

Adding PrEP in Your Step:

Pre-Exposure Prophylaxis for HIV

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OVERVIEW

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04 STARTING/STOPPING PrEP

02 DECIDING TO TAKE PrEP

05 CASE SCENARIOS

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Join by Web

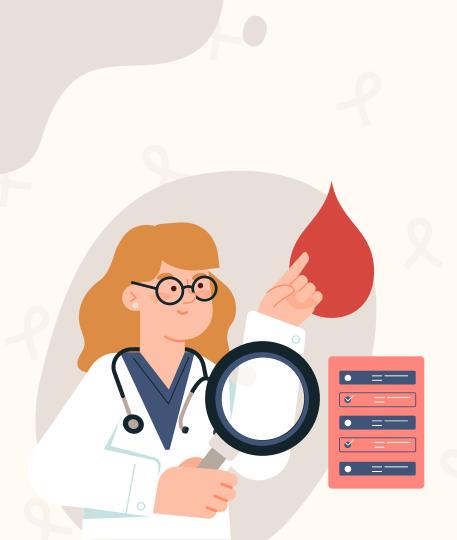








- Go to PollEv.com
- 2 Enter KATIEPEARCE098 1 Text KATIEPEARCE098 to 22333
 - Respond to activity
 Text in your message



O1 BACKGROUND

TERMINOLOGY

Sex

assignment as male or female usually based on external anatomy at birth

Transgender or "Trans"

People whose gender identity differs from sex assigned at birth. Independent of physical appearance or medical procedures

Gender Identity

internal, deeply held sense of gender; usually man or boy or woman or girl

Cisgender or "Cis"

People whose gender identity is the same as their sex assigned at birth

Sexual Orientation

physical, romantic, &/or emotional attraction to others; NOT the same as gender identity.
Ex.) straight, lesbian, gay, bisexual, or queer

Non-binary &/or genderqueer

People whose gender identity &/or expression falls outside of categories "man" and "women" (gender binary)
Only use if person self-describes themselves as this

Preexposure prophylaxis for the prevention of HIV infection in the United States. CDC. 2021.

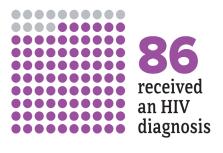


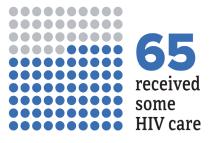


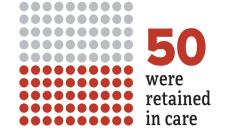
HIV in the United States

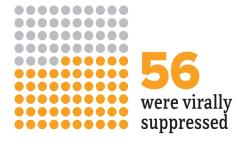
Not all people with HIV are getting the care they need. An estimated **1.2 million people had HIV in the US in 2018**. For **every 100 people with HIV:***











* Includes people with diagnosed or undiagnosed HIV.

www.cdc.gov/hiv | 1-800-CDC-INFO

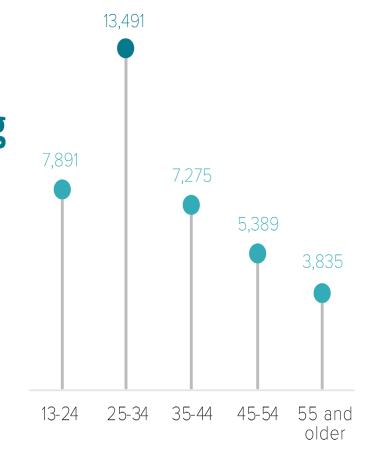
Get Tested. Get in Care. Stay in Care. Stay Healthy.



New HIV Diagnoses in the US and Dependent Areas by Age, 2018

The number of new HIV diagnoses was highest among people aged 25 to 34.





Source: CDC. Diagnoses of HIV infection in the United States and dependent areas, 2018 (updated). HIV Surveillance Report 2020;31.

Prescriptions for PrEP

2012

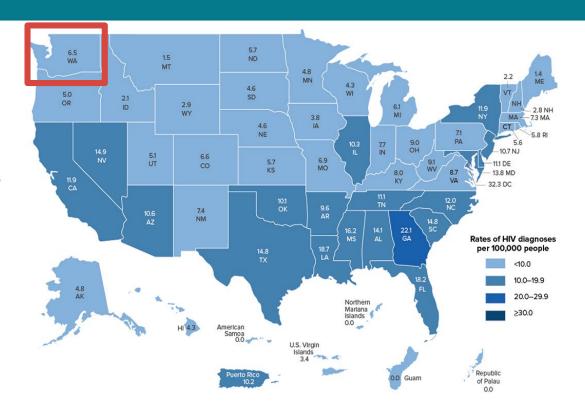


2019 220,000

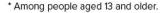
Rates of New HIV Diagnoses in the US and Dependent Areas, 2020*

The highest rates of new HIV diagnoses were mainly in the South.



