

Injectable PrEP & Related Services at PIMC

Jonathan Enchinton PharmD, BCPS, AAHIVP
Phoenix Indian Medical Center - Phoenix, Arizona
HIV Center of Excellence - Clinical Pharmacist

Jonathan.Enchinton@ihs.gov

602-581-6726

Disclosures

- Nothing to disclose
- The material is the result of work supported with resources and the use of facilities at the Phoenix Indian Medical Center, located in the Phoenix Area of the Indian Health Service
- The contents do not represent the views of the Indian Health Service or the United States Government

Outline

1. Introduction
2. 3-site Testing
3. Related infections
4. Doxy-PEP
5. Injectable Overview
6. Injectable PrEP
7. Hepatitis B
8. Patient Satisfaction
9. SeroPrep
10. Acquisition
11. Vaccines
12. Outreach

About Me



About Me

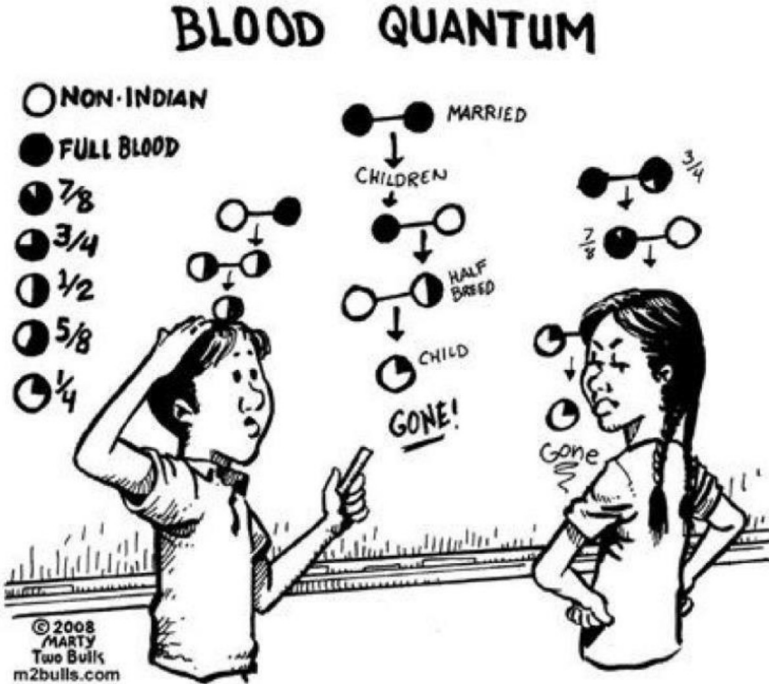
- Board Certified Clinical Pharmacist (BCPS)
- American Academy of HIV certified (AAHIVP)
- Arizona State Medicaid P&T Committee Member (AHCCCS)
- Love precepting, restaurants, dance clubs, traveling on points, and long walks on the beach
- Go Longhorns!!!



Connection with Native Health



Blood Quantum



Hey wait a minute, we're disappearing!

Our Clinic - HIV Center of Excellence



Our Clinic - HIV Center of Excellence

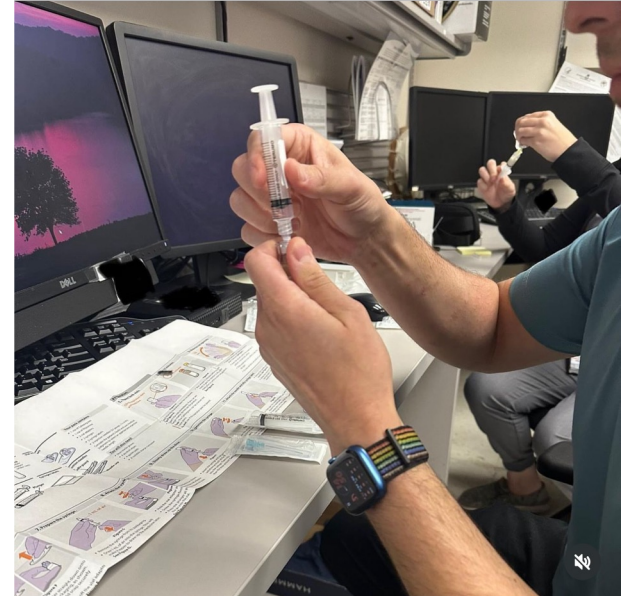


Our Clinic - HIV Center of Excellence

- Primary care for over 400 active HIV+ patients, in addition to chronic diseases
 - HIV, Hep C, STI's, PrEP/PEP/nPEP, Latent Tuberculosis, infectious disease, and more
- Doctors, pharmacists, nurse practitioners, physician assistants, nurses, medical assistants, benefits and resources, behavioral health, etc.
- Community outreach, case management, presentations, housing, etc.
- Medical literature review for hard to find questions
- Teaching students and residents
- Management of drug shortages, find funding of expensive injectables, etc.

