PRE-EXPOSURE PROPHYLAXIS FOR HIV (EASIER THAN IT SOUNDS!)

Sean Kelly, MD Vanderbilt Division of Infectious Diseases August 10, 2018

Objectives

- Importance of PrEP in the Southeast
- Provider barriers for providing PrEP
- Becoming a PrEP provider
- Logistical considerations of a PrEP clinic
 - Visits
 - Labs
 - Truvada® access
 - Advertising

Have you provided PrEP?

- A. Yes
- B. No
- C. Wait, what's 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



But what is PrEP, really?

Truvada®



- Fixed dose combination of tenofovir disoproxil fumarate (TDF) 300mg/emtracitabine (FTC) 200mg
- Developed by Gilead
- 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 6/2017

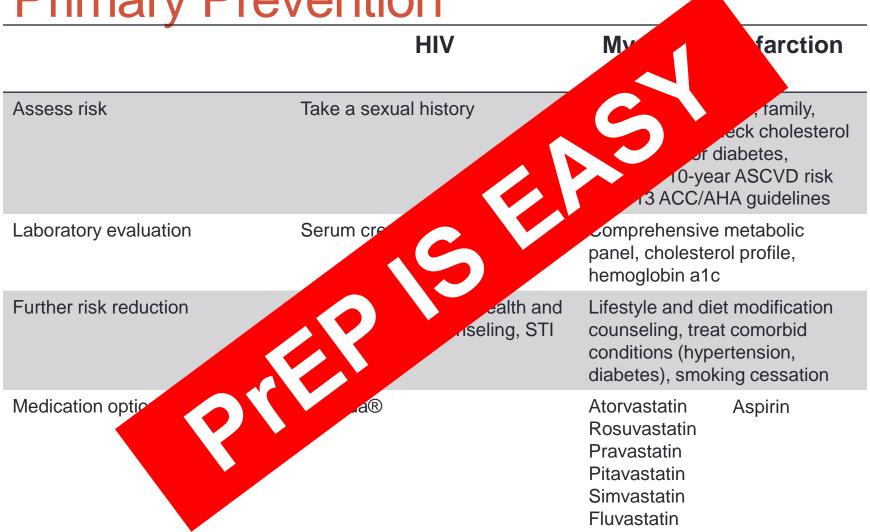
Also approved in Australia, Canada, France, Norway, Belgium, Netherlands, Peru, Israel, Kenya, Botswana, Zimbabwe and South Africa

Coming soon in: Brazil, Nigeria, Zambia, Malawi, Uganda, India, Thailand, United Kingdom, Italy

This is different from PEP

- PrEP = Pre-Exposure Prophylaxis
 - HIV exposure has not yet occurred
 - Indefinite duration if HIV risk persists
- PEP = Post-Exposure Prophylaxis
 - HIV exposure HAS occurred
 - Goal is to reduce incidence of established infection
 - THREE drugs required: Truvada® (TDF/FTC) + dolutegravir (or raltegravir)
 - Limited duration of 28 days

Primary Prevention



Who benefits from PrEP

Summary of Guidance for PrEP Use					
	Men Who Have Sex With Men	Heterosexual Women and Men	Injection Drug Users		
Detecting substantial risk	Sexual partne Recent bacter High number partners History of inco no condom us Commercial se	HIRI-MSM Risk Index*			
of acquiring HIV infection:		1 How old are you today (yrs)?	<18 years 18–28 years 29–40 years 41–48 years ≥49 years	score 0 score 8 score 5 score 2 score 0	
		2 How many men have you had sex with	>10 male partners	score 7	

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

*To identify sexually active MSM their male patients a routine question: men, women, or both?"

†If score is 10 or greater, evalu services; If score is 9 or less, provide Other important information for people who take TRUVADA to help reduce their risk of getting HIV-1 infection: Before taking TRUVADA to reduce your risk of getting HIV-1 infection:

- You must be HIV-negative to start TRUVADA. You must get tested to make sure that you do not already have HIV-1 infection.
- . Do not take TRUVADA to reduce the risk of getting HIV-1 unless you are confirmed to be HIV-negative.
- 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:
- tiredness
- sore throat
- fever

- vomiting or diarrhea
- ioint or muscle aches or

How well does PrEP work?



iPrEX



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ORIGINAL ARTICLE

Preexposure Chemoprophylaxis for HIV Prevention in Men Who Have Sex with Men

Robert M. Grant, M.D., M.P.H., Javier R. Lama, M.D., M.P.H., Peter L. Anderson, Pharm.D., Vanessa McMahan, B.S., Albert Y. Liu, M.D., M.P.H., Lorena Vargas, Pedro Goicochea, M.Sc., Martín Casapía, M.D., M.P.H., Juan Vicente Guanira-Carranza, M.D., M.P.H., Maria E. Ramirez-Cardich, M.D., Orlando Montoya-Herrera, M.Sc., Telmo Fernández, M.D., Valdilea G. Veloso, M.D., Ph.D., Susan P. Buchbinder, M.D., Suwat Chariyalertsak, M.D., Dr.P.H., Mauro Schechter, M.D., Ph.D., Linda-Gail Bekker, M.B., Ch.B., Ph.D., Kenneth H. Mayer, M.D., Esper Georges Kallás, M.D., Ph.D., K. Rivet Amico, Ph.D., Kathleen Mulligan, Ph.D., Lane R. Bushman, B.Chem., Robert J. Hance, A.A., Carmela Ganoza, M.D., Patricia Defechereux, Ph.D., Brian Postle, B.S., Furong Wang, M.D., J. Jeff McConnell, M.A., Jia-Hua Zheng, Ph.D., Jeanny Lee, B.S., James F. Rooney, M.D., Howard S. Jaffe, M.D., Ana I. Martinez, R.Ph., David N. Burns, M.D., M.P.H., and David V. Glidden, Ph.D., for the iPrEx Study Team*

N Engl J Med 2010; 363:2587-2599 | December 30, 2010 | DOI: 10.1056/NEJMoa1011205

44% HIV risk reduction, but 92% risk reduction when taken consistently among MSM and transgender women



TDF2 Study Group



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ORIGINAL ARTICLE

Antiretroviral Preexposure Prophylaxis for Heterosexual HIV Transmission in Botswana