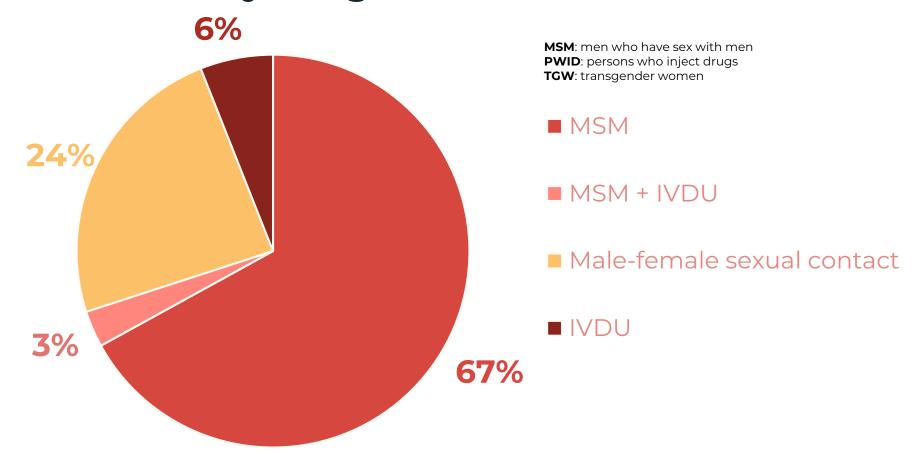


Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state and local jurisdictions.





Newly-Diagnosed HIV in 2018



Preexposure prophylaxis for the prevention of HIV infection in the United States. CDC. 2021.

PrEP Awareness and Use Among Gay and Bisexual Men in 23 US Cities, 2017*

PrEP is highly effective for preventing HIV from sex or injection drug use.



of gay and bisexual men without HIV were aware of PrEP



of gay and bisexual men without HIV used PrEP

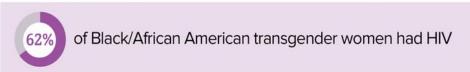
^{*} Among gay and bisexual men aged 18 and older.

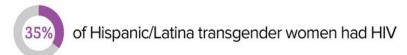
HIV Prevalence Among Transgender Women in 7 US Cities, 2019-2020*

Racial and ethnic disparities exist among transgender women with HIV.



Among transgender women interviewed, 42% had HIV.







* Among people aged 18 and older.

PrEP Awareness and Use Among Transgender Women in 7 US Cities, 2019-2020*

PrEP is highly effective for preventing HIV from sex or injection drug use.



of transgender women without HIV were aware of PrEP



of transgender women without HIV used PrEP

Among people aged 18 and older.

What is PrEP?

WHAT IS PREP?

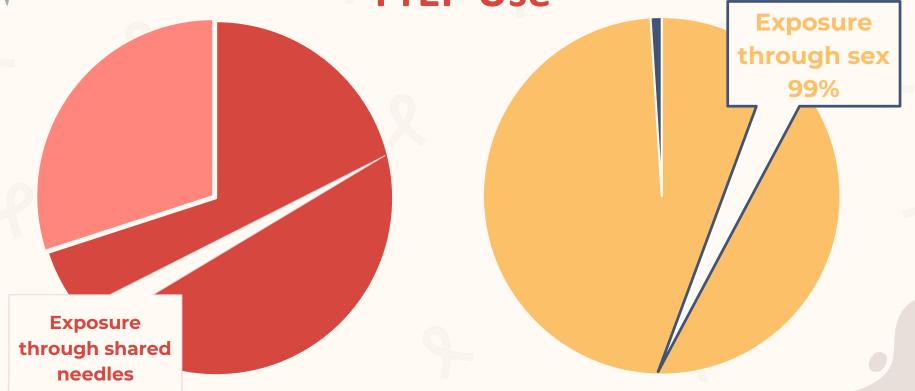


- PrEP (pre-exposure prophylaxis) can be pills or shots that reduce your chances of getting HIV.
- PrEP can stop HIV from taking hold and spreading throughout your body.





Effectiveness of HIV Prevention with PrEP Use









Protect your valuables.

Protect your valuables.

Quebec Coalition Against Aids

Protect your valuables.

uebec Coalition Against Aids

True/false: Everyone 13 to 64 years old should be tested for HIV at least once as part of routine health care.

True

False

Total Results: 0



True/false: Everyone 13 to 64 years old should be tested for HIV at least once as part of routine health care.

True

False

True/false: Everyone 13 to 64 years old should be tested for HIV at least once as part of routine health care.