Our Clinic - Services

- HIV - Primary Care, Case Management
- Clinical Pharmacy
- Prevention, Testing, Counseling, Treatment
- PrEP/PEP/nPEP
- Doxy-PEP
- Hepatitis C, STI's, and Oversee PHN-STI Clinic
- Injectable Medications
- Gender Affirming Care
- Precepting Students & Residents



What our Clinic Pharmacists Do

- PrEP rapid starts
- HIV, HCV, STI, PrEP/PEP/nPEP follow-up and outreach
- HIV chart reviews, genotyping, med history, immunizations, etc.
- Nationwide and internal education presentations
- Case management assistance
- Primary literature research for hard to find questions
- Precepting
- Community engagement
- Much more

Future Goals

- Internal pharmacist provider status
- Integration with pharmacy chronic care clinic
- Universal opt out testing (includes HIV, Hep C, & Syphilis)
- Facility-Wide Transgender Flags
- Expanded Staffing
- Renovations

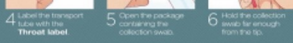
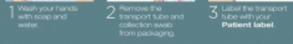
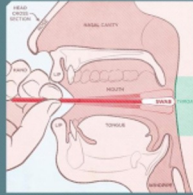
Three-Site Testing

Extra-genital Self-testing Program at Madison Clinic



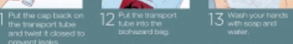
TEST YOURSELF

The Visual Guide for a Self-collected Throat Swab



7 Say "Ah"... and reach the collection swab into your mouth to gently touch your throat.

8 Gently rub the swab tip on your throat side to side, up and down at least 5 times.



9 Uncover the cap from the transport tube.

10 Place the collection swab into the transport tube, snapping it on and off 5 times.

11 Pull the cap back on the transport tube and twist it closed to prevent leakage.

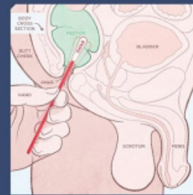
12 Put the transport tube into the biohazard bag.

13 Wash your hands with soap and water.



TEST YOURSELF

The Visual Guide for a Self-collected Rectal Swab



7 Get into a comfortable position that allows you to relax to your anus. Putting your foot on the step stool may help.

8 Gently insert the swab 1 inch into the rectum and twist the swab in a circle at least 5 times.



9 Uncover the cap from the transport tube.

10 Place the collection swab into the transport tube, snapping it at dashed line.

11 Pull the cap back on the transport tube and twist it closed to prevent leakage.

12 Put the transport tube into the biohazard bag.

13 Wash your hands with soap and water.

Three-Site Testing

<https://www.uwptc.org/visual-guides>

Request Visual Guides

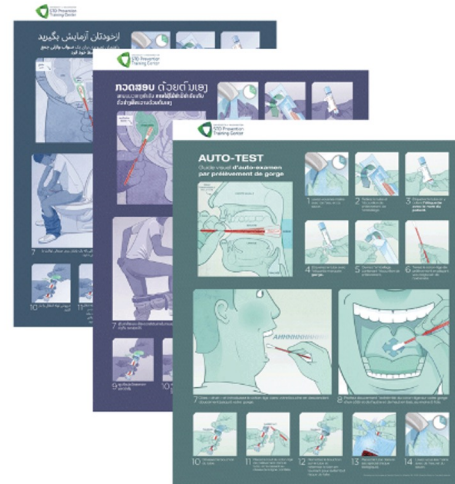
Order Form TestYourself Visual Guides

The UW PTC is happy to provide free, high-quality printable PDFs of our **pharyngeal, rectal, and vaginal** self-testing visual aids (now available in 21 languages!) for your clinic.

Upon completing the form below you will be redirected to file downloads. The files can be printed in 16"x20" and 8.5"x11" formats. The files are locked to prohibit editing.

Bulk order printing requests available for orders over 200 prints.

