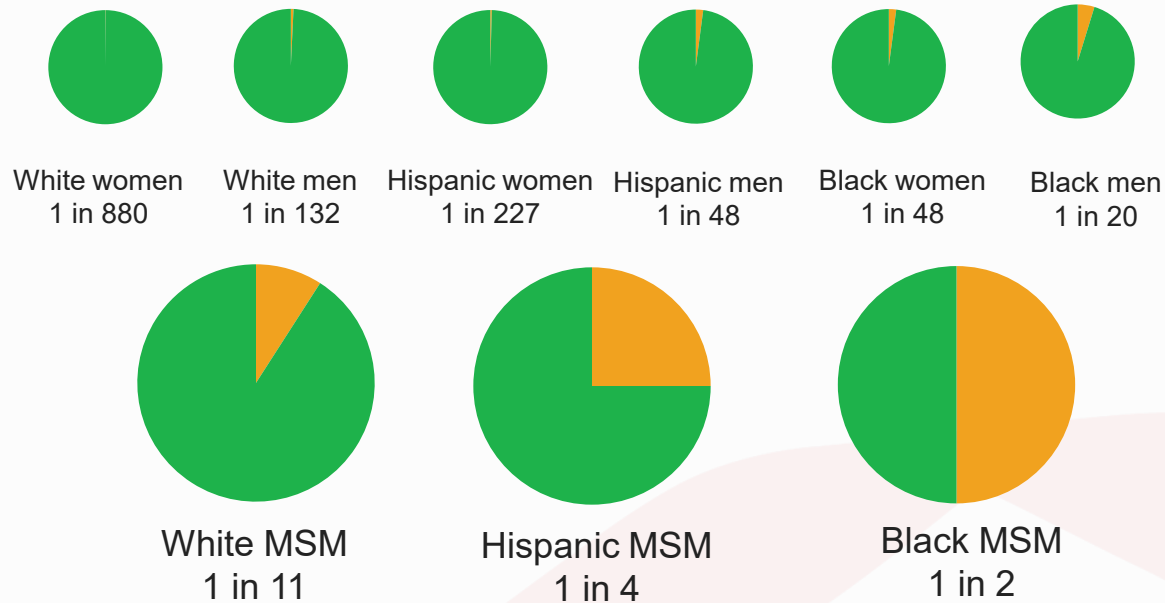
# Why PrEP Matters



The Southeast remains the region with the highest HIV incidence, which can be markedly reduced with widespread use of pre-exposure prophylaxis (PrEP) among high-risk individuals.



# HIV Risk by Race/Ethnicity and MSM

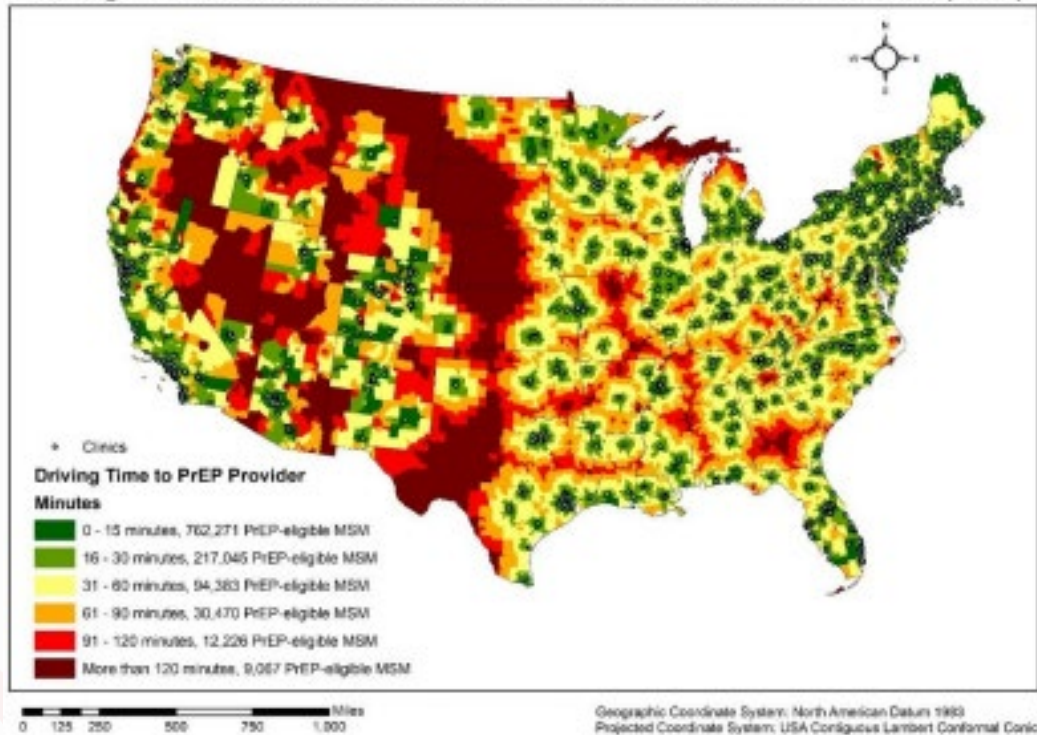


CDC, 23 Feb 2016: <http://www.cdc.gov/nchhstp/newsroom/2016/croi-press-release-risk.html>



# PrEP Deserts

Driving Time to Nearest PrEP Provider for men who have sex with men (MSM)

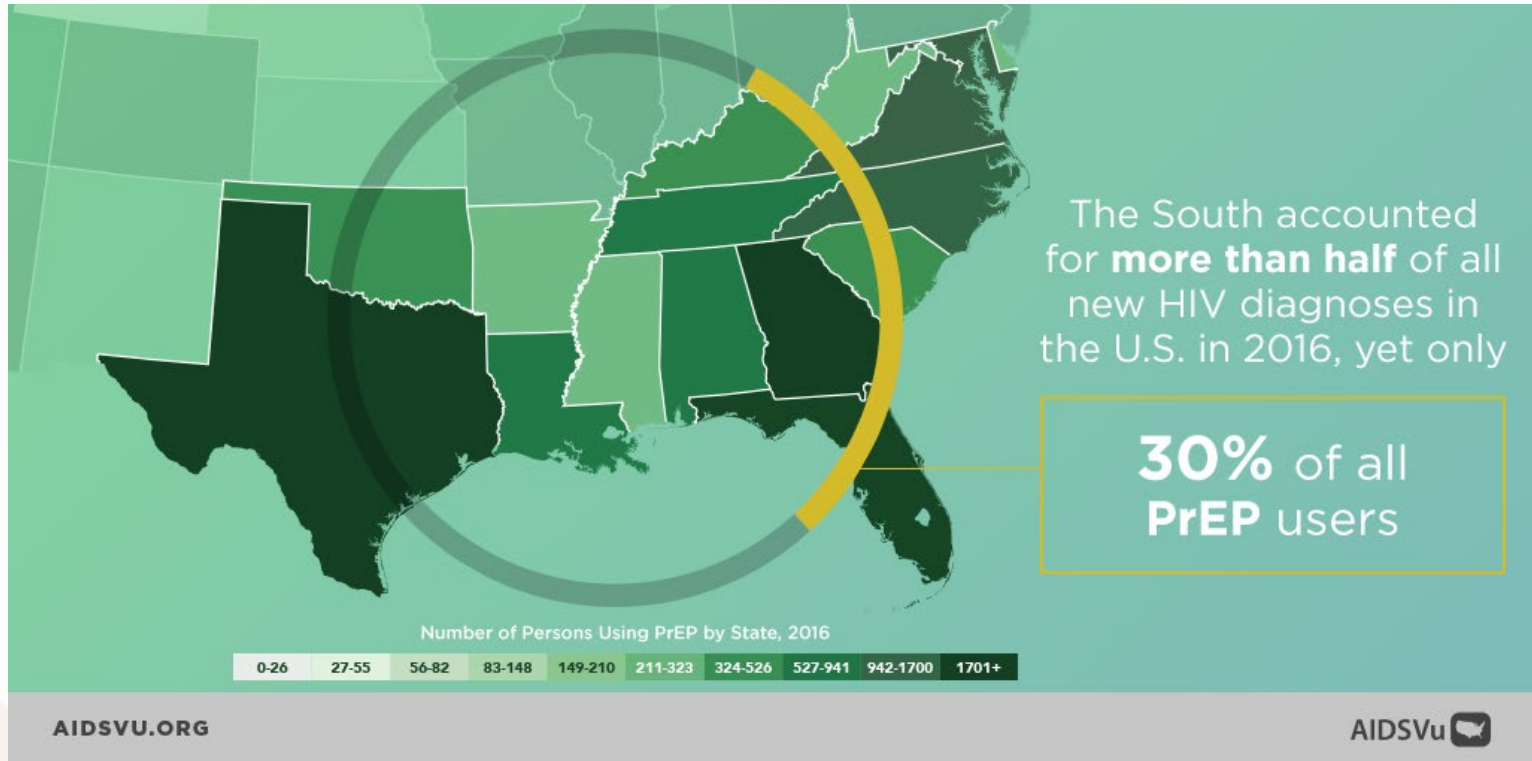


- Most MSM with reduced geographic access to PrEP providers (“PrEP deserts”) reside in the South.
- Over 50% of MSM in the South must drive >60 minutes to a PrEP provider.
- PrEP deserts are generally non-urban areas.