Michael C. Thigpen, M.D., Poloko M. Kebaabetswe, Ph.D., M.P.H., Lynn A. Paxton, M.D., M.P.H., Dawn K. Smith, M.D., M.P.H., Charles E. Rose, Ph.D., Tebogo M. Segolodi, M.Sc., Faith L. Henderson, M.P.H., Sonal R. Pathak, M.P.H., Fatma A. Soud, Ph.D., Kata L. Chillag, Ph.D., Rodreck Mutanhaurwa, M.B., Ch.B., Lovemore Ian Chirwa, M.B., Ch.B., M.Phil., Michael Kasonde, M.B., Ch.B., Daniel Abebe, M.D., Evans Buliva, M.B., Ch.B., Roman J. Gvetadze, M.D., M.S.P.H., Sandra Johnson, M.A., Thom Sukalac, Vasavi T. Thomas, M.P.H., R.Ph., Clyde Hart, Ph.D., Jeffrey A. Johnson, Ph.D., C. Kevin Malotte, Dr.P.H., Craig W. Hendrix, M.D., and John T. Brooks, M.D., for the TDF2 Study Group*

N Engl J Med 2012; 367:423-434 | August 2, 2012 | DOI: 10.1056/NEJMoa1110711

62.2% HIV risk reduction among heterosexual men and women



Partners PrEP Study Team



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ORIGINAL ARTICLE

Antiretroviral Prophylaxis for HIV Prevention in Heterosexual Men and Women

Jared M. Baeten, M.D., Ph.D., Deborah Donnell, Ph.D., Patrick Ndase, M.B., Ch.B., M.P.H., Nelly R. Mugo, M.B., Ch.B., M.P.H., James D. Campbell, M.D., Jonathan Wangisi, M.B., Ch.B., Jordan W. Tappero, M.D., M.P.H., Elizabeth A. Bukusi, M.B., Ch.B., Ph.D., Craig R. Cohen, M.D., M.P.H., Elly Katabira, M.B., Ch.B., Allan Ronald, M.D., Elioda Turmwesigye, M.B., Ch.B., Edwin Were, M.B., Ch.B., M.P.H., Kenneth H. Fife, M.D., Ph.D., James Kiarie, M.B., Ch.B., M.P.H., Carey Farquhar, M.D., M.P.H., Grace John-Stewart, M.D., Ph.D., Aloysious Kakia, M.B., Ch.B., Josephine Odoyo, M.P.H., Akasiima Mucunguzi, M.B., Ch.B., Edith Nakku-Joloba, M.B., Ch.B., Ph.D., Rogers Twesigye, M.B., Ch.B., M.P.H., Kenneth Ngure, Ph.D., Cosmas Apaka, B.Sc., Harrison Tamooh, M.B., Ch.B., Fridah Gabona, M.B., Ch.B., Andrew Mujugira, M.B., Ch.B., Dana Panteleeff, B.S., Katherine K. Thomas, M.S., Lara Kidoguchi, M.P.H., Meighan Krows, B.A., Jennifer Revall, B.A., Susan Morrison, M.D., M.P.H., Harald Haugen, M.S., Mira Emmanuel-Ogier, B.A., Lisa Ondrejcek, M.A., Robert W. Coombs, M.D., Ph.D., Lisa Frenkel, M.D., Craig Hendrix, M.D., Namandjé N. Bumpus, Ph.D., David Bangsberg, M.D., M.P.H., Jessica E. Haberer, M.D., M.P.H., Wendy S. Stevens, M.D., F.C.Path., Jairam R. Lingappa, M.D., Ph.D., and Connie Celum, M.D., M.P.H., for the Partners PrEP Study Team

N Engl J Med 2012; 367:399-410 August 2, 2012 DOI: 10.1056/NEJMoa1108524

75% HIV risk reduction among heterosexual serodiscordant couples, 90% among those with detectable drug levels



Bangkok Tenofovir Study Group

THE LANCET

Volume 381, Issue 9883, 15-21 June 2013, Pages 2083-2090



Articles

Antiretroviral prophylaxis for HIV infection in injecting drug users in Bangkok, Thailand (the Bangkok Tenofovir Study): a randomised, double-blind, placebo-controlled phase 3 trial

Kachit Choopanya, MD^a, Dr Michael Martin, MD^{b, c,} ▲· ■, Pravan Suntharasamai, MD^a, Udomsak Sangkum, MD^a, Philip A Mock, MAppStats^b, Manoj Leethochawalit, MD^d, Sithisat Chiamwongpaet, MD^d, Praphan Kitisin, MD^d, Pitinan Natrujirote, MD^d, Somyot Kittimunkong, MD^e, Rutt Chuachoowong, MD^b, Roman J Gvetadze, MD^c, Janet M McNicholl, MD^{b, c}, Lynn A Paxton, MD^c, Marcel E Curlin, MD^{b, c}, Craig W Hendrix, MD^f, Suphak Vanichseni, MD^a, for the Bangkok Tenofovir Study Group

48.9% risk reduction, but 74% HIV risk reduction when taken consistently, among IDUs (TDF only)



IPERGAY



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ORIGINAL ARTICLE

On-Demand Preexposure Prophylaxis in Men at High Risk for HIV-1 Infection

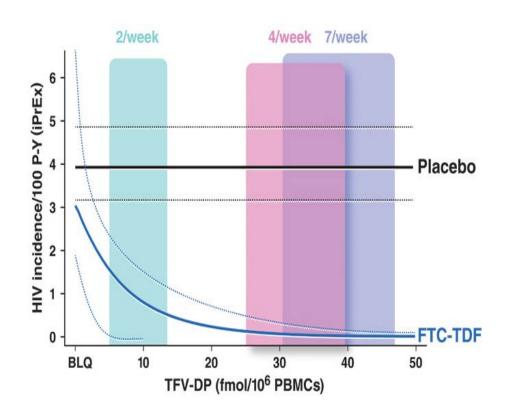
Jean-Michel Molina, M.D., Catherine Capitant, M.D., Bruno Spire, M.D., Ph.D., Gilles Pialoux, M.D., Laurent Cotte, M.D., Isabelle Charreau, M.D., Cecile Tremblay, M.D., Jean-Marie Le Gall, Ph.D., Eric Cua, M.D., Armelle Pasquet, M.D., François Raffi, M.D., Claire Pintado, M.D., Christian Chidiac, M.D., Julie Chas, M.D., Pierre Charbonneau, M.D., Constance Delaugerre, Pharm.D., Ph.D., Marie Suzan-Monti, Ph.D., Benedicte Loze, B.S., Julien Fonsart, Pharm.D., Gilles Peytavin, Pharm.D., Antoine Cheret, M.D., Ph.D., Julie Timsit, M.D., Gabriel Girard, Ph.D., Nicolas Lorente, Ph.D., Marie Préau, Ph.D., James F. Rooney, M.D., Mark A. Wainberg, Ph.D., David Thompson, B.C.L., LL.B., Willy Rozenbaum, M.D., Veronique Doré, Ph.D., Lucie Marchand, B.S., Marie-Christine Simon, B.S., Nicolas Etien, B.S., Jean-Pierre Aboulker, M.D., Laurence Meyer, M.D., Ph.D., and Jean-François Delfraissy, M.D., for the ANRS IPERGAY Study Group*