NO EDITING OF THESE IMAGES IS PERMITTED - FOR DUPLICATION ONLY



Other STI's and Related Infections

- *M. Genitalium* (Mgen)
- Trichomoniasis
- Herpes
- HPV - cancers, warts, polyps, etc.
- Infectious diarrhea
- Urinary Tract Infections (UTI's)
- Mpox
- Scabies, lice, others

M. Genitalium

Men with recurrent NGU should be tested for *M. genitalium* using an FDA-cleared NAAT. If resistance testing is available, it should be performed and the results used to guide therapy. Women with recurrent cervicitis should be tested for *M. genitalium*, and testing should be considered among women with PID. Testing should be accompanied with resistance testing, if available. Screening of asymptomatic *M. genitalium* infection among women and men or extragenital testing for *M. genitalium* is not recommended. In clinical practice, if testing is unavailable, *M. genitalium* should be suspected in cases of persistent or recurrent urethritis or cervicitis and considered for PID.

M. Genitalium

Recommended Regimens if *M. genitalium* Resistance Testing is Available

If *macrolide sensitive*: **Doxycycline** 100 mg orally 2 times/day for 7 days, followed by **azithromycin** 1 g orally initial dose, followed by 500 mg orally once daily for 3 additional days (2.5 g total)

If *macrolide resistant*: **Doxycycline** 100 mg orally 2 times/day for 7 days followed by **moxifloxacin** 400 mg orally once daily for 7 days

Recommended Regimens if *M. genitalium* Resistance Testing is Not Available

If *M. genitalium* is detected by an FDA-cleared NAAT: **Doxycycline** 100 mg orally 2 times/day for 7 days, followed by **moxifloxacin** 400 mg orally once daily for 7 days

M. Genitalium

Follow-Up

Test of cure is not recommended for asymptomatic persons who received treatment with a recommended regimen. In settings in which *M. genitalium* testing is available, persons with persistent urethritis, cervicitis, or PID accompanied by detection of *M. genitalium* should be treated with moxifloxacin.

M. Genitalium

Management of Sex Partners

Recent studies report a high concordance of *M. genitalium* among partners of males, females, and MSM; however, no studies have determined whether reinfection is reduced with partner treatment (940,967,968). Sex partners of patients with symptomatic *M. genitalium* infection can be tested, and those with a positive test can be treated to possibly reduce the risk for reinfection. If testing the partner is not possible, the antimicrobial regimen that was provided to the patient can be provided.

M. Genitalium Treatment Failure



Centers for Disease
Control and Prevention

[Returning?](#)

AAA



Mycoplasma genitalium Treatment Failure Registry

The purpose of this form is to collect clinical information on cases of *Mycoplasma genitalium* that fail antimicrobial therapy. All reported information will be maintained in the strictest confidence.

Identifying patient information (e.g., patient name, date of birth, medical record number, social security number) should not be included on the form.

Doxy-PEP

- New and hot right now
- Take within 72 hours of sexual activity to reduce risk of gonorrhea, chlamydia, and syphilis
 - Preferably within 24 hours
- Doxycycline 200 mg orally x 1 for each encounter
 - Take both tablets at the same time - do not split up
 - Maximum of 200 mg per day
 - Can theoretically take every single day if patient has risky exposure every day

Doxy-PEP

- Initial studies referenced by CDC in MSM and TGW
 - Chlamydia – 70% incident reduction
 - Syphilis – 73% incident reduction
 - Gonorrhoea – No effect seen
- Additional studies have found statistically significant gonorrhoea efficacy

MSM = Men who have sex with men TGW = Transgender women

CDC. STI treatment guidelines. Centers for Disease Control and Prevention. Published 2021. <https://www.cdc.gov/std/treatment-guidelines/default.htm>


Juliana S Grant, Chrysovalantis Stafylis, et al. Doxycycline Prophylaxis for Bacterial Sexually Transmitted Infections, *Clinical Infectious Diseases*, Volume 70, Issue 6, 15 March 2020, Pages 1247–1253, <https://doi.org/10.1093/cid/ciz866>

Jean-Michel Molina, Isabelle Charreau, et al. Post-exposure prophylaxis with doxycycline to prevent sexually transmitted infections in men who have sex with men: an open-label randomised substudy of the ANRS IPERGAY trial, *The Lancet Infectious Diseases*, Volume 18, Issue 3, 2018, Pages 308-317, ISSN 1473-3099, [https://doi.org/10.1016/S1473-3099\(17\)30725-9](https://doi.org/10.1016/S1473-3099(17)30725-9), <https://www.sciencedirect.com/science/article/pii/S1473309917307259>.