True

√ 0%

False

GET TESTED FOR HIV...

everyone between the ages of 13 and 64 get tested at least once as part of routine care.

People with certain risk factors should get tested at least once a year.



Find an HIV testing site near you:

Locator.HIV.gov







Deciding to Take PrEP

Indications



POPULATION

RECOMMENDATION

GRADE

Adolescents and adults at increased risk of HIV

The USPSTF recommends that clinicians prescribe preexposure prophylaxis with effective antiretroviral therapy to persons who are at increased risk of HIV acquisition to decrease the risk of acquiring HIV infection.

Δ

WHEN TO CONSIDER PrEP



ANAL or VAGINAL sex in the past 6 mo AND:

- Have sexual partner with HIV
- Not consistently using condoms
- Diagnosed with STD in past 6 mo

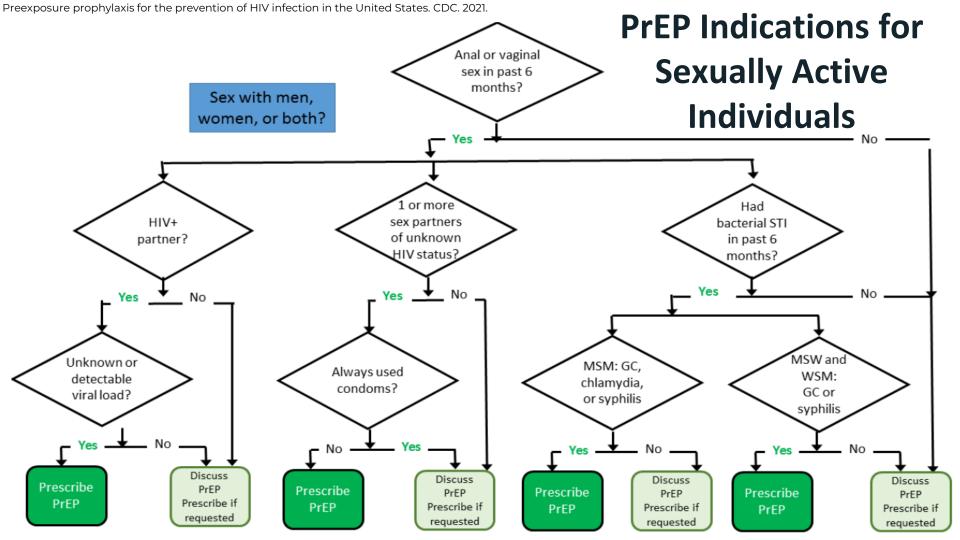


- Have injection partner with HIV OR
- Share needles, syringes, or other injection equipment



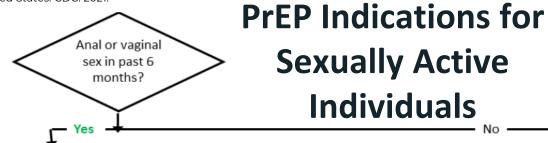
PEP: post-exposure prophylaxis

- Report continued risk behavior
- Used multiple courses of PEP



Preexposure prophylaxis for the prevention of HIV infection in the United States. CDC. 2021.

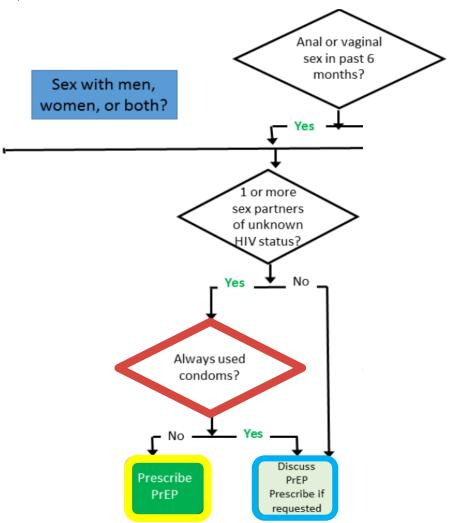
Sex with men, women, or both?