Weiss K, et al. Access to PrEP clinics among US MSM: documenting PrEP deserts. Conference on Retroviruses and Opportunistic Infections, Abstract 1006; March 4–7, 2018, Boston, Massachusetts



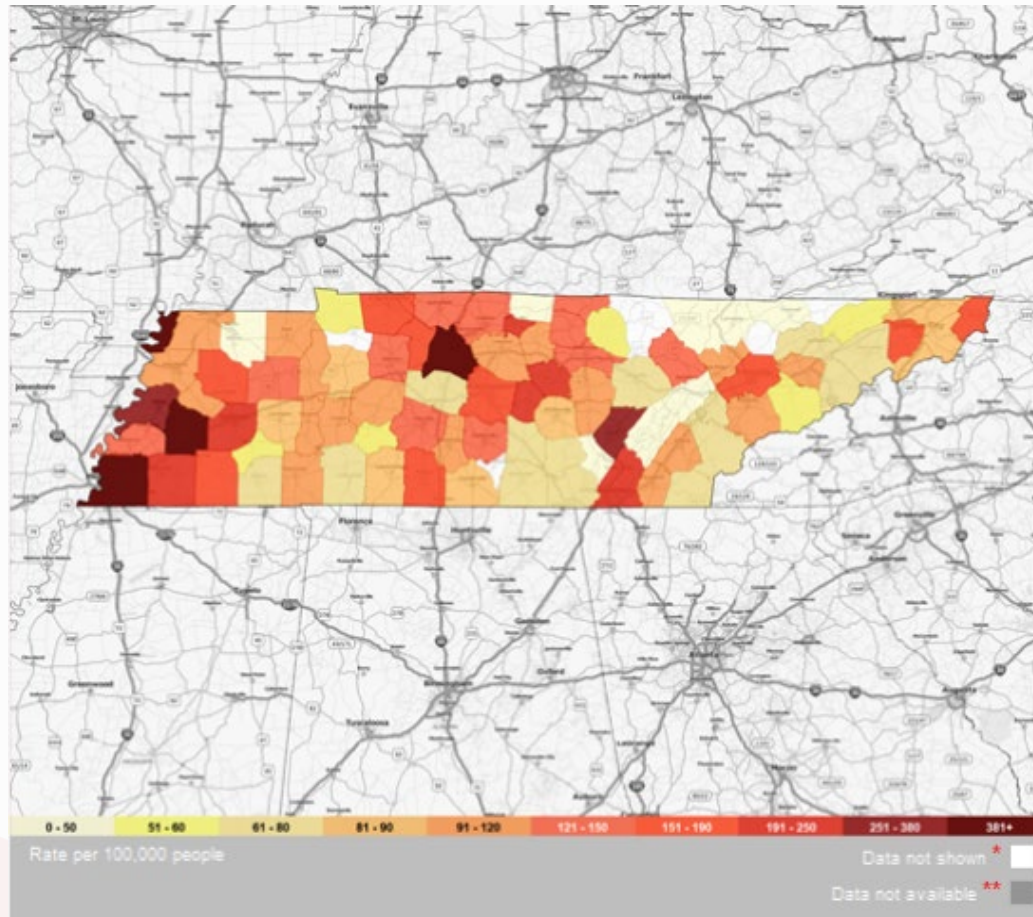
# PrEP use





# Tennessee

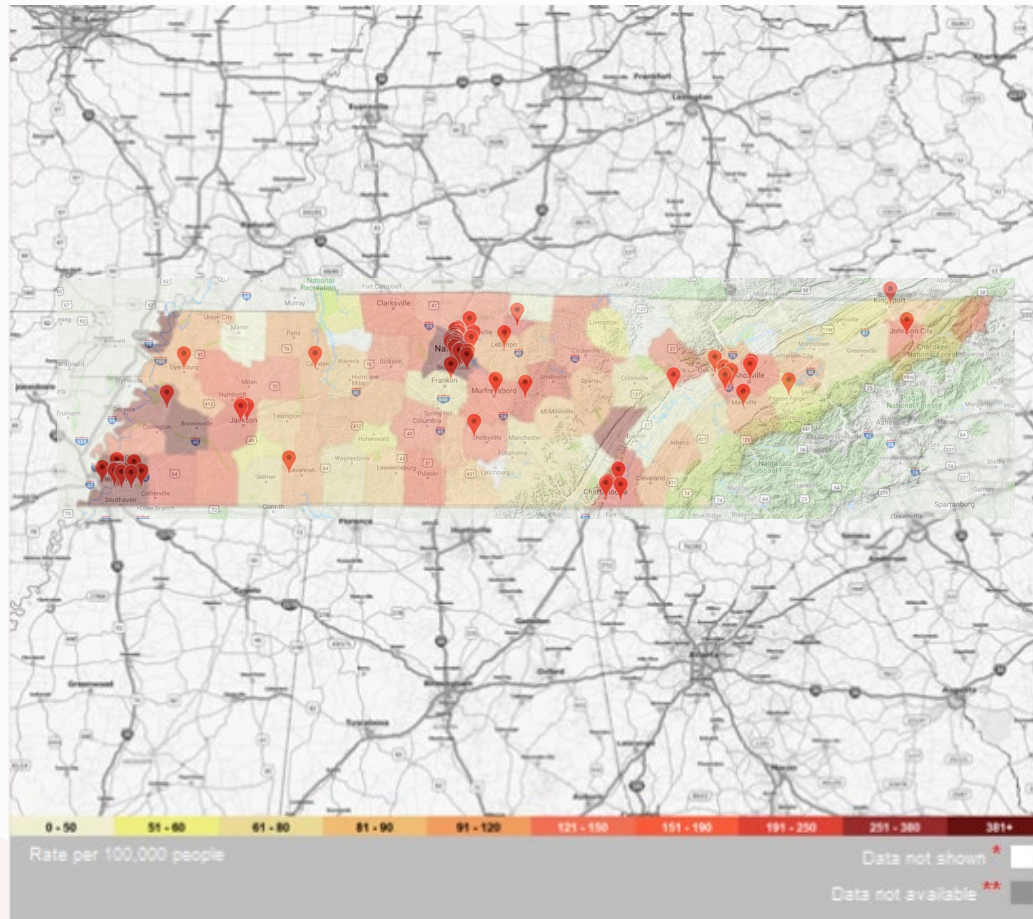
## HIV risk and location of PrEP providers





# Tennessee

## HIV risk and location of PrEP providers







# Barriers to PrEP



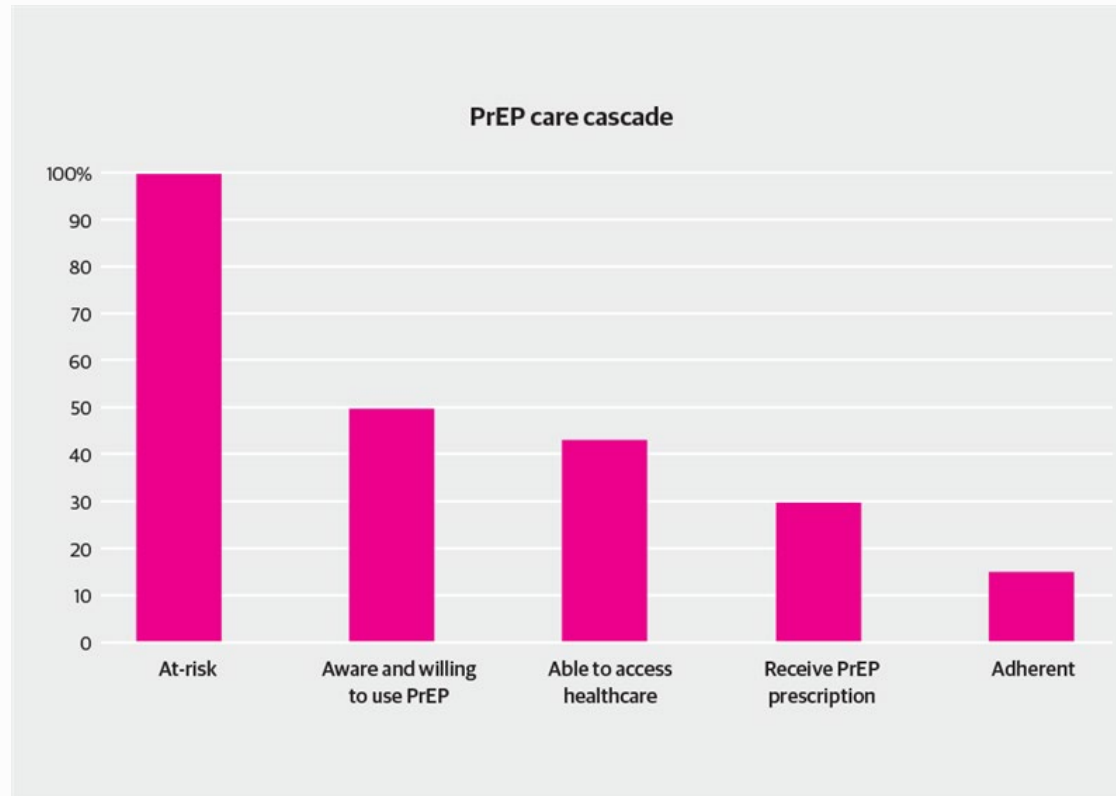
# PrEP sounds amazing!

So why aren't we using it?





# PrEP barriers



<https://www.aidsmap.com>. Sept 9, 2016 [Accessed April 9, 2018]



# Stigma

A preventative measure against the consequences of sexual activity

... *condones* sexual activity

... *promotes* sexual activity

... *causes* sexual activity





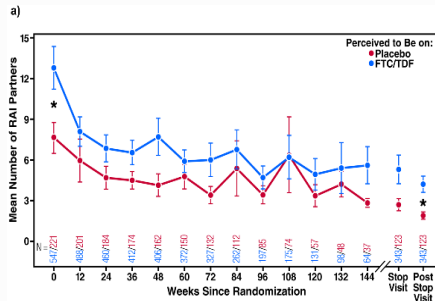
# Sexual risk compensation

- PrEP users will engage in higher risk sex than they previously had.
- This increased unsafe sex will undermine prevention efforts.
- Higher rates of bacterial STIs diagnosed among PrEP users may falsely support this.
  - PrEP users are screened for bacterial STIs frequently due to follow-up requirements.
- On a population level, sexual risk compensation is a fallacy.

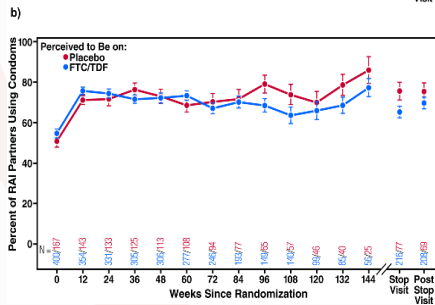


# Sexual Risk Compensation

## iPrex



For patients believing they were on PrEP, the number of receptive anal intercourse partners decreased.