N Engl J Med 2015; 373:2237-2246 | December 3, 2015 | DOI: 10.1056/NEJMoa1506273

86% HIV risk reduction in MSM using on-demand PrEP



Dosing matters

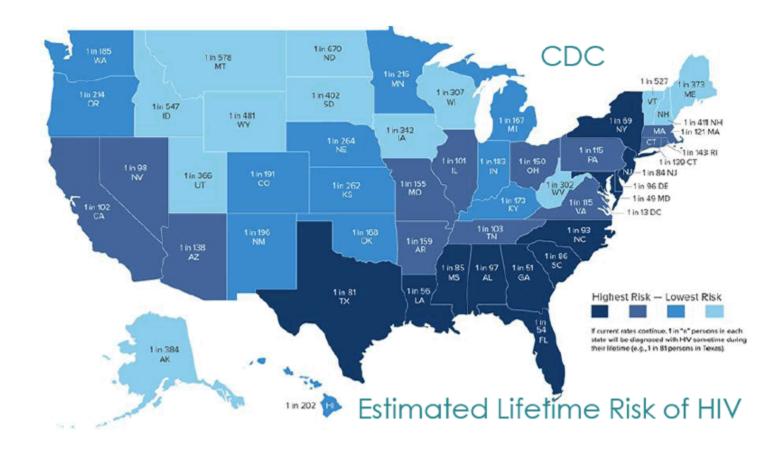


Using drug concentrations in iPrEX and STRAND, pharmacokinetic models predict **76%** risk reduction with 2 doses/week, **96%** with 4 doses/week, and **99%** with 7 doses/week.

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%

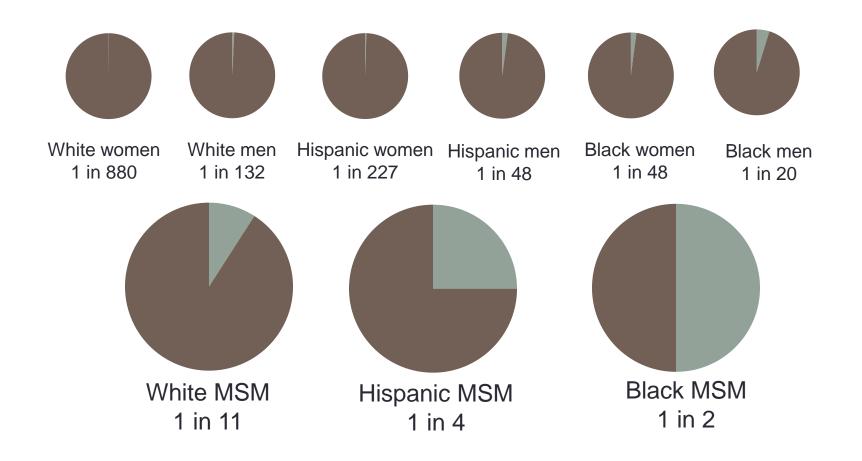
Why PrEP matters



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.