Doxy-PEP Patient Handout (Front)

Doxy PEP – How to Take

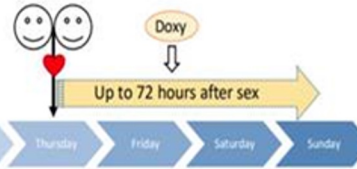
Two 100 mg pills of doxycycline ideally within 24 hours but no later than 72 hours after condomless oral, anal or vaginal sex

 = sex without a condom, including oral sex

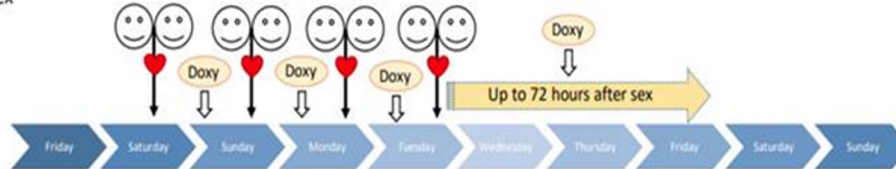
Example: Sex on Sat; take dose of doxy by Tues



Example: Sex on Thursday; take dose of doxy by Sunday



Example 2: Daily (or more) sex Sat-Tues; take daily dose of doxy and last dose within 24 hours but not later than 72 hours after last sex




No more than 200 mg every 24 hours

Doxy-PEP Patient Handout (Back)

Doxycycline PEP Information Sheet

When should I take doxycycline PEP?





- Two 100 mg pills of doxycycline should be taken ideally within 24 hours but no later than 72 hours after condomless sex. Condomless sex means oral, anal or vaginal/front hole sex where a condom isn't used for the entire time.

What about when I have sex again?



- If you have sex again within 24 hours of taking doxycycline, take another dose 24 hours after your last dose. You can take doxycycline as often as every day when you are having condomless sex but don't take more than 200 mg (two 100 mg pills) every 24 hours.

How should I take doxycycline PEP?



- Take doxycycline with plenty of water or something else to drink so that it does not get stuck when you swallow. If your stomach is upset by doxycycline, taking with food may help.
- Some people are more sensitive to the sun when they take doxycycline, so wear sunscreen.
- Please do not share doxycycline with others.
- Avoid dairy products, calcium, antacides or multivitamins within 2 hours before or after doxy

Reminders



- Let your provider know if you run out of doxycycline, if you are having any side effects, and if you think you may have a sexually transmitted infection (STIs)
- Doxy-PEP reduces the risk of syphilis, gonorrhea and chalymdia but these infections can still happen. You should continue to be tested at regular intervals and if you have symptoms
- Doxy-PEP doesn't protect against MPX (monkeypox), HIV, or other viral infections

Doxy-PEP

Table: Quarterly STI incidence by HIV status and by randomization to doxyPEP & control arms

	HIV uninfected MSM/TGW on PrEP		MSM/TGW living with HIV		Total	
	Doxy arm N=240	Control arm N=120	Doxy arm N=134	Control arm N=60	Doxy Arm N=374	Control arm N=180
Follow up quarters	491	220	266	108	757	328
Participants with an incident STI (GC, CT or syphilis)	41	42	24	18	65	60
Primary STI endpoints	47 (9.6%)	65 (29.5%)	31 (11.7%)	30 (27.8%)	78 (10.3%)	95 (29.0%)
Gonorrhea	40 (8.1%)	45 (20.5%)	21 (7.9%)	20 (18.5%)	61 (8.1%)	65 (19.8%)
Chlamydia	7 (1.4%)	23 (10.5%)	12 (4.5%)	16 (14.8%)	19 (2.5%)	39 (11.9%)
Syphilis	1 (0.2%)	5 (2.3%)	3 (1.1%)	2 (1.9%)	4 (0.5%)	7 (2.1%)

CONCLUSIONS: Doxycycline 200 mg taken within 72 hours after condomless sex significantly reduced STIs in MSM/TGW. Effects on antimicrobial resistance, gut microbiome, and sexual behavior are being assessed as important considerations for this STI prevention strategy.

Doxy-PEP & RPMS

Script one example:

DOXYCYCLINE TAB 100MG

TAKE ONE (1) TABLET BY MOUTH BID WITH MEALS FOR INFECTION ,
AVOID ANTACIDS,

DAIRY PRODUCTS AND IRON WITHIN 3 HOURS

Quantity: 14 Tablet Days: 7 Refills: 0

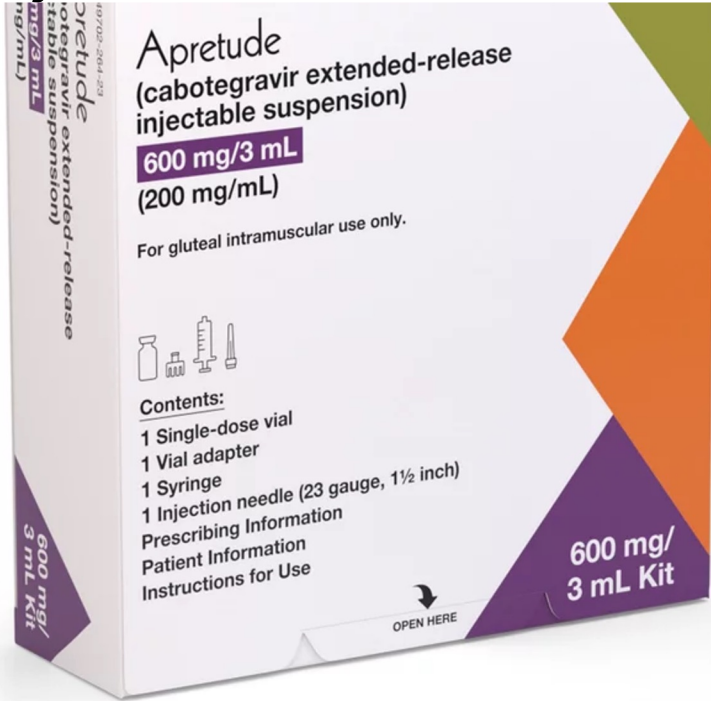
Script two example:

DOXYCYCLINE TAB 100MG

TAKE TWO (2) TABLETS BY MOUTH ONCE IF NEEDED IDEALLY
WITHIN 24 HOURS BUT NO LATER THAN 72 HOURS AFTER
SEXUAL EXPOSURE FOR INFECTION PREVENTION ***NO MORE
THAN 2 TABLETS IN A 24 HOUR PERIOD, AVOID ANTACIDS,
DAIRY PRODUCTS AND IRON WITHIN 3 HOURS

Quantity: 60 Tablet Days: 30 Refills: 3 *Chronic Med:
YES

Injectable Meds



A new injection to prevent HIV, rather than pills, is a game-changer, scientists say. *NPR.org*. <https://www.npr.org/2021/12/23/1067366345/hiv-aids-injection-fda-approval-cabotegravir-apretude-prep>.

Cabenuva HIV Medication. POZ. <https://www.poz.com/drug/cabenuva>

Sunlenca HIV Medication. POZ. Accessed February 29, 2024. <https://www.poz.com/drug/sunlenca>

Apretude (Cab-LA)



[Full Prescribing Info with Boxed Warning](#)

[Patient Info](#)

[For US Healthcare Professionals](#)

[En Español](#)

[Sign Up](#)

[For ASOs](#)



[About APRETUDE](#)

[APRETUDE Cost and Resources](#)

[Risks and Side Effects](#)

[Starting APRETUDE](#)

[About PrEP](#)

[PrEP Locator](#)

APRETUDE is a prescription medicine used for HIV-1 PrEP to reduce the risk of getting HIV-1 infection in adults and adolescents who weigh at least 77 pounds (at least 35 kg).

Why APRETUDE?

Bring on a different way to help you stay continually protected from HIV.



Injectable PrEP Overview

- Apretude (Cabotegravir, or Cab-LA)
 - Non-inferiority and superiority trials
 - Unknown exact time to full protection
 - Estimated 7 days to full protection in receptive anal
 - Estimated 21 days to full protection for receptive vaginal (cis-gender women)
 - Counsel on safe sex practices and risk avoidance
 - Monthly x 2 doses, then every other month
 - Only 1 drug - estimated less long-term side effects
 - Constant drug level, great safety profile, less drug interactions