Syphilis incidence also decreased in both study arms

For patients believing they were on PrEP, condom use increased.

## PROUD

- Pre-exposure prophylaxis to prevent the acquisition of HIV-1 infection
  - UK randomized, open-label study
    - 275 MSM to start TDF/FTC immediately
    - 269 MSM to start TDF/FTC after 1 year
  - 86% HIV risk reduction
  - No difference between groups in STI incidence



# Actually...





As a society, we treat HIV-related health care activities differently.

As healthcare providers, we need to accept our responsibility to protect our patients.





# PrEP barriers - Providers

- Insufficient evidence of efficacy
- Inexperience with Truvada/lack of knowledge
- PrEP is cost-prohibitive
- PrEP is not a primary care activity (“not me”)
- Unfamiliarity with PrEP candidates; inability to assess high HIV risk
- Sexual risk compensation (that use of PrEP will lead to increased high-risk behavior)
- Discomfort using a drug with potential adverse effects in an otherwise healthy person (primary prevention vs. treatment)
- Patients perceived as non-adherent, and risk HIV resistance mutation development
- Personal ideology

Blumenthal J, et al. *AIDS Behav* 2015,19:802-810.

Karris MY, et al. *Clin Infect Dis* 2014,58:704-712.

Sharma M, et al. *PLoS One* 2014,9:e105283.

Hakre S, et al. *Medicine (Baltimore)* 2016,95:e4511.

Clement ME, et al. *AIDS Care* 2017:1-6.

Martin J, et al. Abstract # 1447. IDWeek, San Diego, October 4-8, 2017.

Imp B, et al. Abstract # 879, IDWeek, San Diego, October 4-8, 2017.

Blackstock OJ, et al. *J Gen Intern Med* 2017,32:62-70.



# PrEP eligibility



# PrEP eligibility

Summary of Guidance for PrEP Use			
	Men Who Have Sex With Men	Heterosexual Women and Men	Injection Drug Users
<b>Detecting substantial risk of acquiring HIV infection:</b>	<ul style="list-style-type: none"> <li>Sexual partner with HIV</li> <li>Recent bacterial STD</li> <li>High number of sex partners</li> <li>History of inconsistent or no condom use</li> <li>Commercial sex work</li> </ul>	<ul style="list-style-type: none"> <li>Sexual partner with HIV</li> <li>Recent bacterial STD</li> <li>High number of sex partners</li> <li>History of inconsistent or no condom use</li> <li>Commercial sex work</li> <li>Lives in high-prevalence area or network</li> </ul>	<ul style="list-style-type: none"> <li>HIV-positive injecting partner</li> <li>Sharing injection equipment</li> <li>Recent drug treatment (but currently injecting)</li> </ul>
<b>Clinically eligible:</b>	<ul style="list-style-type: none"> <li>Documented negative HIV test before prescribing PrEP</li> <li>No signs/symptoms of acute HIV infection</li> <li>Normal renal function, no contraindicated medications</li> <li>Documented hepatitis B virus infection and vaccination status</li> </ul>		
<b>Prescription</b>	Daily, continuing, oral doses of TDF/FTC (Truvada), ≤90 day supply		
<b>Other services:</b>	<ul style="list-style-type: none"> <li>Follow-up visits at least every 3 months to provide:               <ul style="list-style-type: none"> <li>HIV test, medication adherence counseling, behavioral risk reduction support, side effect assessment, STD symptom assessment</li> </ul> </li> <li>At 3 months and every 6 months after, assess renal function</li> <li>Every 6 months test for bacterial STDs</li> </ul>		
	<ul style="list-style-type: none"> <li>Do oral/rectal STD testing</li> </ul>	<ul style="list-style-type: none"> <li>Assess pregnancy intent</li> <li>Pregnancy test every 3 months</li> </ul>	<ul style="list-style-type: none"> <li>Access to clean needles/syringes and drug treatment services</li> </ul>

Source: US Public Health Service. Preexposure prophylaxis for the prevention of HIV infection in the United States—2014: a clinical practice guideline.

<https://www.cdc.gov/hiv/pdf/prepguidelines2014.pdf>  
[http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada\\_medication\\_guide.pdf](http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada_medication_guide.pdf)



# PrEP eligibility

## Summary of Guidance for PrEP Use

	Men Who Have Sex With Men	Heterosexual Women and Men	Injection Drug Users
<b>Detecting substantial risk of acquiring HIV infection:</b>	<ul style="list-style-type: none"> <li>Sexual p</li> <li>Recent b</li> <li>High nu</li> <li>partners</li> <li>History c</li> <li>no cond</li> <li>Commer</li> </ul>	<b>HIRI-MSM Risk Index*</b>	
<b>Clinically eligible:</b>	<ul style="list-style-type: none"> <li>Do</li> <li>No</li> <li>No</li> <li>Do</li> </ul>	1 How old are you today (yrs)? <ul style="list-style-type: none"> <li>&lt;18 years score 0</li> <li>18–28 years score 8</li> <li>29–40 years score 5</li> <li>41–48 years score 2</li> <li>≥49 years score 0</li> </ul>	
<b>Prescription</b>		2 How many men have you had sex with in the last 6 months? <ul style="list-style-type: none"> <li>&gt;10 male partners score 7</li> <li>6–10 male partners score 4</li> <li>0–5 male partners score 0</li> </ul>	
<b>Other services:</b>	<ul style="list-style-type: none"> <li>Fol</li> <li>HIV</li> <li>sid</li> <li>At</li> <li>Eve</li> <li>Do oral/re</li> </ul>	3 In the last 6 months, how many times did you have receptive anal sex (you were the bottom) with a man? <ul style="list-style-type: none"> <li>1 or more times score 10</li> <li>0 times score 0</li> </ul>	
		4 How many of your male sex partners were HIV positive? <ul style="list-style-type: none"> <li>&gt;1 positive partner score 8</li> <li>1 positive partner score 4</li> <li>&lt;1 positive partner score 0</li> </ul>	
		5 In the last 6 months, how many times did you have insertive anal sex (you were the top) with a man who was HIV positive? <ul style="list-style-type: none"> <li>5 or more times score 6</li> <li>0 times score 0</li> </ul>	
		6 In the last 6 months, have you used methamphetamines such as crystal or speed? <ul style="list-style-type: none"> <li>Yes score 5</li> <li>No score 0</li> </ul>	
		7 In the last 6 months, have you used poppers (amyl nitrate)? <ul style="list-style-type: none"> <li>Yes score 3</li> <li>No score 0</li> </ul>	
		Add down entries in right column to calculate total score	Total score†
<p>*To identify sexually active MSM in their practice, we recommend clinicians ask all their male patients a routine question: "In the past (time) have you had sex? (if yes), with men, women, or both?"</p> <p>†If score is 10 or greater, evaluate for PrEP or other intensive HIV prevention services; If score is 9 or less, provide indicated standard HIV prevention services.</p>			

Source: US Public Health Service. Preexposure prophylaxis for HIV infection among men who have sex with men.

<https://www.cdc.gov/hiv/pdf/prepguidelines2014.pdf>

[http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada\\_medication\\_guide.pdf](http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada_medication_guide.pdf)



# PrEP eligibility

## Summary of Guidance for PrEP Use

	Men Who Have Sex With Men	Heterosexual Women and Men	Injection Drug Users
<b>Detecting substantial risk of acquiring HIV infection:</b>	<ul style="list-style-type: none"> <li>- Sexual p</li> <li>- Recent b</li> <li>- High nu</li> <li>- partners</li> <li>- History o</li> <li>- no cond</li> <li>- Commer</li> </ul>		
<b>Clinically eligible:</b>	<ul style="list-style-type: none"> <li>• Do</li> <li>• No</li> <li>• No</li> <li>• Do</li> </ul>		
<b>Prescription</b>			
<b>Other services:</b>	<ul style="list-style-type: none"> <li>• Fol</li> <li>• HIV</li> <li>• sid</li> <li>• At</li> <li>• Eve</li> </ul>		

HIRI-MSM Risk Index*			
1	How old are you today	<18 years	score 0
2	How many you have had sex with in the last 12 months		
3	In the last 12 months, how many times did you have sex with a partner who has HIV or is at high risk of having HIV?		
4	How many partners have you had sex with in the last 12 months (you do not need to have had sex with all of them)?		
5	In the last 12 months, how many times did you have sex with a partner who has HIV or is at high risk of having HIV?		
6	In the last 12 months, how many times did you have sex with a partner who has HIV or is at high risk of having HIV?		
7	In the last 12 months, how many times did you have sex with a partner who has HIV or is at high risk of having HIV?		

Medication Guide							
TRUVADA® (tru-VAH-dah) (emtricitabine and tenofovir disoproxil fumarate) tablets							
Read this Medication Guide before you start taking TRUVADA and each time you get a refill. There may be new information. This information does not take the place of talking to your healthcare provider about your medical condition or your treatment.							
This Medication Guide provides information about two different ways that TRUVADA may be used (see the Medication Guide section "What is TRUVADA?" for important information about how TRUVADA may be used):							
<ul style="list-style-type: none"> <li>• to treat Human Immunodeficiency Virus-1 (HIV-1) infection, and</li> <li>• to reduce the risk of getting HIV-1 infection in adults who are HIV-negative</li> </ul> HIV is the virus that causes AIDS (Acquired Immune Deficiency Syndrome).							
<b>What is the most important information I should know about TRUVADA?</b> <b>If you also have hepatitis B virus (HBV) infection and take TRUVADA, your hepatitis B may become worse if you stop taking TRUVADA.</b> <ul style="list-style-type: none"> <li>• Do not stop taking TRUVADA without first talking to your healthcare provider.</li> <li>• Do not run out of TRUVADA. Refill your prescription or talk to your healthcare provider before your TRUVADA is all gone.</li> <li>• If your healthcare provider stops TRUVADA, your healthcare provider will need to watch you closely for several months to check your hepatitis B infection, or give you a medication to treat hepatitis B.</li> </ul> Tell your healthcare provider about any new or unusual symptoms you may have after you stop taking TRUVADA. For more information about side effects, see the section "What are the possible side effects of TRUVADA?" in this Medication Guide.							
<b>Other important information for people who take TRUVADA to help reduce their risk of getting HIV-1 infection:</b> <b>Before taking TRUVADA to reduce your risk of getting HIV-1 infection:</b> <ul style="list-style-type: none"> <li>• You must be HIV-negative to start TRUVADA. You must get tested to make sure that you do not already have HIV-1 infection.</li> <li>• Do not take TRUVADA to reduce the risk of getting HIV-1 unless you are confirmed to be HIV-negative.</li> <li>• Many HIV-1 tests can miss HIV-1 infection in a person who has recently become infected. If you have flu-like symptoms, you could have recently become infected with HIV-1. Tell your healthcare provider if you had a flu-like illness within the last month before starting TRUVADA or at any time while taking TRUVADA. Symptoms of new HIV-1 infection include:               <table border="0"> <tr> <td>○ tiredness</td> <td>○ sore throat</td> </tr> <tr> <td>○ fever</td> <td>○ vomiting or diarrhea</td> </tr> <tr> <td>○ joint or muscle aches</td> <td>○ rash</td> </tr> </table> </li> </ul>		○ tiredness	○ sore throat	○ fever	○ vomiting or diarrhea	○ joint or muscle aches	○ rash
○ tiredness	○ sore throat						
○ fever	○ vomiting or diarrhea						
○ joint or muscle aches	○ rash						

\*To identify their male partners, women, or injection drug users.