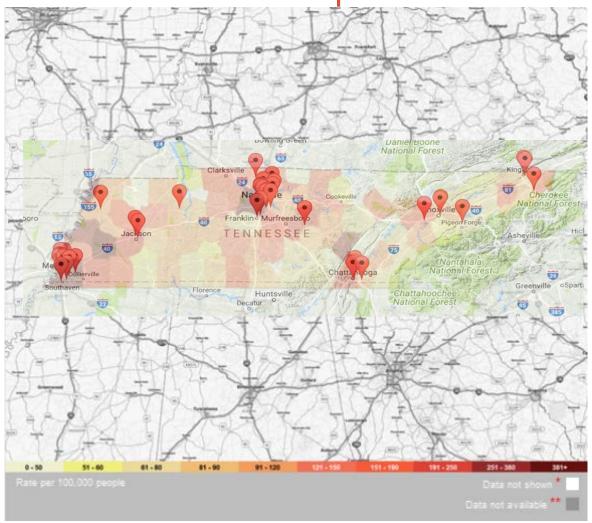


HIV Risk by Race/Ethnicity and MSM



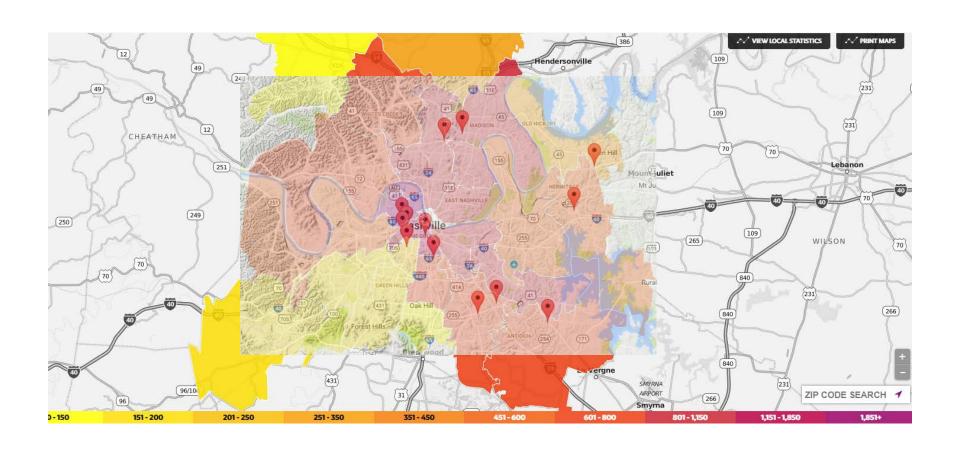
Tennessee

HIV risk and location of PrEP providers



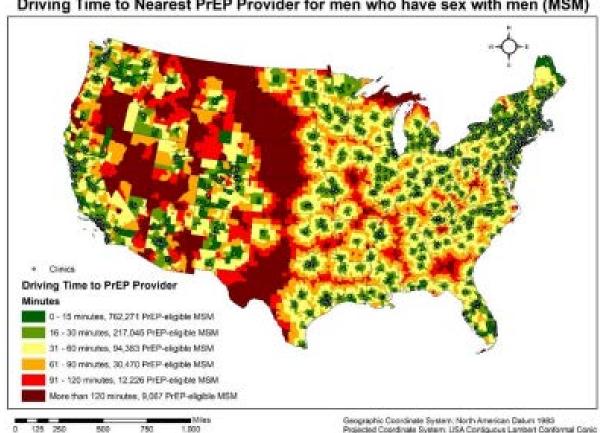
Nashville

HIV risk and location of PrEP providers



PrEP Deserts

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



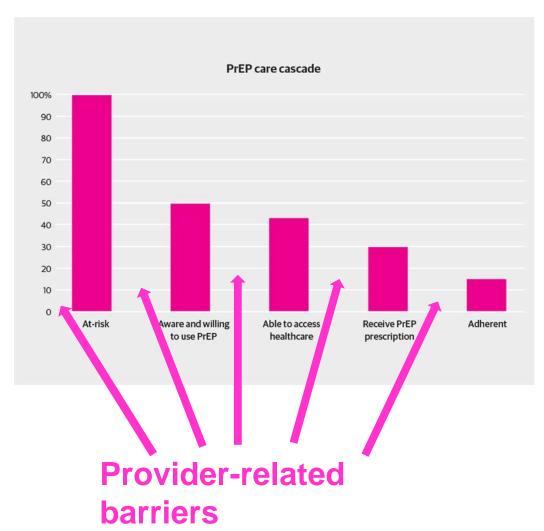
- Most MSM with reduced geographic access to PrEP providers ("PrEP deserts") reside in the South.
- Over 50% of MSM in the South must drive >60 minutes to a PrEP provider.
- PrEP deserts are generally non-urban areas.

Low PrEP Uptake

 Among recent national surveys, low numbers of primary healthcare providers reported providing PrEP (9%-35%).

The PrEP Care Cascade

- Many barriers exist along the PrEP care cascade.
- Patient-related barriers have been wellcharacterized across many different populations.
- Provider-related barriers are relatively poorly characterized, though they also exist along the care continuum.

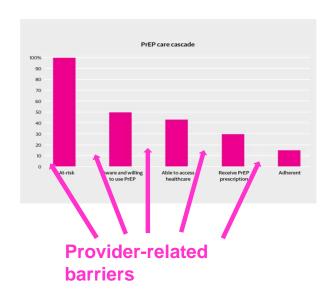




Provider barriers

Knowledge/Attitudes

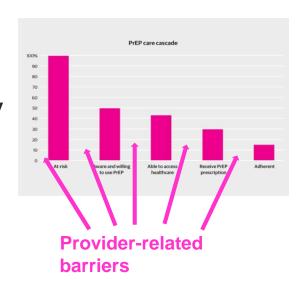
- Insufficient evidence of efficacy (22%-81%)
- Inexperience with Truvada/lack of knowledge (60%-77.5%)
- PrEP is cost-prohibitive (29%-92%)
- PrEP is not a primary care activity ("not me") (34%)
- Unfamiliarity with PrEP candidates; inability to assess high HIV risk (61%)



Provider barriers

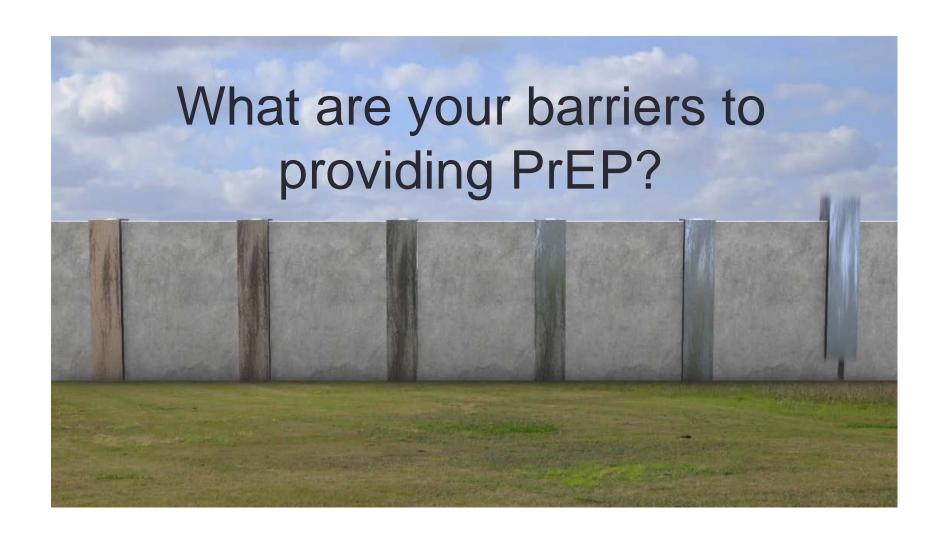
Knowledge/Attitudes

- Sexual risk compensation (that use of PrEP will lead to increased high-risk behavior) (33%)
- Discomfort using a drug with potential adverse effects in an otherwise healthy person (primary prevention vs. treatment) (67%)
- Patients perceived as non-adherent, and risk HIV resistance mutation development (40%-77%)
- Personal ideology



Provider Barriers Needs for practice transformation

- Nursing support (92%)
- Social work support (90%)
- CME (90%)
- PrEP training event (OR 4.84, CI 1.77–13.21)



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

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

...Ready for it?

- Inquiring about a sexual history and sexual health counseling are part of primary care.
 - We already do that!
- The most important tool for assessing HIV risk is your clinical sense.
 - We already have that!
- Basic labs are required for Truvada® prescriptions.
 - We already do that!
- Most common medications, like Truvada®, require followup and monitoring.
 - We already do that!

Get comfortable!