Injectable PrEP Guideline

US Public Health Service

**PREEXPOSURE PROPHYLAXIS FOR
THE PREVENTION OF HIV
INFECTION IN THE UNITED STATES
– 2021 UPDATE**

A CLINICAL PRACTICE GUIDELINE

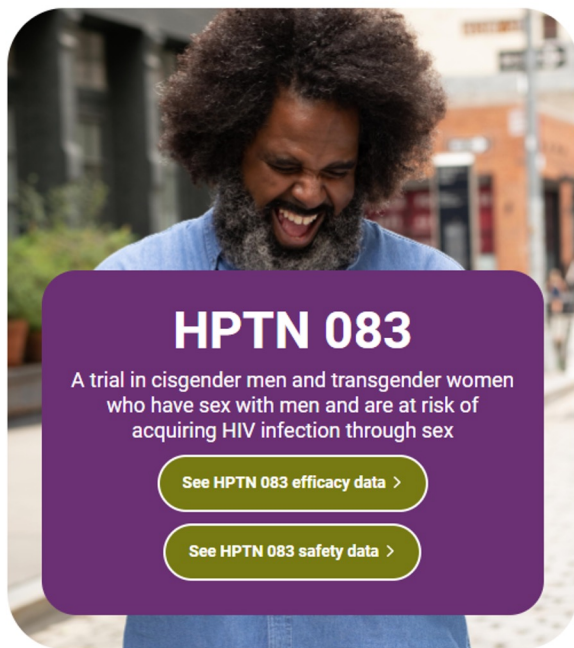
Injectable PrEP Efficacy

Only with APRETUDE:

Superior efficacy with significantly lower incidence of HIV-1 infection vs a daily oral PrEP (TDF/FTC) proven in 2 double-blind clinical trials.

- 69% ($P=0.0003$) and 90% ($P<0.0001$) lower incidence of HIV-1 infection in HPTN 083 and HPTN 084*†





HPTN 083

A trial in cisgender men and transgender women who have sex with men and are at risk of acquiring HIV infection through sex

[See HPTN 083 efficacy data >](#)

[See HPTN 083 safety data >](#)

- Noninferiority trial with the prespecified ability to test for superiority
- 43 sites around the world (N=4,566)¹

Gender and sexuality¹:

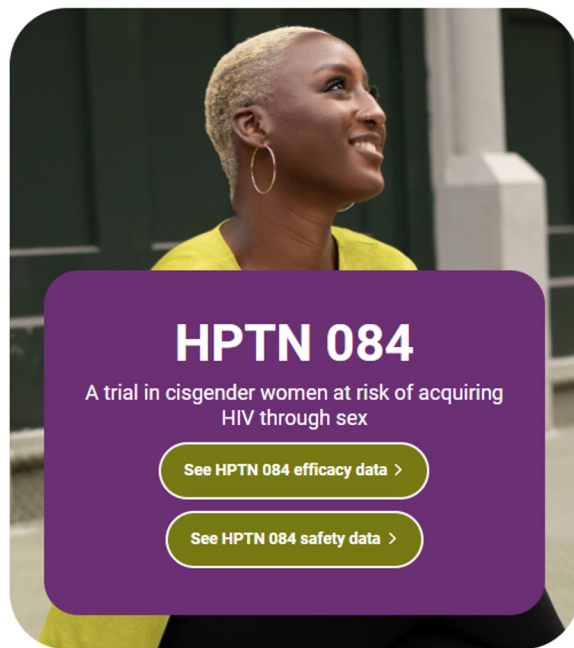
- 87% of participants were MSM
- 13% were TGW

Age¹:

- 68% were <30 years old

Race¹:

- 50% in the US were Black



HPTN 084

A trial in cisgender women at risk of acquiring HIV through sex

[See HPTN 084 efficacy data >](#)

[See HPTN 084 safety data >](#)

- Superiority trial
- 20 sites around sub-Saharan Africa (N=3,224)²

Age²:

- 50% were <25 years old

Race²:

- 55% had ≥ 2 sex partners

Injectable PrEP Safety

BOXED WARNING: RISK OF DRUG RESISTANCE WITH USE OF APRETUDE FOR HIV-1 PRE-EXPOSURE PROPHYLAXIS (PrEP) IN UNDIAGNOSED HIV-1 INFECTION

Safety profile established in >2,200 participants in HPTN 083

Adverse drug reactions* of all grades reported in at least 1% of participants receiving APRETUDE

Adverse reactions	APRETUDE (n=2,281)	TDF/FTC (n=2,285)
Injection-site reactions [†]	82%	35%
Diarrhea	4%	5%
Headache	4%	3%
Pyrexia [‡]	4%	<1%
Fatigue [§]	4%	2%
Sleep disorders	3%	3%
Nausea	3%	5%
Dizziness	2%	3%
Flatulence	1%	1%
Abdominal pain [†]	1%	1%

Injectable PrEP Dosing

Table 1. Recommended Dosing Schedule (with Oral Lead-In) for Pre-Exposure Prophylaxis in Adults and Adolescents Weighing at Least 35 kg

Oral Lead-In (at Least 28 Days) (Month Prior to Starting Injections)	Intramuscular (Gluteal) Initiation Injection (Month 1 and Month 2)	Intramuscular (Gluteal) Continuation Injection (Month 4 and Every 2 Months Onwards)
Oral cabotegravir 30 mg by mouth once daily for 28 days	APRETUDE ^a 600 mg (3 mL)	APRETUDE ^b 600 mg (3 mL)

^a Should be administered on the last day of oral lead-in or within 3 days thereafter.