†If score is 10 or greater, evaluate for PrEP or other intensive HIV prevention services; If score is 9 or less, provide indicated standard HIV prevention services.

Source: US Public Health Service. Preexposure prophylaxis to prevent HIV infection in men who have sex with men, women, and injection drug users.

<https://www.cdc.gov/hiv/pdf/prepguidelines2014.pdf>  
[http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada\\_medication\\_guide.pdf](http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada_medication_guide.pdf)



# PrEP eligibility

## Summary of Guidance for PrEP Use

	Men Who Have Sex With Men	Heterosexual Women and Men	Injection Drug Users
<b>Detecting substantial risk of acquiring HIV infection:</b>	<ul style="list-style-type: none"> <li>- Sexual p</li> <li>- Recent b</li> <li>- High nu</li> <li>- partners</li> <li>- History o</li> <li>- no cond</li> <li>- Commer</li> </ul>	<b>HIRI-MSM Risk Index*</b>	
<b>Clinically eligible:</b>	<ul style="list-style-type: none"> <li>• Do</li> <li>• No</li> <li>• No</li> <li>• Do</li> </ul>	<ol style="list-style-type: none"> <li>1 How old are you today &lt;18 years score 0</li> <li>2 How many you have had sex with in the last 12 months</li> <li>3 In the last 12 months, how many times did you have sex with a partner whose HIV status is unknown</li> <li>4 How many partners have you had sex with in the last 12 months</li> <li>5 In the last 12 months, how many times did you have sex with a partner whose HIV status is unknown</li> <li>6 In the last 12 months, how many times did you have sex with a partner whose HIV status is unknown</li> <li>7 In the last 12 months, how many times did you have sex with a partner whose HIV status is unknown</li> </ol>	
<b>Prescription</b>			
<b>Other services:</b>	<ul style="list-style-type: none"> <li>• Fol</li> <li>• HIV</li> <li>• sid</li> <li>• At</li> <li>• Eve</li> <li>• Do oral/re</li> </ul>	<p><b>Medication Guide</b>  <b>TRUVADA® (tru-VAH-dah)</b>            (emtricitabine and tenofovir disoproxil fumarate) tablets</p> <p>Read this Medication Guide before you start taking TRUVADA and each time you get a refill. There may be new information. This information does not take the place of talking to your healthcare provider about your medical condition or your treatment.</p> <p>This Medication Guide provides information about two different ways that TRUVADA may be used (see the Medication Guide section <b>"What is TRUVADA?"</b> for important information about how TRUVADA may be used):</p> <ul style="list-style-type: none"> <li>• to treat Human Immunodeficiency Virus-1 (HIV-1) infection, and</li> <li>• to reduce the risk of getting HIV-1 infection in adults who are HIV-negative</li> </ul> <p>HIV is the virus that causes AIDS (Acquired Immune Deficiency Syndrome).</p> <p><b>What is the most important information I should know about TRUVADA?</b>  <b>If you also have hepatitis B virus (HBV) infection and take TRUVADA, your hepatitis B may become worse if you stop taking TRUVADA.</b></p> <ul style="list-style-type: none"> <li>• The USPSTF recommends the following persons be considered for PrEP:</li> <li>• 1. Men who have sex with men, are sexually active, and have one of the following characteristics:               <ul style="list-style-type: none"> <li>◦ A serodiscordant sex partner (i.e., a sex partner living with HIV)</li> <li>◦ A recent sexually transmitted infection (STI) with syphilis, gonorrhea, or chlamydia</li> <li>◦ Inconsistent use of condoms during receptive or insertive anal sex</li> </ul> </li> <li>• 2. Heterosexual women and men who are sexually active and have one of the following characteristics:               <ul style="list-style-type: none"> <li>◦ A serodiscordant sex partner (i.e., a sex partner living with HIV)</li> <li>◦ Inconsistent use of condoms during sex with a partner whose HIV status is unknown and who is at high risk (e.g., a person who injects drugs or bisexual partner)</li> <li>◦ A recent STI with syphilis or gonorrhea</li> </ul> </li> <li>• 3. Persons who inject drugs and have one of the following characteristics:               <ul style="list-style-type: none"> <li>◦ Share drug injection equipment</li> <li>◦ Are at risk of sexual acquisition of HIV (see above)</li> </ul> </li> </ul>	

\*To identify their male patients, women, or transgender people who are at high risk of HIV infection,†If score is 10 or greater, consider PrEP; If score is 9 or less, consider PrEP.

Source: US Public Health Service. Preexposure prophylaxis to prevent HIV infection in men who have sex with men, women, and transgender people who are at high risk of HIV infection.

<https://www.cdc.gov/hiv/pdf/prepguidelines2014.pdf>  
[http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada\\_medication\\_guide.pdf](http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada_medication_guide.pdf)



# PrEP eligibility

Summary of Guidance for PrEP Use			
	Men Who Have Sex With Men	Heterosexual Women and Men	Injection Drug Users
Detecting substantial risk of acquiring HIV infection:	<ul style="list-style-type: none"> <li>- Sexual p</li> <li>- Recent b</li> <li>- High nu</li> <li>- partners</li> <li>- History o</li> <li>- no cond</li> <li>- Commer</li> </ul>	<b>HIRI-MSM Risk Index*</b>	
		1 How old are you today	<18 years score 0
		2 How many you have in the	
		<b>Medication Guide</b> TRUVADA® (tru-VAH-dah) (emtricitabine and tenofovir disoproxil fumarate) tablets <small>Read this Medication Guide before you start taking TRUVADA and each time you get a refill. There may be new</small>	

Anyone with high risk for HIV acquisition, as determined by the patient's and/or provider's assessment, in which the risk of PrEP does not outweigh the benefit.

<p>*To identify their male patients, women, or</p> <p>†If score is 10 or greater; If score is 9 or</p>	<p>3. Persons who inject drugs and have one of the following characteristics:</p> <ul style="list-style-type: none"> <li>○ Share drug injection equipment</li> <li>○ Are at risk of sexual acquisition of HIV (see above)</li> </ul>
--	--

<https://www.cdc.gov/hiv/pdf/prepguidelines2014.pdf>  
[http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada\\_medication\\_guide.pdf](http://www.gilead.com/~media/Files/pdfs/medicines/hiv/truvada/truvada_medication_guide.pdf)



# Recommendation comparisons

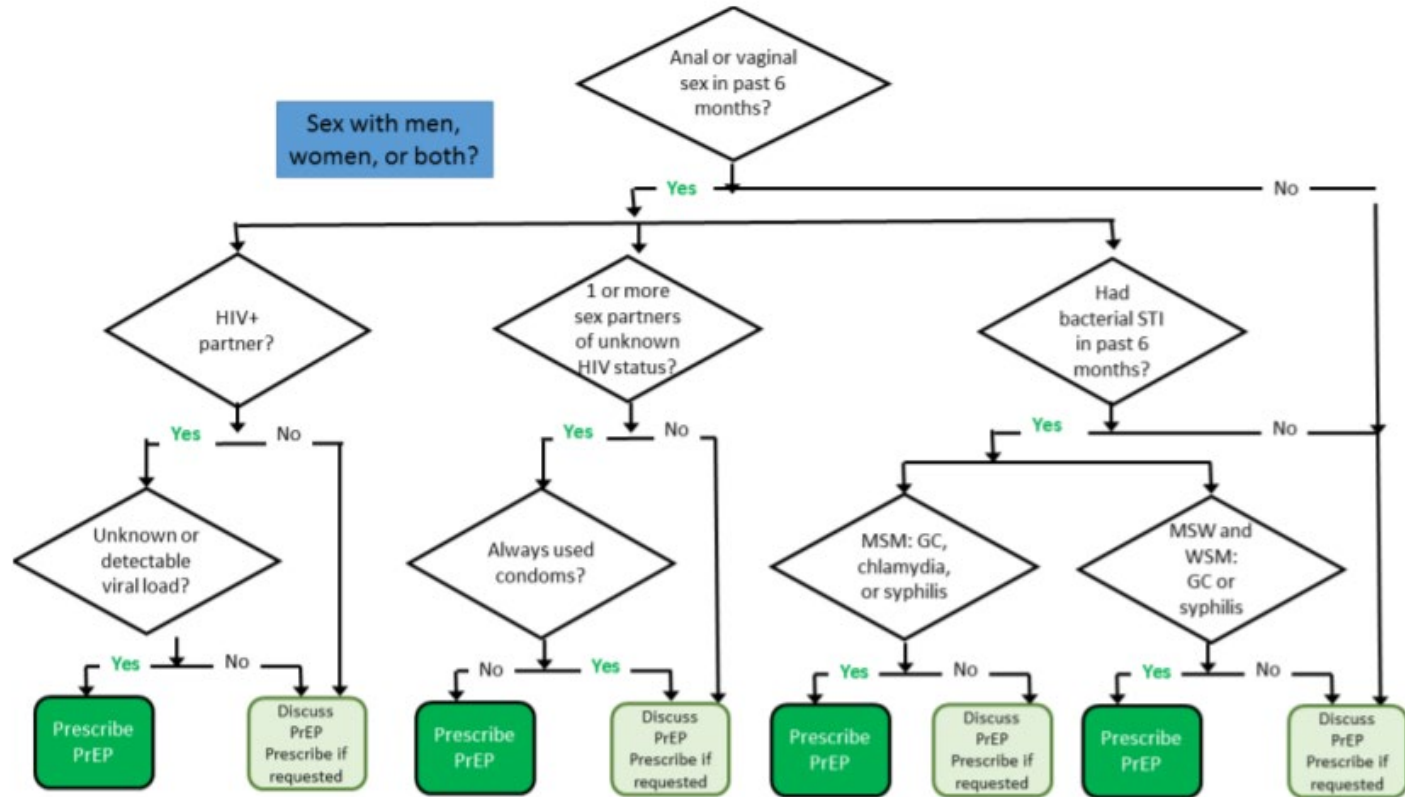
- 300 high risk young, black MSM (age 16-29) in Chicago
- 33 HIV acquisitions over 3 years
  - 52% met CDC eligibility for PrEP
  - 85% met HIRI-MSM eligibility for PrEP
  - 94% met drug company eligibility for PrEP
- CDC guidelines: Low sensitivity, specificity (52%)
- Drug company guidelines: High sensitivity, low specificity (15%)