- Patients have sex, in lots of different ways.
- Patients may not want to discuss this.
- Providers may not feel comfortable discussing this.



Taking a sexual history is a potentially life-saving intervention.



HIV risk is behavioral

The only way to know is to ask (and listen)!

Taking a sexual history promotes comprehensive STI risk reduction counseling



Condom use
Knowing HIV status
Knowing partner's HIV status
PrEP

Stigma

A preventative measure against the consequences of sexual activity

... condones sexual activity

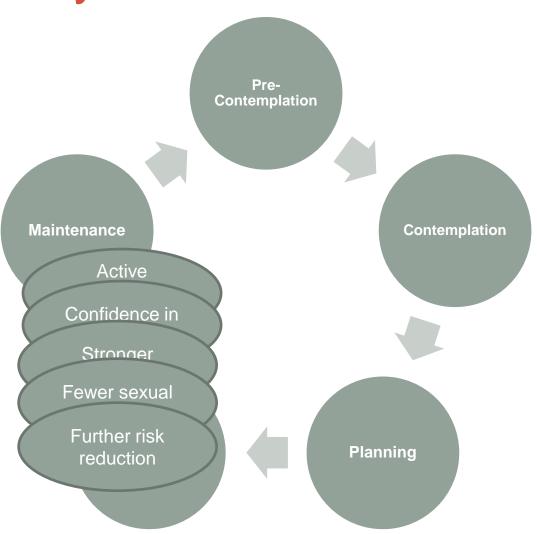
... promotes sexual activity

... causes sexual activity

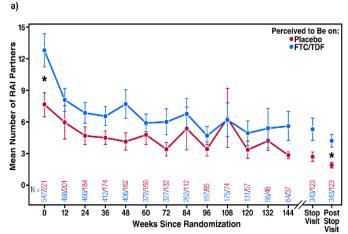


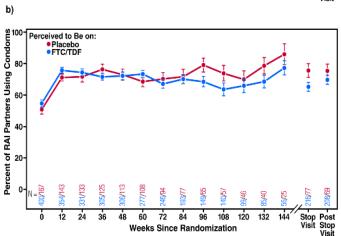


But actually...



No evidence of sexual risk compensation in the iPrEx trial of daily oral PrEP





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

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

Syphilis incidence also decreased in both study arms

Ready, set, PrEP!



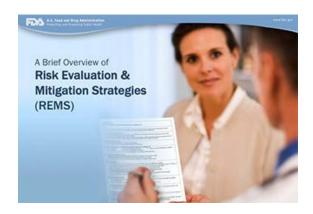


PrEP Clinic Needs

- Provider
- Nursing
 - Assistance in communicating with patient
 - Providing labs and other documents to pharmacy
 - Assisting in completing prior authorization
- Pharmacy
 - Specialty pharmacy partnership highly recommended
- Phlebotomy, blood draws
- Ability to provide treatment and counseling for STIs

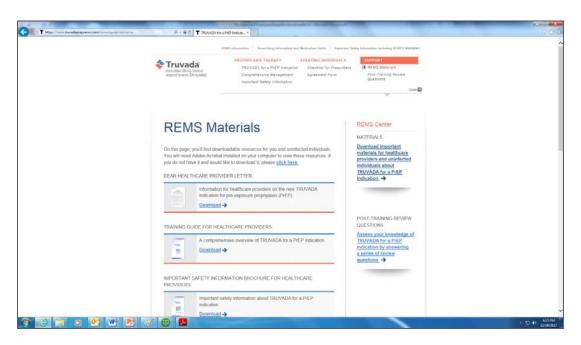
Before prescribing

- Risk Evaluation and Mitigation Strategies (REMS)
 - REMS is a safety strategy to manage risks associated with a drug and to enable continued access to the drug by managing its safe use.
 - REMS is a safety measure beyond the professional labeling to ensure the drug's benefits outweigh its risks.
 - REMS requirements are different for different drugs.



Before prescribing

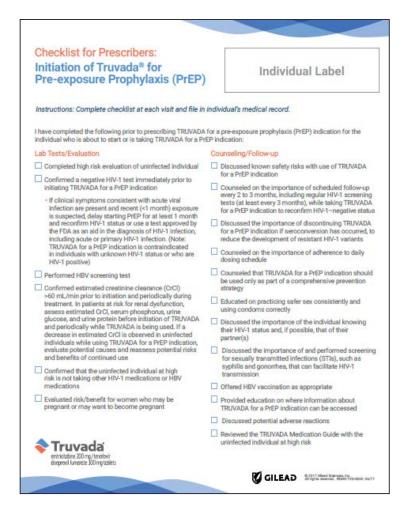
Risk Evaluation and Mitigation Strategies (REMS)



https://www.truvadapreprems.com/truvadaprep-resources



Before prescribing



Patient Intake

- Most new PrEP patients will seek out PrEP
- Since many have no PCP, allow self-referrals
- Consider patient insurance status
 - Cost of medication
 - Cost of quarterly visits
 - Cost of labs
 - Cost of vaccination, parenteral antibiotics and their administrations if patient acquires bacterial STI

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"

	Table 2. Adverse Events.*						
	Adverse Event	FTC-TDF (N = 1251)		Placebo (N	=1248)	P Value†	
		no. of patients (%)	no. of events	no. of patients (%)	no. of events		
	Any adverse event	867 (69)	2630	877 (70)	2611	0.50	
	Any serious adverse event	60 (5)	76	67 (5)	87	0.57	
	Any grade 3 or 4 event	151 (12)	248	164 (13)	285	0.51	
	Grade 3 event	110 (9)	197	117 (9)	225	0.65	
	Grade 4 event	41 (3)	51	47 (4)	60	0.57	
	25 (2)	28	14 (1)	15	0.08		
	Headache	56 (4)	66	41 (3)	55	0.10	
Nausea	ausea 20		22	9 (<1)	10	0.
	Unintentional weight loss (>59	4) 97 (9)	3.4	14 (1)	19	0.04	
Unintentional weigh	t loss (≥5%) 27	(2)	34	14 (1)		19	0.
	Death	1 (<1);	1	4 (<1)	4	0.18	
	Discontinuation of study drug						
	Permanently	25 (2)	26	27 (2)	33	0.82	
	Permanently or temporaril	y 79 (6)	99	72 (6)	92	0.49	

^{*} A listing of all laboratory abnormalities and clinical adverse events of grade 2 or higher that were reported in 25 or more subjects (1%) is provided in Tables S9 and S10 in the Supplementary Appendix. FTC-TDF denotes emtricitabine and tenofovir disoproxil fumarate.