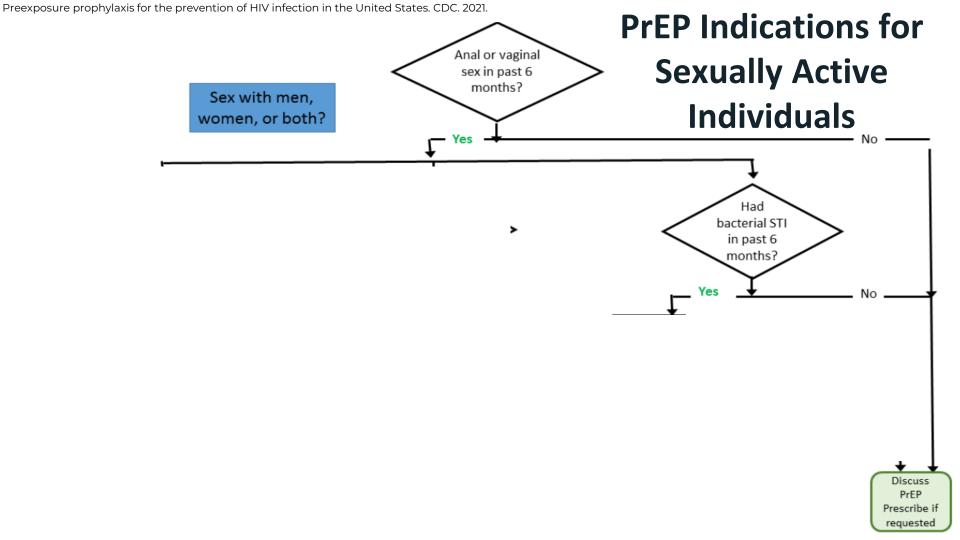
Discuss PrEP Prescribe if requested Preexposure prophylaxis for the prevention of HIV infection in the United States. CDC. 2021. Anal or vaginal sex in past 6 months? Sex with men, women, or both? HIV+ partner? No Unknown or detectable viral load? Discuss Prescribe PrEP PrEP Prescribe if requested

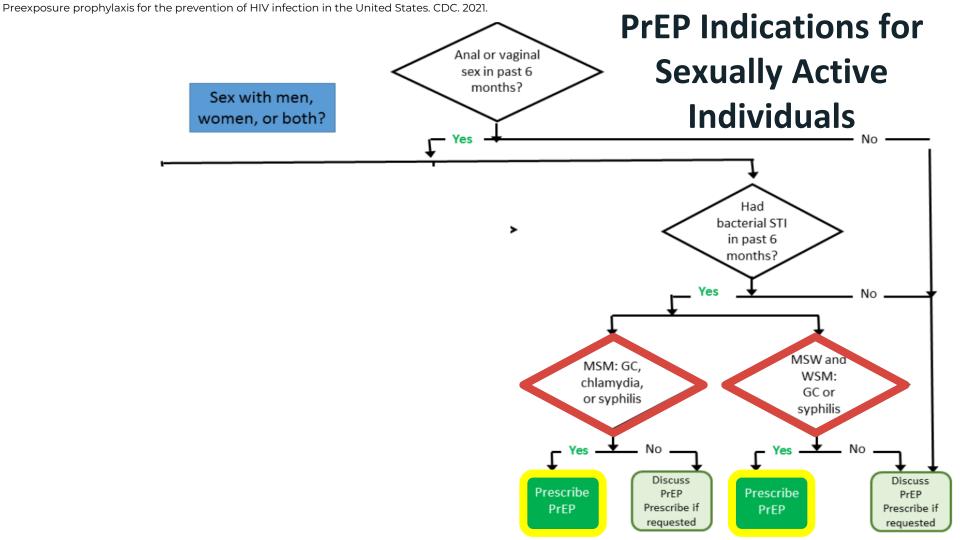
PrEP Indications for Sexually Active Individuals

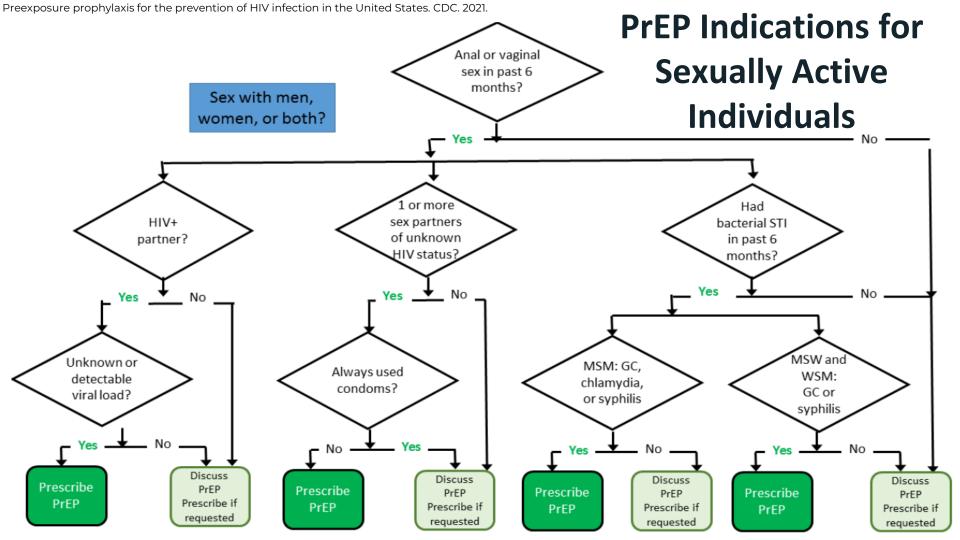
Preexposure prophylaxis for the prevention of HIV infection in the United States. CDC. 2021.