Lancki N et al. AIDS, 2018





# Discuss with everyone!



Preexposure Prophylaxis for the Prevention of HIV Infection in the United States – 2021 Update Clinical Practice Guideline

<https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf>



# What about U=U?





# U=U

- Those who have an undetectable viral load have effectively no risk of transmitting the virus.
- This is a consensus of HIV experts worldwide, CDC, NIH, IDSA/HIVMA, common knowledge in the medical community.
- Combined data from 4 studies (HPTN 052, OPPOSITES ATTRACT, PARTNER and PARTNER2)
  - Among sero-discordant couples where the partner living with HIV had a durably undetectable viral load:
    - zero transmission among over a hundred thousand condomless sex acts
    - Results similar in both male-female and male-male partnerships



# U=U

- Is PrEP necessary in this situation?
  - Consider *durable* viral suppression
    - Contributing factors include adherence, history of virologic failure, follow-up interval of the HIV-positive person
  - Consider non-monogamous sex
    - In U=U studies, HIV transmissions **DID** occur, but were linked to sex between HIV-negative participant and HIV-positive individual not involved in the study
  - Always weigh risks and benefits



# Special considerations

(TDF/FTC and TAF/FTC)

- **Pregnant or breastfeeding women**
  - Pregnancy Category B (No known risk)
  - Minimally secreted in breastmilk, not contraindicated in breastfeeding
- **Chronic HBV**
  - TDF/TAF and FTC are active against HBV
  - Abrupt withdrawal could cause HBV flare
  - Stopping requires careful monitoring and observation
- **Chronic Renal Failure (CrCl <60mL/min)**
  - Don't use TDF/FTC; safety has not been adequately determined
  - Can use TAF/FTC for CrCl >30mL/min



# PrEP medication counseling

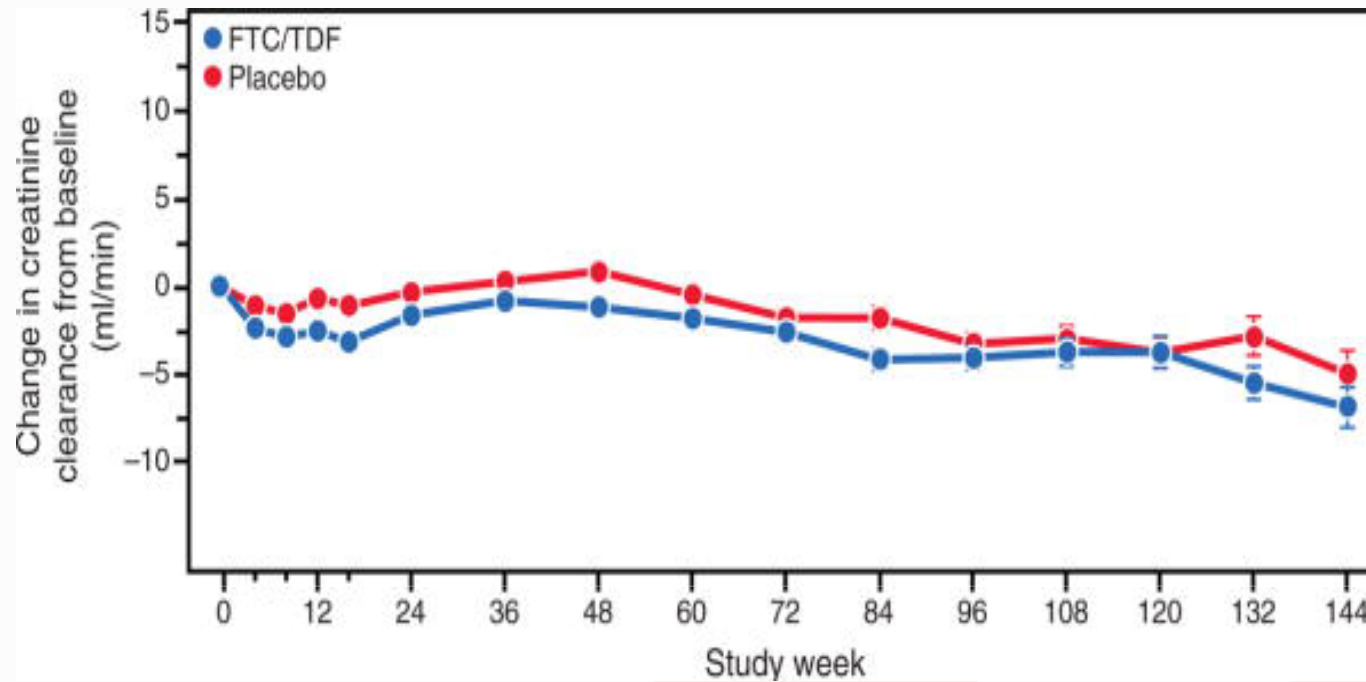


# PrEP Medication Counseling

- Dosing
  - One tab daily, with or without food
- Adherence, and its relationship to efficacy
- Time to effectiveness
  - 7-10 days for men, 21 days for women
  - Barrier protection especially needed during that time
- Adverse effects
  - Nausea, vomiting, diarrhea, loss of appetite, weight loss
  - Fatigue, headache
- Requirements for monitoring
- Refill process
  - “Call when you have 7-10 days left”



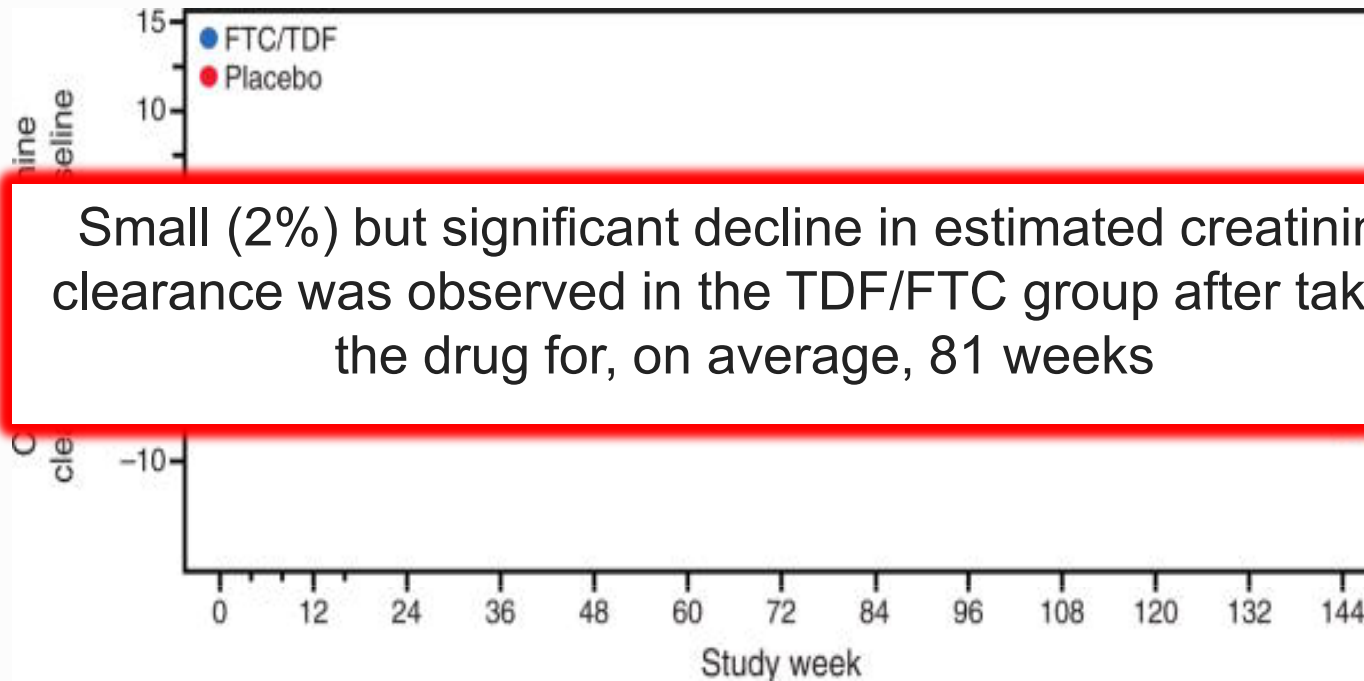
# Adverse Events (TDF/FTC)







# Adverse Events (TDF/FTC)



Small (2%) but significant decline in estimated creatinine clearance was observed in the TDF/FTC group after taking the drug for, on average, 81 weeks



# Adverse Events (TDF/FTC)

**Table 3. Bone Mineral Density Scores.\***

Assessment	Forearm			Hip			Lumbar Spine		
	TDF-FTC (N=109)	Placebo (N=112)	P Value	TDF-FTC (N=109)	Placebo (N=112)	P Value	TDF-FTC (N=109)	Placebo (N=112)	P Value
<b>T score</b>			0.004			<0.001			<0.001
Enrollment	-0.75	-0.58		0.44	0.53		-0.72	-0.59	
6 mo	-0.77	-0.50		0.33	0.57		-0.84	-0.45	
12 mo	-0.79	-0.48		0.33	0.54		-0.77	-0.56	
18 mo	-0.93	-0.27		0.17	0.77		-0.92	-0.43	
24 mo	-0.92	-0.13		0.21	0.74		-1.11	-0.37	
<b>z Score</b>			0.004			<0.001			<0.001
Enrollment	-0.70	-0.54		0.45	0.54		-0.67	-0.54	
6 mo	-0.73	-0.45		0.35	0.58		-0.80	-0.41	
12 mo	-0.72	-0.42		0.34	0.55		-0.74	-0.53	
18 mo	-0.88	-0.21		0.18	0.78		-0.88	-0.41	
24 mo	-0.87	-0.13		0.20	0.76		-1.09	-0.28	

\* In the TDF-FTC group, 58 participants completed bone mineral density testing at the 6-month visit, 45 at the 12-month visit, 36 at the 18-month visit, and 23 at the 24-month visit. In the placebo group, 66 participants completed bone mineral density testing at the 6-month visit, 44 at the 12-month visit, 33 at the 18-month visit, and 35 at the 24-month visit.