^b Individuals may be given APRETUDE up to 7 days before or after the date the individual is scheduled to receive the injections.

Table 2. Recommended Dosing Schedule (Direct to Injection) for Pre-Exposure Prophylaxis in Adults and Adolescents Weighing at Least 35 kg

Intramuscular (Gluteal) Initiation Injection (Month 1 and Month 2)	Intramuscular (Gluteal) Continuation Injection (Month 4 and Every 2 Months Onwards)
APRETUDE ^a 600 mg (3 mL)	APRETUDE ^a 600 mg (3 mL)

^a Individuals may be given APRETUDE up to 7 days before or after the date the individual is scheduled to receive the injections.

Injectable PrEP Initiation

Table 1b: Summary of Clinician Guidance for Cabotegravir Injection PrEP Use

	Sexually-Active Adults	Persons Who Inject Drugs ¹
Identifying substantial risk of acquiring HIV infection	<p>Anal or vaginal sex in past 6 months AND any of the following:</p> <ul style="list-style-type: none"> • HIV-positive sexual partner (especially if partner has an unknown or detectable viral load) • Bacterial STI in past 6 months² • History of inconsistent or no condom use with sexual partner(s) 	<p>HIV-positive injecting partner OR Sharing injection equipment</p>
Clinically eligible	<p><u>ALL OF THE FOLLOWING CONDITIONS ARE MET:</u></p> <ul style="list-style-type: none"> • Documented negative HIV Ag/Ab test result within 1 week before initial cabotegravir injection • No signs/symptoms of acute HIV infection • No contraindicated medications or conditions 	
Dosage	<ul style="list-style-type: none"> • 600 mg cabotegravir administered as one 3 ml intramuscular injection in the gluteal muscle <ul style="list-style-type: none"> ○ Initial dose ○ Second dose 4 weeks after first dose (month 1 follow-up visit) ○ Every 8 weeks thereafter (month 3,5,7, follow-up visits etc) 	

Injectable Target Dates

Return to Home | Full Prescribing Info With Boxed Warning

Use this tool to determine your patient's APRETUDE injection schedule

Here is your schedule. If this does not work for your patient, [close this window and start again.](#)

- Initiation injections**
1 injection for 2 consecutive months
- Dosing window**
7 days before or after second Initiation Injection Date
- Continuation injection**
Every 2 months after the second Initiation Injection Date
- Dosing window**
7 days before or after Continuation Injection Date
- Not recommended**
Due to varying number of days in each month

Help keep them on track
Consider providing email or text reminders the week and day before each planned appointment

It is recommended that patients receive their injection on the same date every 2 months.

Individuals must be tested for HIV-1 infection prior to initiating APRETUDE or oral cabotegravir, and with each subsequent injection of APRETUDE, using a test approved or cleared by the FDA for the diagnosis of acute or primary HIV-1 infection. Drug-resistant HIV-1 variants have been identified with use of APRETUDE by individuals with undiagnosed HIV-1 infection. Do not initiate APRETUDE for

April 2024

SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

May 2024

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June 2024

SU	MO	TU	WE	TH	FR	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July 2024

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Converting from Oral Cabotegravir to Injectable PrEP

CAB PREP INITIATION VISIT

In the clinical trials of CAB injections for PrEP, patients were provided oral CAB 30 mg tablets daily for 5 weeks prior to receiving the first injection.¹⁴⁷ Because there were no safety concerns identified during this lead-in period or during the injection phase of the studies, an oral lead-in is not required when initiating CAB PrEP. It may be optionally used for patients who are especially worried about side effects to relieve anxiety about using the long-acting CAB injection. However, continued daily oral CAB is not recommended or FDA-approved for PrEP.

Converting from Oral FTC/TDF or FTC/TAF to Injectable PrEP

CAB PrEP INITIATION VISIT

Patients who have been taking daily oral PrEP, can initiate CAB injections as soon as HIV-1 RNA test results confirm that they remain HIV negative.

Injectable PrEP **Planned** Missed Injections

If an individual plans to miss a scheduled every-2-month continuation injection visit by more than 7 days, take daily oral cabotegravir for up to 2 months to replace 1 missed scheduled every-2-month injection. The recommended oral daily dose is one 30-mg tablet of oral cabotegravir. The first dose of oral PrEP should be taken approximately 2 months after the last injection dose of APRETUDE. Restart injection with APRETUDE on the day oral dosing completes or within 3 days; thereafter, as recommended in Table 3. For oral PrEP durations greater than 2 months, an alternative oral regimen is recommended.