PrEP Indications for Sexually Active Individuals

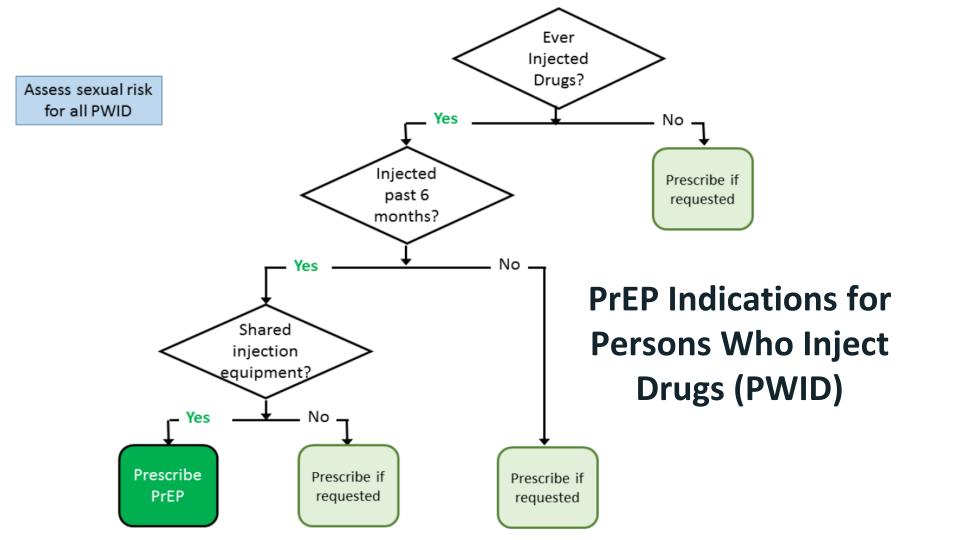






WHY ASSESS BACTERIAL STIS?

Identifies evidence of sexual activity that could lead to **HIV exposure**

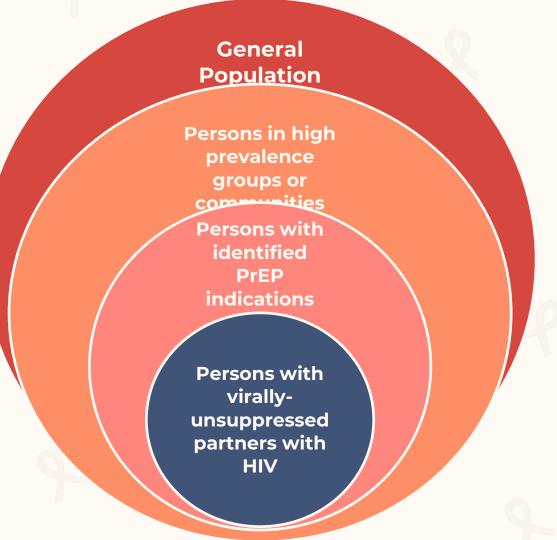


HIV Acquisition Risk According to Population

Local prevalence estimates

http://www.AIDSvu. org

http://www.cdc.gov/ nchhstp/atlas/



Lab Testing & Diagnostic Procedures

SIGNS/SYMPTOMS OF ACUTE HIV INFECTION

HIV testing

Acute HIV infection

















MSM: men who have sex with men **PWID**: persons who inject drugs **TGW**: transgender women

Monitoring for Oral PrEP

Test	Initial Visit	Q 3 mo	Q 6 mo	Q 12 mo	Discontinuation Visit
HIV test	X & assess for acute HIV infx	X			X & assess for acute HIV infx
eCrCl	X		≥50 yo OR eCrCl <90 mL/min at initiation	<50 yo & eCrCl <u>></u> 90 ml/min at initiation	X
Syphilis	X	MSM/ TGW	X		MSM/TGW
Gonorrhea	X	MSM/ TGW	X		MSM/TGW
Chlamydia	X	MSM/ TGW	X		MSM/TGW
Lipid panel (F/TAF)	X			X	
Hep B serology	X				
Hep C serology	MSM, TGW & PWID			MSM, TGW & PWID	