# Adverse Events (TDF/FTC)

**Table 3. Bone Mineral Density Scores.\***

Assessment	Forearm			Hip			Lumbar Spine		
	TDF-FTC (N=109)	Placebo (N=112)	P Value	TDF-FTC (N=109)	Placebo (N=112)	P Value	TDF-FTC (N=109)	Placebo (N=112)	P Value
T score			0.004			<0.001			<0.001
Enrollment	-0.75	-0.58		0.44	0.53		-0.72	-0.59	
6 mo	-0.77	-0.50		0.33	0.57		-0.84	-0.45	
12 mo	-0.73	-0.45		0.35	0.58		-0.80	-0.41	
18 mo	-0.72	-0.42		0.34	0.55		-0.74	-0.53	
24 mo	-0.88	-0.21		0.18	0.78		-0.88	-0.41	
24 mo	-0.87	-0.13		0.20	0.76		-1.09	-0.28	

Significant decline in T scores and z scores for BMD at the forearm, hip, and lumbar spine in participants who received TDF/FTC, as compared with those who received placebo

\* In the TDF-FTC group, 58 participants completed bone mineral density testing at the 6-month visit, 45 at the 12-month visit, 36 at the 18-month visit, and 23 at the 24-month visit. In the placebo group, 66 participants completed bone mineral density testing at the 6-month visit, 44 at the 12-month visit, 33 at the 18-month visit, and 35 at the 24-month visit.



# Adverse Events (TDF/FTC)

**Table 3. Bone Mineral Density Scores.\***

Assessment	Forearm			Hip			Lumbar Spine		
	TDF-FTC (N=109)	Placebo (N=112)	P Value	TDF-FTC (N=109)	Placebo (N=112)	P Value	TDF-FTC (N=109)	Placebo (N=112)	P Value
T score			0.004			<0.001			<0.001

**BUT THIS CAN RECOVER!**

Bone mineral density recovered after 6 months of stopping TDF/FTC in both young and older adults.

24 mo	-0.87	-0.13	0.20	0.76	-1.09	-0.28
-------	-------	-------	------	------	-------	-------

\* In the TDF-FTC group, 58 participants completed bone mineral density testing at the 6-month visit, 45 at the 12-month visit, 36 at the 18-month visit, and 23 at the 24-month visit. In the placebo group, 66 participants completed bone mineral density testing at the 6-month visit, 44 at the 12-month visit, 33 at the 18-month visit, and 35 at the 24-month visit.



# PrEP laboratory monitoring



# HIV screening

- At baseline, 4<sup>th</sup> generation HIV Ag/Ab combination assay
- During PrEP maintenance, HIV Ag/Ab **AND** HIV RNA PCR are now recommended
  - Incident HIV infections during PrEP use may exhibit lower viral replication and longer time to antibody production (seroconversion)
- Routine HIV RNA PCR may not be readily available or affordable
  - Providers should use tests that are available to them to continue PrEP provision

Donnell D, et al. The effect of oral preexposure prophylaxis on the progression of HIV-1 seroconversion. *AIDS*. 2017;31(14):2007. 78.

Marzinke MA, et al. Characterization of human immunodeficiency virus (HIV) infection in cisgender men and transgender women who have sex with men receiving injectable cabotegravir for HIV prevention: HPTN 083. *Infect Dis*. 2021;



# A year of oral PrEP

Encounter	To do
Month 0	<ul style="list-style-type: none"><li>• Screen for HIV</li><li>• Confirm HBV and HCV status</li><li>• Check serum creatinine</li><li>• Screen for STIs</li><li>• Counseling</li><li>• Prescribe</li></ul>
Month 3	<ul style="list-style-type: none"><li>• Screen for HIV</li><li>• Counseling</li><li>• Prescribe</li></ul>
Month 6	<ul style="list-style-type: none"><li>• Screen for HIV</li><li>• Screen for STIs</li><li>• Counseling</li><li>• Prescribe</li></ul>
Month 9	<ul style="list-style-type: none"><li>• Screen for HIV</li><li>• Counseling</li><li>• Prescribe</li></ul>
Month 12	<ul style="list-style-type: none"><li>• Screen for HIV</li><li>• Screen for STIs</li><li>• Check serum creatinine</li><li>• Counseling</li><li>• Prescribe</li></ul>

## Labs\*:

- HIV screen: 5
- Serum creatinine: 2\*\*
- STI screen: 3

\*Lipids Q12 months if taking TAF/FTC  
\*\*Serum creatinine should be done Q6 months if age  $\geq 50$  years or who have an CrCl  $< 90$  mL/min at initiation

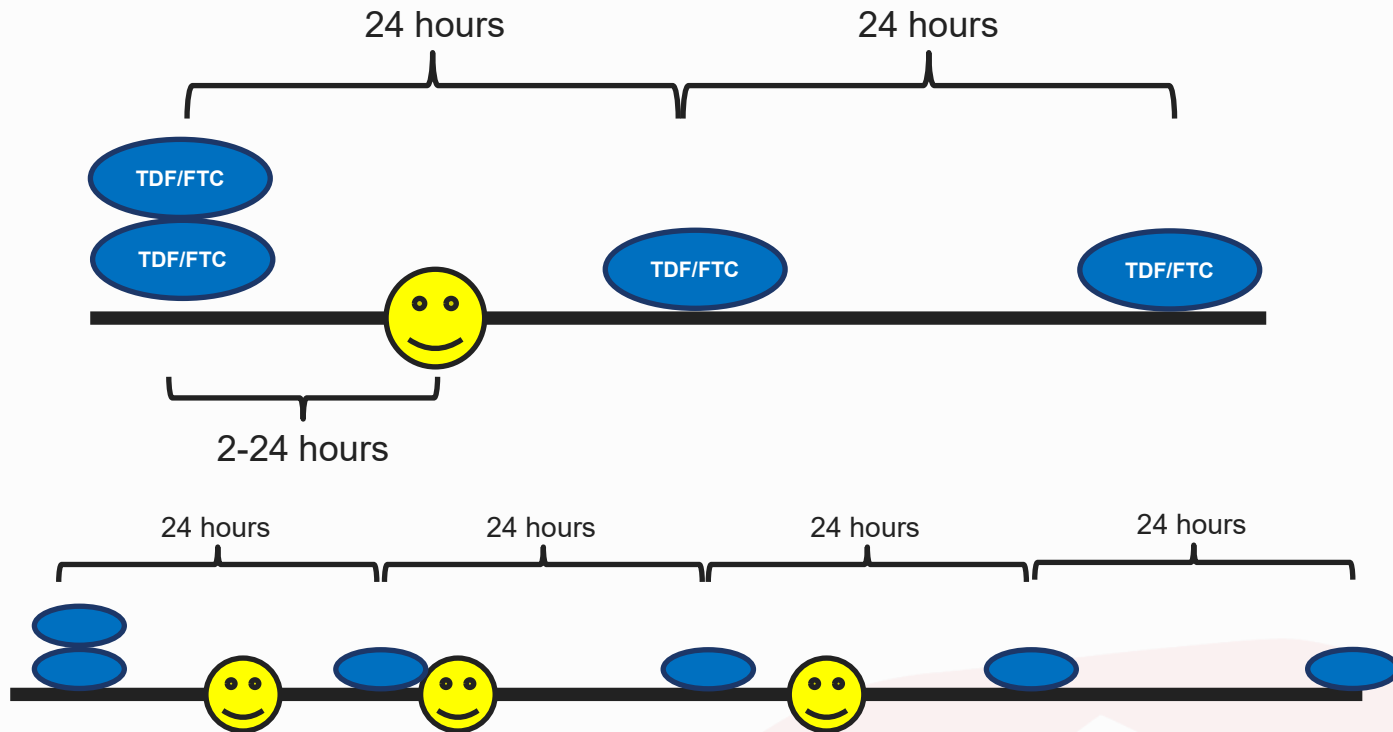
Prescriptions/Refill  
authorizations: 5