[†] P values were calculated by the log-rank test.

[‡] This death was due to a motorcycle accident.

	Table 2. Adverse Events, According to Tro	eatment Group.*						
	Adverse Event	TDF-FTC (N=611)			Placebo (N = 608)			
		no. of participants (%)	no. of events	no. of participants (%)	no. of events			
	Any	557 (91.2)	4357	536 (88.2)	4390	0.003		
	Any serious	63 (10.3)	68	66 (10.9)	79	0.90		
	Grade 3 or 4 only	19 (3.1)	21	29 (4.8)	32	0.17		
	At least possibly related to study d	rug 20 (3.3)	21	27 (4.4)	29	0.35		
	Upper respiratory tract infection	231 (37.8)	385	241 (39.6)	439	0.84		
Dizziness		92 (15.1)	109	(67 (11.	.0)	82	0.03
	Abdominal pain	155 (25.4)	215	156 (25.7)	217	0.78	_	_
Nausea	1	13 (18.5)	132	4	43 (7.1)	48	< 0.001
Vomiting		69 (11.3)	87	1	43 (7.1)	47	0.008
	Back pain	57 (9.3)	72	68 (11.2)	90	0.37		
	Rash	39 (6.4)	44	42 (6.9)	48	0.81		
	Fracture	7 (1.1)	7	6 (1.0)	8	0.74		
	Elevated creatinine	1 (0.2)	1	0	0	1.00		
	Hypophosphatemia	142 (23.2)	219	159 (26.2)	245	0.65		
	Hyperamylasemia	315 (51.6)	997	302 (49.7)	1017	0.45		
	Elevated AST	36 (5.9)	43	38 (6.2)	42	0.90		
	Elevated ALT	38 (6.2)	48	43 (7.1)	66	0.57		
	Death:	2 (0.3)	2	4 (0.7)	4	0.45		

^{*} ALT denotes alanine aminotransferase, and AST aspartate aminotransferase.

[†] All P values were calculated with the use of a time-to-first-event analysis (regression analysis of survival data on the basis of the Cox proportional-hazards model), with the exception of the P values for weight loss of 5% or more and death, which were calculated with the use of Fisher's exact test.

[‡] The causes of death in the TDF-FTC group were motor vehicle accident (one participant) and suicide (one); the causes of death in the placebo group were motor vehicle accident (two), homicide (one), and cerebrovascular accident (one).

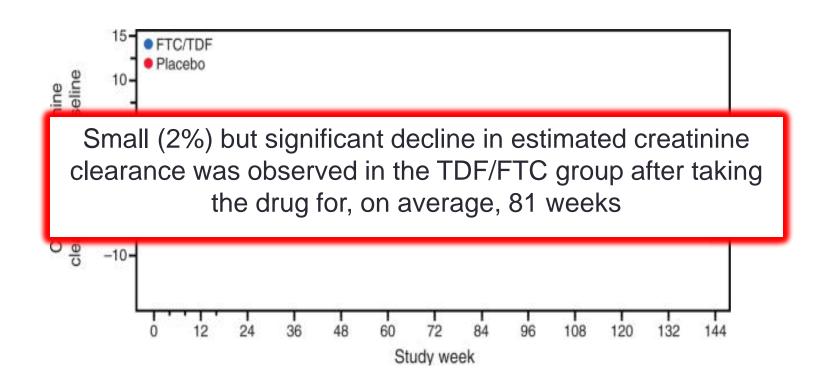




Table 3. Bone Mineral Density Scores.*									
Assessment		Forearm			Hip		L	umbar Spine	
	TDF-FTC (N = 109)	Placebo (N=112)	P Value	TDF-FTC (N=109)	Placebo (N=112)	P Value	TDF-FTC (N=109)	Placebo (N=112)	P Value
T score			0.004			<0.001			<0.001

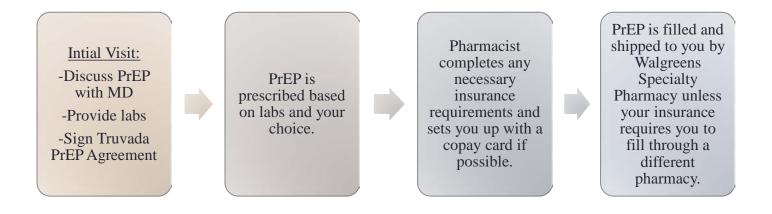
BUT THIS CAN RECOVER!

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	
					I	

^{*} 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.







Agreement Form for Initiating Truvada® for Individual Label Pre-exposure Prophylaxis (PrEP) TRUVADA is indicated in combination with safer sex practices for pre-exposure Instructions: prophylaxis (PrEP) to reduce the risk of sexually acquired HIV-1 in adults at high Review form with an risk. The following factors may help to identify individuals at high risk: HIV-negative person who is about to start · Has partner(s) known to be HIV-1 infected, or or is taking TRUVADA Engages in sexual activity within a high prevalence area or social network for a PrEP indication at and one or more of the following: each visit. File form in - Inconsistent or no condom use the person's medical - Diagnosis of sexually transmitted infections record. - Exchange of sex for commodities (such as money, shelter, food, or drugs) - Use of illicit drugs, alcohol dependence - Incarceration - Partner(s) of unknown HIV-1 status with any of the factors listed above **HIV-Negative Person Agreement** Healthcare Provider Agreement By signing below, I signify my understanding of the By signing below, I acknowledge that I have talked risks and benefits of TRUVADA for a PrEP indication with my healthcare provider about the risks and and my obligation as a prescriber to educate the HIVbenefits of TRUVADA to reduce the risk of getting HIV-1 infection, and I understand them clearly. negative person about these risks, counsel the person on risk reduction, monitor the person appropriately, Specifically, I attest to the following: and report adverse events. Specifically, I attest to · My healthcare provider talked with me about the having done the following: importance of follow-up HIV-1 testing, and I agree · Confirmed the negative HIV-1 status of this person to have repeat HIV-1 screening tests (at least every prior to starting TRUVADA for a PrEP indication 3 months) as scheduled by my healthcare provider · Read the Prescribing Information, including the · My healthcare provider talked with me about the BOXED WARNING safety risks involved with using TRUVADA to reduce the risk of getting HIV-1 infection · Discussed with the HIV-negative person the known safety risks with use of TRUVADA for a PrEP · My healthcare provider talked with me about a complete prevention strategy and always practicing safer sex by using condoms correctly · Reviewed the importance of adherence with a comprehensive prevention strategy, including . I will talk with my healthcare provider if I have any practicing safer sex · Discussed the importance of regular HIV-1 testing I have read the TRUVADA Medication Guide (at least every 3 months) while taking TRUVADA for a PrEP indication · Reviewed the TRUVADA Medication Guide with the HIV-Negative Person's Signature HIV-negative person at high risk prior to prescribing TRUVADA for a PrEP indication · Completed the items on the Checklist for Prescribers: Initiation of TRUVADA for Pre-exposure Prophylaxis (PrEP) Truvada embricitabine 200 mg / tenofovir disoproxil fumarate 300 mg tablets Healthcare Provider's Signature Date GILEAD 0.2017 Gilead Sciences, Inc. All rights reserved. REMS-TVD-0029 04/17