Monitoring for Injectable PrEP

MSM: men who have sex with men **PWID**: persons who inject drugs

TGW: transgender women

Test	Initiation Visit	1 mo visit	Q 2 mo	Q 4 mo	Q 6 mo	Q 12 mo	Discontinuation Visit
HIV-1 RNA assay	x	X	X	x	x	x	x
Syphilis	X			MSM/TGW	Hetosexually- active women & men	X	MSM/TGW
Gonorrhea	X			MSM/TGW	Hetosexually- active women & men	X	MSM/TGW
Chlamydia	X			MSM/TGW	MSM/TGW	Hetosexually- active women & men	MSM/TGW

CLINICAL ELIGIBILITY for ORAL PrEP

Negative HIV
Ag/Ab within 1
week of
initiation

No signs/symptoms of acute HIV infection

eCrCl <u>></u>30 mL/min No contraindicated medications



CLINICAL ELIGIBILITY for INJECTABLE PREP

Negative HIV
Ag/Ab within 1
week of
initiation

No signs/symptoms of acute HIV infection

No contraindicated medications or conditions





03 Types of PrEP

Oral PrEP

- Truvada® (FTC/TDF)
- Descovy® (FTC/TAF)



Emtricitabine (FTC)

Tenofovir disoproxil fumarate (TDF)

Tenofovir alafenamide (TAF)



Emtricitabine (FTC)

Tenofovir disoproxil fumarate (TDF)

Truvada®

(FTC 200 mg + TDF 300 mg)

men & women

Sexually active adults/ adolescents > 77 lbs Persons who inject drugs (PWID)

or
injection drug users (IDU)

Truvada®

Dose	Frequency	Side Effects	Clinical Pearls
FTC 200 mg + TDF 300 mg	Once daily	HeadacheAbdominal painWeight loss	Contraindicated in eCrCl <60 mL/min
			 Avoid with high-dose or multiple NSAIDs or drugs that worsen renal function



Descovy®

(FTC 200 mg + TAF 25 mg)

For men & transgender women (TGW)

Emtricitabine (FTC)

Tenofovir alafenamide (TAF)

Descovy®

Dose	Frequency	Side Effects	Clinical Pearls
FTC 200 mg + TAF 25 mg	Once daily	DiarrheaWeight gain	 May use in eCrCl 30 – 60 mL/min Don't use with St. John's Wort



BONE HEALTH



Truvada® (FTC/TDF): ↓ in bone mineral density

Descovy® (FTC/TAF): ↑ in bone mineral density

No difference in fracture frequency

No routine monitoring for osteoporosis needed for PrEP

Text KATIEPEARCE098 to 22333 once to join, then A, B, C, or D

A 48 YOM presents to clinic because of frequent headache after starting PrEP 2 months ago. He asks about switching from TDF/F to TAF/F. Which of the following adverse effects is most likely to occur after this switch?

Decreased bone mineral density	А
Increased serum creatinine	В
Decreased total cholesterol	С
increased BMI	D

Total Results: 2



A 48 YOM presents to clinic because of frequent headache after starting PrEP 2 months ago. He asks about switching from TDF/F to TAF/F. Which of the following adverse effects is most likely to occur after this switch?

Decreased bone mineral density
Increased serum creatinine
Decreased total cholesterol
increased BMI



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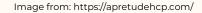
Decreased bone mineral density
Increased serum creatinine
Decreased total cholesterol
increased BMI



Injectable PrEP



Apretude® (CAB)



Apretude®

Cabotegravir (CAB)

Dose	Frequency	Side Effects	Clinical Pearls
CAB 600 mg/3 mL	IM gluteal muscle q 2 mo	Injection site reactionsN/V/DHeadachePyrexia	May use in eCrCl<30 mL/min
CAB 30 mg	• (Optional) oral 4-week lead-in before injections	 Fatigue Dizziness ↓ appetite Back pain Upper respiratory tract infections 	 Don't use with rifampicin, rifapentine, carbamazepine, oxcarbazepine, phenytoin, phenobarbital



INJECTION SITE REACTIONS



Pain, tenderness, induration

Transient

Most common after first 2-3 injections

Management

- · OTC analgesic within 2 hrs of injection
- Warm compress x 15-20 mins

PrEP (Pre-Exposure Prophylaxis). Centers for Disease Control and Prevention. 2022.