Discussions: 5+

<https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf>



# Event-Driven (2-1-1) Dosing – TDF/FTC ONLY!



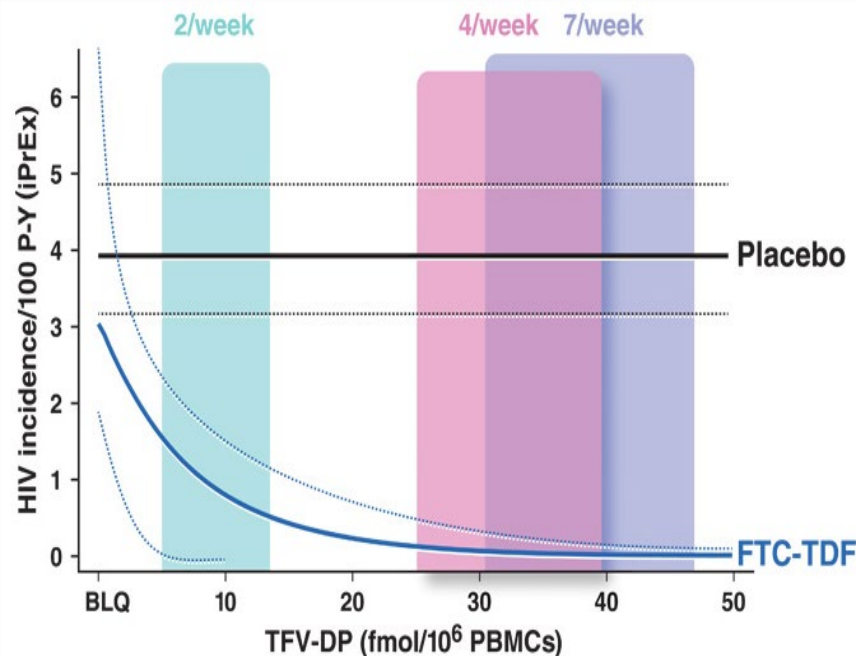
- Off-label dosing to consider
- Continue 1 pill/day until 48 hours from event
- If <7 days between last pill and new event, resume one pill/24 hours (no need to double-dose)

<https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf>





# Dosing matters



- Using drug concentrations in iPrEX and STRAND, pharmacokinetic models predict:
  - **76%** risk reduction with 2 doses/week
  - **96%** with 4 doses/week
  - **99%** with 7 doses/week.

Anderson PL, Glidden DV, Liu A, Buchbinder S, Lama JR, Guanira JV, et al. Sci Transl Med. 2012;4: 151ra125.



# Financial aspects of PrEP



# PrEP coverage

- Most insurance plans cover TDF/FTC, most cover TAF/FTC (though fewer cover brand medication)
  - Variable copays
- Medicare/Medicaid cover PrEP
- Gilead Advancing Access Program – Copay Assistance
  - \$7,200/calendar year of copay assistance
  - No income limitation, federal beneficiaries excluded
- Gilead Advancing Access Program – Medication Access
  - Full drug coverage if income <500% federal poverty level
  - Primary option for uninsured patients




# Copay Assistance


<b>ADVANCING ACCESS<sup>®</sup></b>	FINANCIAL SUPPORT	INSURANCE SUPPORT
-------------------------------------	-------------------	-------------------

**Get Started with the Gilead Advancing Access<sup>®</sup> program**

Advancing Access can provide you with information to help you find financial and insurance support every step of the way.

 **Support by Phone**  
 Call **1-800-226-2056** to speak to an Advancing Access counselor directly. You can also leave a confidential message any time and day of the week.

**Hours:** Monday-Friday / 9am to 8pm ET

 **Enroll Today**  
 The form requires some information from your healthcare provider, so you may want to fill it out with them. [Download the Advancing Access Enrollment Form](#) or [Enroll Online](#)





# Medication Assistance Program

**ADVANCING ACCESS ENROLLMENT FORM** PAGE 1 OF 3  
PHONE: 1-800-226-2056 FAX: 1-800-216-6857

**ENROLLMENT FORM** PAGE 1 OF 3  
PHONE: 1-800-226-2056 FAX: 1-800-216-6857

**1. REQUESTED PATIENT SUPPORT REQUIRED** CHECK ALL BOXES THAT APPLY

Benefits Investigation  Prior Authorization and Appeals Information  Co-pay Coupon Program Enrollment   
 Patient Assistance Program (PAP) or Medication Assistance Program (MAP) Eligibility Screening

**2. GILEAD MEDICATION PRESCRIBED (REQUIRED)**

Product Name:  mg  
 If requesting TRUVADA, please indicate for: Treatment  PHEP/Prevention

**3. PATIENT INFORMATION (REQUIRED)**

First Name:  Last Name:  MI:  Preferred Language:   
 Address:  Apt./Unit #  City:   
 State:  Zip Code:  Phone #:  SSN (Last 4 digits)   
 Email:  DOB:   
 Alternate Contact Name:  Phone #:  Relationship:

**CONTACT AUTHORIZATION**

I authorize Advancing Access to leave a detailed message, including the name of my prescription, if it am unavailable when they call. Yes  No

**4. INSURANCE INFORMATION (REQUIRED)** PLEASE INCLUDE A COPY OF THE FRONT AND BACK OF INSURANCE CARDS

Primary Insurance:  Patient is insured (Please fill out all of the applicable insurance information below. Attach copy - front and back - of patient card).  Patient is uninsured, no health insurance through any public or private agent. SEE CRITICAL FINANCIAL INFORMATION SECTION 5 BELOW.

Plan name:  Is this a Medicare Part D plan? Yes  No   
 Insurance Plan Number:   
 Subscriber Name:  Policy Holder Name:  Policy Holder Relationship to Patient:   
 Policy #:  Group #:  Rx Bin #:  Rx PCN #:   
 Check box if patient has secondary insurance coverage and fax a copy of insurance cards, if available.

**5. PRESCRIBER INFORMATION (REQUIRED)**

Prescriber Name:  Facility Name:   
 Address:  City:   
 State:  Zip Code:  Office Contact:   
 Phone #:  Fax #:  NPI #:   
 Tax ID #:  State License #:

**6. DIAGNOSIS/MEDICAL INFORMATION** MUST BE COMPLETED BY HEALTHCARE PROVIDER

Diagnosis (Please include ICD code):

**7. PRESCRIBER CERTIFICATION AND STATEMENT OF MEDICAL NECESSITY**

I, the undersigned, hereby certify that any prescribing Gilead medication for the patient described in Section 3 is medically necessary for the patient and that it will be used as directed. I certify that I will be approving the patient's treatment and verify that the information provided is complete and accurate to the best of my knowledge. I agree that I will not seek reimbursement for any Gilead medication dispensed to the patient through the Patient Assistance Program/Medication Assistance Program (PAP/MAP) from any government program or third-party source.

Transacting TRUVADA by name: I verify that the application has been tested for HIV infection and found to be HIV negative, and regular HIV testing will be conducted as part of the patient's care plan. As part of my applicant's eligibility, I agree to periodically verify continued use of Gilead medication and resultant current prescriptions.

I certify that I have received the appropriate written authorization from the patient in accordance with the Health Insurance Portability and Accountability Act of 1996, applicable state health information privacy laws, and any other applicable requirements, in order to release the patient's personal and medical information to Gilead and its agents and contractors for the purposes of: 1) verifying the patient's insurance coverage and eligibility for benefits; 2) seeking prior authorization if needed on the patient's behalf; 3) providing financial assistance support; and referral support as needed; 4) facilitating the provision of the patient's prescription medication to the patient; 5) contacting the patient with educational materials about the patient's prescription medication; or to evaluate the effectiveness of the Advancing Access Program under the PAP/MAP; and 6) for Gilead's related business purposes.

PRESCRIBER SIGNATURE (REQUIRED):  DATE:

© 2017 Gilead Sciences, Inc. All rights reserved. ADM20300 01/17

ADVANCING ACCESS ENROLLMENT FORM PHONE: 1-800-226-2056 FAX: 1-800-216-6857 PAGE 2 OF 3

PATIENT NAME:  DATE OF BIRTH:

**8. PATIENT AUTHORIZATION FOR USE AND DISCLOSURE OF PERSONAL HEALTH INFORMATION (REQUIRED)**

I understand that I must complete this enrollment form before I can receive assistance through Gilead Sciences, Inc.'s Advancing Access ("Program") and the Patient Assistance Program/Medication Assistance Program ("PAP/MAP") as part of this process. Gilead and its agents and contractors (collectively, "Gilead") will need to obtain, review, use and disclose my personal and medical information as described below. I hereby authorize my healthcare providers and health plans to disclose my personal and medical information as described below to Gilead in connection with the Program and/or the PAP/MAP all in accordance with this authorization, and I authorize Gilead to use and disclose the information in accordance with the authorization.

**Information to Be Disclosed:** Personal health information ("PHI"), including information about me (for example, my name, mailing address, financial information, and insurance information), my past, current and future medical condition (including information about my HIV-related status or treatment with this prescription medication and related medical condition), and all information provided on this enrollment form.

**Persons Authorized to Disclose My Information:** My healthcare providers, including any pharmacy that fills my prescription medication, and any health plans or programs that provide me healthcare benefits. I understand that my pharmacy providers may receive remuneration for disclosing my PHI pursuant to this authorization.

**Persons to Which My Information May Be Disclosed:** Gilead, including the third party administrator responsible for the administration of the Program and the PAP/MAP.

**Purposes for Which the Disclosures Are to Be Made:** Disclosures of PHI may be made to Gilead so that Gilead may use and disclose the PHI for purposes of: 1) completing the enrollment process and verifying my enrollment form; 2) establishing my eligibility for benefits from my health plan or other programs; 3) providing financial assistance, support, and referral support, and communicating with my healthcare providers, including, but not limited to, facilitating the provision of my prescription medication to me; 4) contacting me to evaluate the effectiveness of the Program and/or the PAP/MAP; 5) for Gilead's internal business purposes, including quality control and support enhancing surveys; and 6) to send me marketing information, offers, and educational materials related to my treatment and/or my prescription medication, including the customer relationship marketing program (this use of my personal information is optional and by checking the box under the signatures below, I may opt in).

I understand that once my PHI has been disclosed hereunder, federal privacy law may no longer restrict its use or disclosure. I understand that I may refuse to sign this authorization and that if I refuse, my eligibility for health plan benefits or ability to obtain treatment from my healthcare providers will not change, but I will not have access to the support offered by Program and/or the PAP/MAP. I also understand that I may cancel this authorization at any time by notifying Gilead in writing at Advancing Access, PO Box 13185, La Jolla, CA 92039-3185. If I cancel, Gilead will stop using this authorization to obtain, use or disclose my PHI after the cancellation date, but the cancellation will not affect uses or disclosures of any PHI that have already been made pursuant to this authorization before the cancellation date. I am entitled to a copy of this signed authorization, which expires the earlier of two (2) years from the date it is signed by me or other time period required under the laws of the state in which I reside.