https://www.truvadapreprems.com/truvadaprep-agreement-form#

- Labs:
 - HIV Ag/Ab
 - Basic Metabolic Panel
 - Hepatitis B sAg, sAb
 - Hepatitis C Ab
 - Treponemal IgG
 - Gonorrhea/chlamydia PCR



Tips

- If a specialty pharmacy will be used, make sure to document the patient's preferred pharmacy
 - Provides more efficient prescription for azithromycin if +chlamydia!
- Get contact information!
- Taking a sexual history is an excellent opportunity to discuss substance use
- High risk behavior often occurs during travel, so ASK!
- Use patient-friendly terms

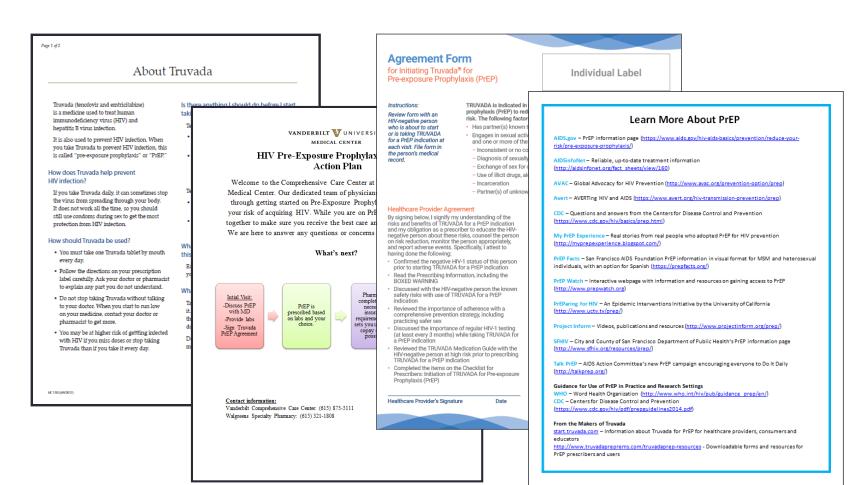


PrEP resources for patients

PrEP welcome packet

- 1. Truvada® medication guide
- 2. CDC PrEP medication information sheet for patients
- 3. Patient/Provider Agreement
- 4. PrEP Action Plan and Next Steps
- 5. Walgreens Specialty Pharmacy contact information
- 6. Additional PrEP resources

PrEP resources for patients



Prescribing process Specialty Pharmacy

- Specialty Pharmacy may complete all prior authorization and copay assistance requirements and connect with the patient
- May also send the prescription and prior authorizations to another pharmacy if the patient requests this



Prescribing process Specialty Pharmacy

- Send prescription electronically to Specialty Pharmacy
 - 30 tabs, 2 refills (total 90-day supply)
- When HIV screen and serum creatinine are available, send message to clinic RN to fax lab results to pharmacy
- Pharmacy contacts patient for further counseling and to arrange PrEP delivery
- Pharmacy contacts patient intermittently over 6 months to assess tolerability and adherence

Prescribing Process

No Specialty Pharmacy

- Send prescription to pharmacy
- Follow HIV screen, serum creatinine
- Complete PA if required (VERY few insurance companies still require this)
 - Information requested: last date of screening and sometimes PrEP Agreement form
- Copay card
 - Gilead copay card: \$4800/year benefit
 - https://www.gileadadvancingaccess.com/copay-coupon-card
 - Federal beneficiaries not eligible

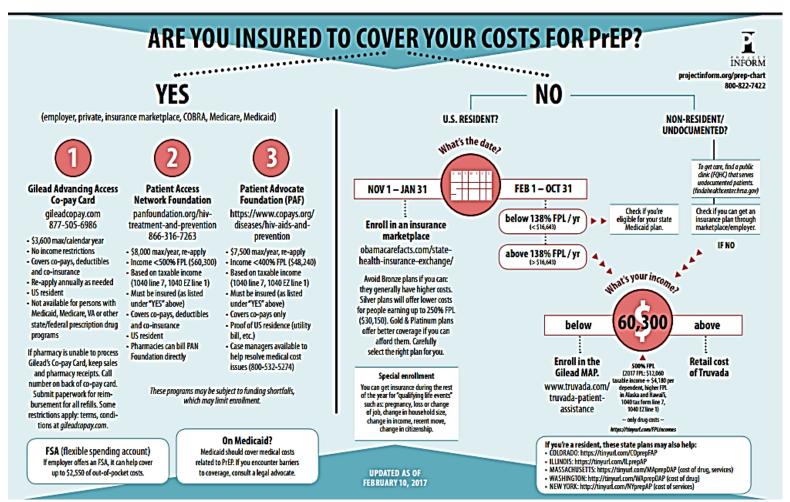


Prior Authorization

NAVITUS	Drug Prior Authorization ntricitabine/tenofovir (TRUVADA)			
STEP 1: CLEARLY PRINT AND COMPLETE TO	EXPEDITE PROCESSING			
Date: 02/28/2017	Prescriber First Sean Kelly			
Patient First & Last Name:	Prescriber NPI: 1932477171			
Palient Address:	Prescriber Address: 1211 21st Ave S Suite 102A Nashville TN 37232			
Patient ID:	Prescriber Phone: 615-936-1174			
Patient Date of Birth:	Prescriber Fax; 615-875-0666			
transmission and receiving TRUVADA to	following suspected or confirmed Human			
AND ☐ Patient is ≥ 18 years of age AND ☐ Patient is HIV negative: Please provide date of last test: AND ☐ Prescriber has completed the REMS Prescriber Checklist: http://www.truvadacreprems.com/Content/odf/Checklist for Prescribers.pdf AND ☐ Patient and prescriber have signed the REMS Agreement Form and it is saved in the patient's medical chart: http://www.truvadapreprems.com/Content/odf/Agreement Form.pdf Please provide expected duration of treatment:				
DIAGNOSIS D: Pre-Exposure Prophylaxis (Con Please provide date of last test: 1292201 STEP 3: SIGN AND FAX TO: NAVITUS PRIOR A	s (HIV) negative			
Prescriber Signature:	Date:2-3%-17			
If patient meets criteria, allow 2 business days for	processing			