SWITCHING FROM ORAL TO INJECTABLE PrEP

Ensure no acute or chronic HIV

- Exclude acute HIV with HIV-1 RNA assay
 - 1 week before initiation

Baseline STI tests

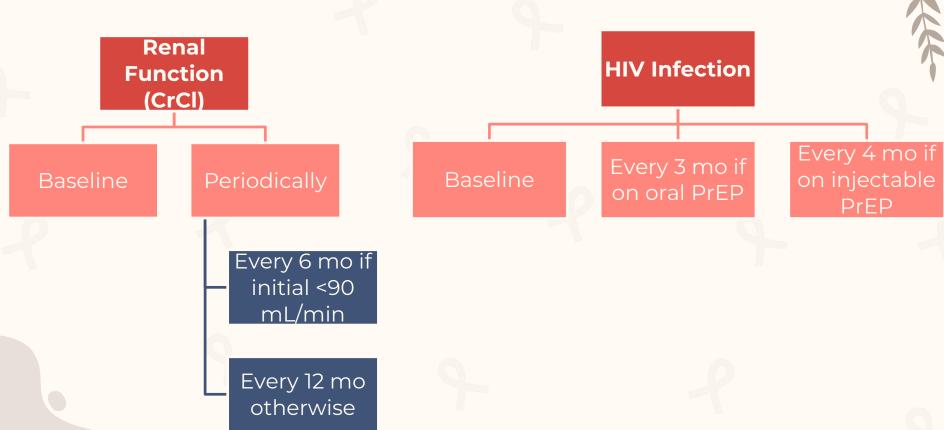


04

Starting/ Stopping PrEP

Monitoring

MONITORING



Preexposure prophylaxis for the prevention of HIV infection in the United States. CDC. 2021.







Need to be on time, every time



effectivenesswith misseddoses

AKA

"Event-Driven, Intermittent, or On-Demand PrEP"

THE 2-1-1:

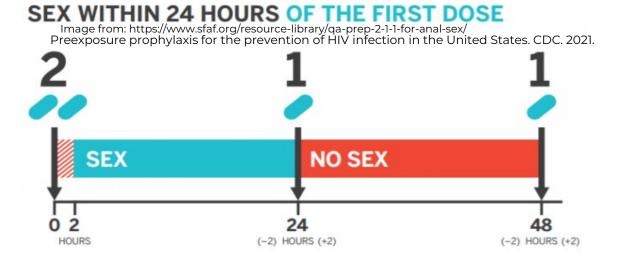
UNDERSTANDING

PREP ON-DEMAND

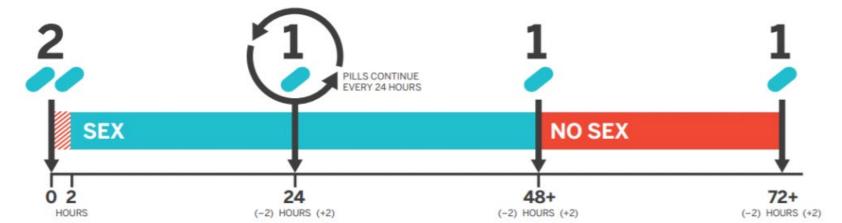
FOR HIV

PREVENTION

 $Image\ from: http://prepdaily.org/the-2-1-1-understanding-prep-on-demand-for-hiv-prevention/$



SEX BEYOND 24 HOURS AFTER THE FIRST DOSE



WHEN TO CONSIDER 2-1-1

MSM who:

Have infrequent sex

(less than once/week)

Can anticipate/delay sex to

allow dosing 2 hrs prior to sex

A 25 YO cisgender bisexual female is interested in the "2-1-1" dosing scheme because she heard about it from one of her friends. Is this strategy appropriate in this patient? Why or why not?

Total Results: 0



A 25 YO cisgender bisexual female is interested in the "2-1-1" dosing scheme because she heard about it from one of her friends. Is this strategy appropriate in this patient? Why or why not?

A 25 YO cisgender bisexual female is interested in the "2-1-1" dosing scheme because she heard about it from one of her friends. Is this strategy appropriate in this patient? Why or why not?

Yes, any patient requesting PrEP should be prescribed it if HIV negative

Yes, the 2-1-1 scheme was studied in bisexual men and women

No, the 2-1-1 scheme was studied only in MSM

No, the FDA labeling is for ages 30 and older

Stopping/Starting Oral PrEP

DISCONTINUING ORAL PREP

Reasons for discontinuing:

- ↓ risk
- Intolerable toxicities
- · Chronic non-adherence
- . Acquisition of UIV

Protection wanes after 7-10 days

Document:

- HIV status
- · Reason for discontinuation
- Adherence & sexual behaviors

Monitor for Hep B flares

RESTARTING ORAL PrEP

If decide to resume PrEP:

- Same evaluation as when first initiating
- Assess circumstance changes
- · Ensure commitment to adherence

FOLLOW-UP VISITS for ORAL PrEP

	Q 3 mo	Q 6 mo	Q 12 mo
HIV Ag/Ab test	X		
HIV-1 RNA Assay	X		
Medication adherence & behavioral risk reduction	X		
Bacterial STI screening	X MSM & TGW who have sex with men	X All sexually active patients	
Access to clean needles/syringes, drug treatment services	X		
Renal function		X	
Chlamydia Screening (heterosexually-active women & men)			X
Metabolic Parameters (FTC/TAF)			X

Preexposure prophylaxis for the prevention of HIV infection in the United States. CDC. 2021.