By checking this box, I agree to receive marketing information, offers and educational materials related to my medical condition, treatment, and/or my prescription medication, including the customer relationship marketing program.

SIGNATURE OF PATIENT OR PATIENT'S REPRESENTATIVE (REQUIRED):  DATE:

Patient Representative's Name (if signing for the patient):

Patient Representative's Relationship to Patient:

FAX COMPLETED FORM TO ADVANCING ACCESS AT 1-800-216-6857

© 2017 Gilead Sciences, Inc. All rights reserved. ADM20300 01/17

ADVANCING ACCESS ENROLLMENT FORM PHONE: 1-800-226-2056 FAX: 1-800-216-6857 PAGE 3 OF 3

PATIENT NAME:  DATE OF BIRTH:

**9. PATIENT FINANCIAL INFORMATION REQUIRED ONLY IF APPLYING FOR THE PATIENT ASSISTANCE PROGRAM/MEDICATION ASSISTANCE PROGRAM (PAP/MAP)**

Current Annual Household Income: \$

Number of People in Household supported by above income: 1  2  3  4  5  6  Other

Please submit current documentation for all sources of income (eg, tax returns, W2, last 2 pay stubs, etc.). If there is no household income, indicate how the patient/household is being supported.

**ADDITIONAL INSURANCE INFORMATION**

Social Security Number:

Has the patient applied for ADAP? Yes  No  If Yes, date of application:

Has the patient applied for Medicaid? Yes  No  If Yes, date of application:

Is the patient eligible for Medicaid? Yes  No  If No, state reason:

Is the patient eligible for VA benefits? Yes  No  If Yes, has the patient tried to obtain the medication through the VA? Yes  No

Has the patient applied for an insurance plan offered through a state insurance marketplace (also known as an exchange)? Yes  No  If Yes, date of application:

Is the patient eligible for an insurance plan offered through a state insurance marketplace (also known as an exchange)? Yes  No  If No, state reason:

**APPLICANT DECLARATIONS AND AUTHORIZATIONS REQUIRED ONLY IF APPLYING FOR THE PAP/MAP**

I certify that all of the information provided in this application, including household income, is complete and accurate. I understand that program assistance will terminate if Advancing Access becomes aware of any false or inaccurate information or if this medication is no longer prescribed for me. I understand that completing this application does not ensure that I will qualify for patient assistance. If I receive free product through the PAP/MAP, I certify that I will not seek reimbursement or credit for this medication from any insurer, health plan, or government program. If I am a member of a Medicare Part D plan, I will not seek to have this medication or any cost for same associated with it counted as part of my out-of-pocket cost for prescription drugs. I understand that the PAP/MAP reserves the right to modify the application form, modify or discontinue this program, or terminate assistance at any time and without notice. I authorize the PAP/MAP and its administrator to forward my prescription to a dispensing pharmacy on my behalf. I authorize Gilead and its third party administrator to use the information provided on this form to obtain a personal credit report about me to verify the information on this form and determine my eligibility for the PAP/MAP.

SIGNATURE OF PATIENT/PATIENT REPRESENTATIVE (REQUIRED ONLY IF APPLYING FOR PAP/MAP):  DATE:

FAX COMPLETED FORM TO ADVANCING ACCESS AT 1-800-216-6857

ADVANCING ACCESS, GILEAD, the GILEAD logo, TRUVADA and TRUVADA for PHEP are trademarks of Gilead Sciences, Inc. or its related companies.  
 © 2017 Gilead Sciences, Inc. All rights reserved. ADM20300 01/17





# Ready, Set, PrEP

- US Dept. of Health and Human Services Program
  - No-cost PrEP provider if the patient:
    - Tests negative for HIV;
    - Has a valid prescription
    - Does not have health insurance coverage for outpatient prescription drugs
  - Does not cover costs of visits or labs
  
- Easy to apply:
  - Online: [GetYourPrEP.com](http://GetYourPrEP.com)
  - By phone: 855.447.8410



# STOP PrEP

- The patient doesn't want it
- Behavior or life situations have changed that lower risk for HIV infection
- Intolerable adverse events/toxicities
- HIV-infection






# PrEP Locator

PrEP Locator  Find Your Provider

[About Us](#) [About PrEP](#) [Locator Data](#) [FAQ](#) [Add Provider](#) [Add Locator To Your Site](#) [Contact](#)

Zip code or city & state, or full address 

PrEP for uninsured

PrEP access assistance

**Vanderbilt Infectious Disease Clinic**  
1211 21st Avenue S  
Medical Arts Building  
Nashville, TN 37212  
615-936-1174  
**Distance from your location:** 0.3 miles

**Planned Parenthood Nashville Health Center**  
412 Dr. D.B. Todd Jr. Blvd  
Nashville, TN 37203  
615-321-7216  
**Distance from your location:** 1.4 miles

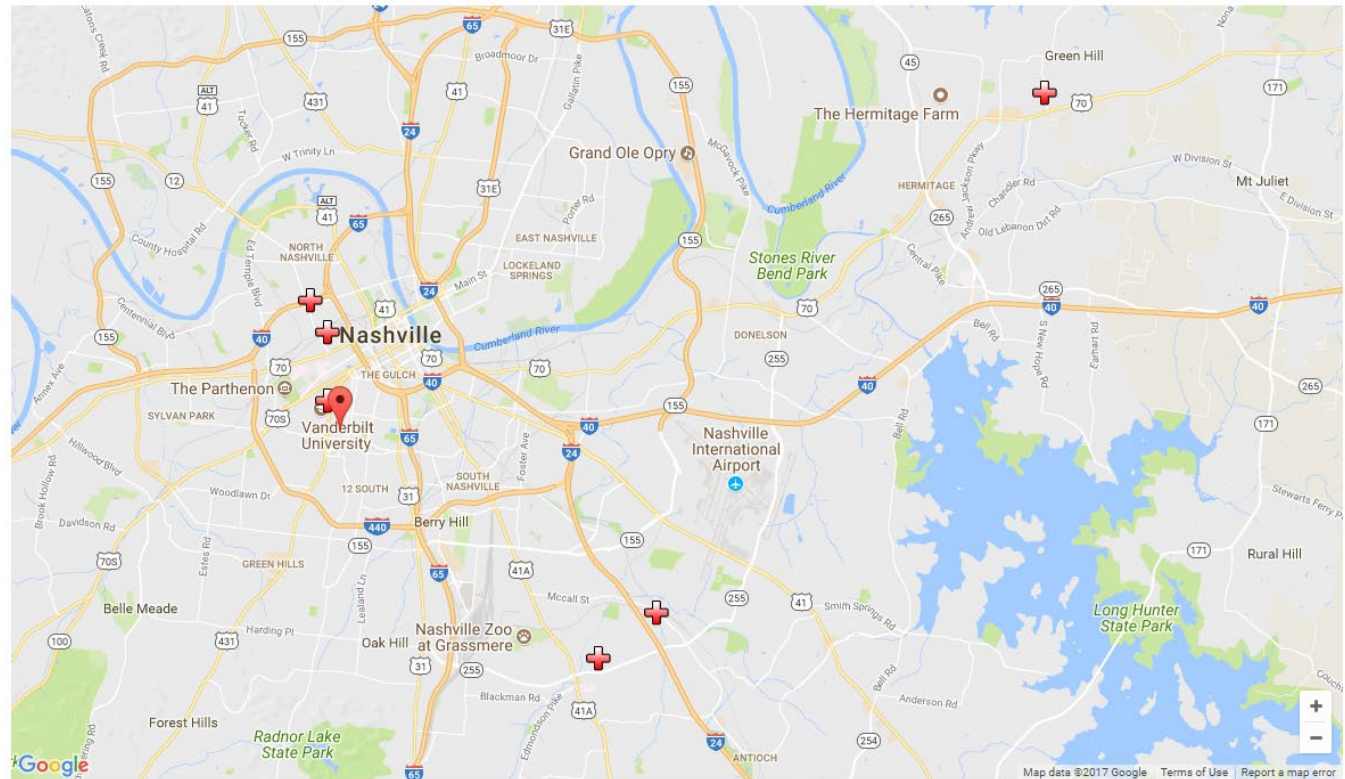
**Meharry Community Wellness Center**  
1005 Dr. D.B. Todd Jr Blvd  
Suite 333  
Nashville, TN 37209  
615-327-5788  
**Distance from your location:** 2 miles

**Middle Tennessee Internal Medicine Associates - Tracy Osbourne MD**  
510 Recovery Road  
Suite 201  
Nashville, TN 37212  
615-833-7080  
**Distance from your location:** 6 miles

**Neighborhood Health @ MyHouse**  
42 Metroplex Drive  
Building 4  
Nashville, TN 37211

[Add PrEP Locator to Your Site](#)

[Suggest a provider for the directory](#)



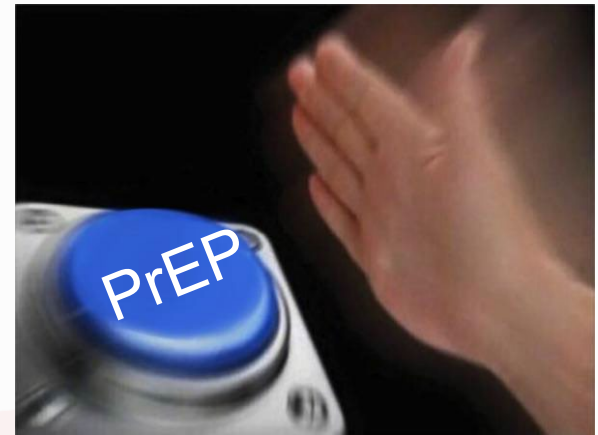
<https://prepolator.org>





# Conclusion

- PrEP is a component of primary care
- PrEP is an extremely effective preventive strategy for both HIV and STIs
- Understand PrEP prescribing guidelines
- There are some adverse effects, but PrEP is generally very well-tolerated
- PrEP requires an ongoing patient-doctor relationship
- Ask for help! [sean.g.kelly@vumc.org](mailto:sean.g.kelly@vumc.org)





# Questions?