Other Cost Options





Billing/coding

- While ICD-10 does not provide specific codes for PrEP, the following codes have been discussed with billing and used for PrEP visits:
 - Z20.6 "Contact with and (suspected) exposure to HIV "
 - Z17.1 "Human immunodeficiency virus [HIV] counseling"
 - Z11.3 "Encounter for screening for infection with a predominantly sexual mode of transmission"
 - Z79.2 "Long-term (current) use of antibiotics"
- Note: Can also bill by time, >25 minutes = level 4
- Not age 772.52 High no. mosexual be avior

The Second Visit

- Repeat HIV screen, repeat serum creatinine
- Assess adherence
- Reassess eligibility
- Assess for side effects
- Provide behavioral risk reduction support
- Assess pregnancy intention (test if could be pregnant)
- If HIV-negative and eligible, refill PrEP

Every 3 months

- HIV screen
- Assess adherence
- Reassess eligibility
- Assess for side effects
- Provide behavioral risk reduction support
- Assess pregnancy intention (test if could be pregnant)
- If HIV-negative and eligible, refill PrEP

Every 6 months

- Screen for other STIs
- Repeat serum creatinine

STOP PrEP

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



A year of PrEP

Encounter	To do
Month 0	 Screen for HIV Confirm HBV and HCV status Check serum creatinine Screen for STIs Counseling Prescribe
Month 3	Screen for HIVCheck serum creatinineCounselingPrescribe
Month 6	Screen for HIVScreen for STIsCounselingPrescribe
Month 9	Screen for HIVCheck serum creatinineCounselingPrescribe
Month 12	Screen for HIVScreen for STIsCounselingPrescribe

Labs:

- HIV screen: 5
- Serum creatinine: 3
- STI screen: 3

Prescriptions/Refill authorizations: 5

Discussions: 5+



Advertise!

Pre-Exposure Prophylaxis (PrEP) at the **Vanderbilt Comprehensive Care Center**

If you have a partner who is not HIV-infected, the Vanderbilt Comprehensive Care Center now offers pre-exposure prophylaxis (PrEP) to reduce his or her risk of HIV infection.

PrEP is an HIV-prevention strategy. It is a pill daily, containing some of treat HIV. If taken by an high risk of getting HIV, Pi

If your partner is intereste set up an appointment w Care Center PrEP pro



VANDERBI MED

REPORTER

Combination therapy PrEP offers effective way to prevent HIV infection

by Bill Snyder | Thursday, Sep. 7, 2017, 9:44 AM



Infectious disease experts Katie White, M.D., Ph.D., and Sean Kelly, M.D., are working to raise awareness of effective was to prevent HIV infection, including the combination drug therapy called pre-exposure prophylaxis, or PrEP. (photo by

Rates of new HIV infections in the United States are declining — except among men who have sex with men. Rates are particularly high among African-American and Hispanic men and especially in the South

PROTECT YOURSELF WITH PREP

Never before have we had a more effective tool in reducing HIV sisk than pre-exposure prophylams ("PHIP"). PHIP is a daily medication for those who are at high risk of acquiring day residuation for those who are at high risk of acquiring. HIV Jahre as directed if, can reduce the male of HIV Jahre as 19 HIV, Jahre as directed in 2007, but it supervant stow to catch on, particularly in the South, The South, however, in the US region with the most new HIV intections?. Through the US region with the most new HIV intections?.

dates and would like to reduce your mik IP with your doctor. Several PEIP provid-



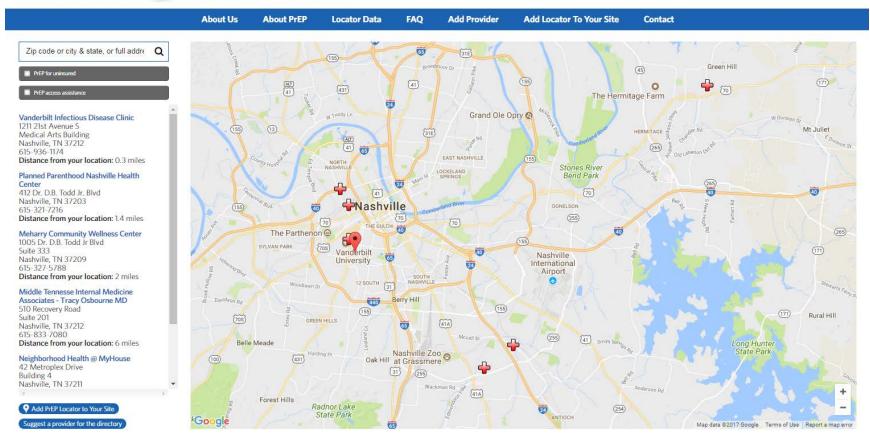






PrEP Locator

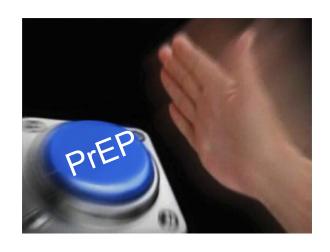
PrEP Locator **Q** Find Your Provider



https://preplocator.org

Conclusion

- PrEP is an extremely effective preventive strategy
- Many PrEP barriers exist, but can easily be overcome
- Understand PrEP prescribing guidelines
- Evaluate individual clinic needs
- Identify individual beliefs and perceptions
- Ask for help! sean.g.kelly@vanderbilt.edu



Questions?