Stopping/Starting Injectable PrEP

DISCONTINUING CABOTEGRAVIR



Educate on risks

Assess HIV risk/prevention

Consider switch to oral PrEP

Test for HIV every 3 months x 1 year

FOLLOW-UP VISITS for INJECTABLE PREP

	1 mo after 1 st injection	Q 2 mo (beg. mo 3)	Q 4 mo (beg. mo 3)	Q 6 mo (beg. mo 7)	Q <u><</u> 12 mo
HIV Ag/Ab test	X	X			
HIV-1 RNA Assay	X	X			
Bacterial STI screening			X MSM & TGW who have sex with men	X Heterosexually- active women & men	
Access to clean needles/syringes, drug treatment services		X PWID			
Chlamydia Screening					X Heterosexually-active women & men
Desire to continue injections for PrEP					X

Preexposure prophylaxis for the prevention of HIV infection in the United States. CDC. 2021.

Implementing in Practice

HOW CAN I HELP END HIV STIGMA?



Talk about HIV.



Share the facts.



Support people with HIV.





WHAT YOU CAN DO

Take a brief, targeted sexual history

Don't defer

due to

discomfort

Don't limit to certain populations

Assess Adherence

"Many find it hard to take medications every day.

How many times in the past week have you **not** taken your medicine?"

INTRODUCING THE TOPIC

"Taking a brief sexual history is routine practice for all our patients."

"This information is vital for me to provide you with appropriate sexual health care."

"What you share with me is entirely confidential."



Case #1: MH

- MH is a 45 YOF who presents to a primary care clinic for treatment of vaginal discharge.
- She reports multiple sex partners with inconsistent condom use. She received a diagnosis of gonorrhea and HPV 3 months ago.
- She admits to a history of substance abuse but has not used in the past 6 months after enrolling in counseling.
- An HIV test was negative about 1 year ago.

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Which of the following risk factors is most likely to result in receipt of PrEP for MH?

multiple sex partners with inconsistent condom use

history of substance use

previous diagnosis of human papilloma virus

negative HIV test from 1 year ago

Total Results: 0



Which of the following risk factors is most likely to result in receipt of PrEP for MH?

multiple sex partners with inconsistent condom use

history of substance use

previous diagnosis of human papilloma virus

negative HIV test from 1 year ago

Which of the following risk factors is most likely to result in receipt of PrEP for MH?

multiple sex partners with inconsistent condom use

history of substance use

previous diagnosis of human papilloma virus

negative HIV test from 1 year ago

™ Text KATIEPEARCE098 to 22333 once to join

A 38 YOM presents to an infectious diseases clinic to be evaluated for PrEP. The patient is in an "open relationship" and discloses active substance abuse, predominantly injection drug use. Which one of the following is best to recommend?

TDF	
TDF/F	
TAF/F	
CAB	

Total Results: 0



A 38 YOM presents to an infectious diseases clinic to be evaluated for PrEP. The patient is in an "open relationship" and discloses active substance abuse, predominantly injection drug use. Which one of the following is best to recommend?

TDF

TDF/F

TAF/F

CAB

A 38 YOM presents to an infectious diseases clinic to be evaluated for PrEP. The patient is in an "open relationship" and discloses active substance abuse, predominantly injection drug use. Which one of the following is best to recommend?

TDF

TDF/F

TAF/F

CAB



SUMMARY

PrEP is highly effective in preventing HIV

Everyone **13-64 yo** should be tested for HIV

F/TDF (Truvada®)

- indicated for PWID or sexually active adults
- Avoid in CrCl <60 mL/min

F/TAF (Descovy®)

- indicated for men or TGW
- Weight gain is a potential side effect

F/TDF (Truvada®) & F/TAF (Descovy®)

 not associated with differences in fracture frequency

CAB (Apretude®)

- · only injectable PrEP
- indicated for MSM & TGW

REFERENCES

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- Centers for Disease Control and Prevention: US Public Health Service: Preexposure prophylaxis for the prevention of HIV infection in the United States—2021 Update: a clinical practice guideline. https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf. Published 2021.
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HH-



Questions? Thank You!



Adding PrEP in Your Step:

Pre-Exposure Prophylaxis for HIV

Katie Schroeder, PharmD

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