Contact Viiv to order oral Vocabria (cabotegravir) to ship to patient or clinic directly, and at no cost

Injectable PrEP **Unplanned** Missed Injections

If a scheduled injection visit is missed or delayed by more than 7 days and oral dosing has not been taken in the interim, clinically reassess the individual to determine if resumption of injection dosing remains appropriate [see *Warnings and Precautions (5.1)*]. If the injection dosing schedule will be continued, see Table 3 for dosing recommendations.

Injectable PrEP Missed Injections

Table 3. Injection Dosing Recommendations after Missed Injections

Time since Last Injection	Recommendation
If second injection is missed and time since first injection is:	
Less than or equal to 2 months	Administer 600-mg (3-mL) gluteal intramuscular injection of APRETUDE as soon as possible, then continue to follow the every-2-month injection dosing schedule.
Greater than 2 months	Restart with 600-mg (3-mL) gluteal intramuscular injection of APRETUDE, followed by a second 600-mg (3-mL) initiation injection dose 1 month later. Then continue to follow the every-2-month injection dosing schedule thereafter.
If third or subsequent injection is missed and time since prior injection is:	
Less than or equal to 3 months	Administer 600-mg (3-mL) intramuscular injection of APRETUDE as soon as possible, then continue with the every-2-month injection dosing schedule.
Greater than 3 months	Restart with 600-mg (3-mL) gluteal intramuscular injection of APRETUDE, followed by the second 600-mg (3-mL) initiation injection dose 1 month later. Then continue with the every-2-month injection dosing schedule thereafter.

Injectable PrEP Initiation Labs

TESTING NOT INDICATED ROUTINELY FOR CAB PREP PATIENTS

Based on the results of the CAB clinical trials,^{12, 147, 148} the following laboratory tests are NOT indicated before starting CAB injection or for monitoring patients during its use: creatinine, eCrCl, hepatitis B serology, lipid panels, liver function tests.

Screening tests associated with routine primary care and not specific to the provision of CAB for PrEP are discussed in the primary care section (see Table 8)

Injectable PrEP Followup Labs

Table 7 Timing of CAB PrEP-associated Laboratory Tests

Test	Initiation Visit	1 month visit	Q2 months	Q4 months	Q6 months	Q12 months	When Stopping CAB
HIV*	X	X	X	X	X	X	X
Syphilis	X			MSM [^] /TGW [~] only	Heterosexually active women and men only	X	MSM/TGW only
Gonorrhea	X			MSM/TGW only	Heterosexually active women and men only	X	MSM/TGW only
Chlamydia	X			MSM/TGW only	MSM/TGW only	Heterosexually active women and men only	MSM/TGW only


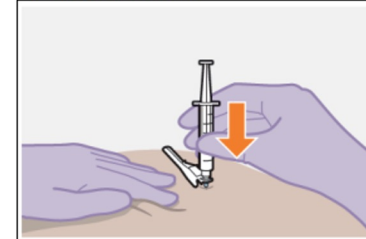
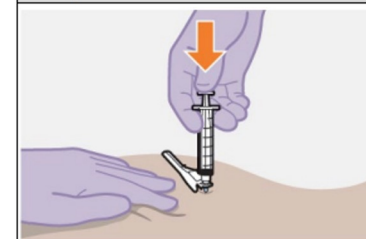
* HIV-1 RNA assay

X all PrEP patients

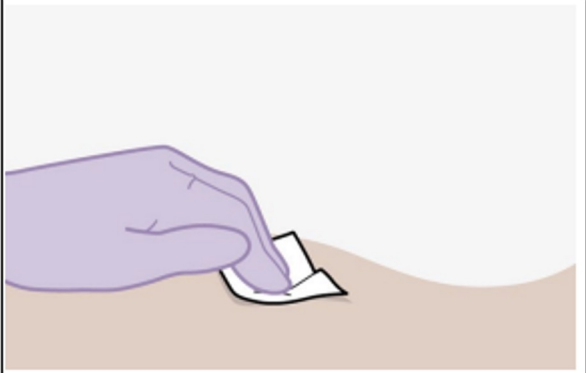
[^] men who have sex with men

[~] persons assigned male sex at birth whose gender identification is female

Injectable PrEP Administration

<p>17. Stretch the skin.</p>  <p>Figure Q</p>	<p>Use the z-track injection technique to minimize medicine leakage from the injection site.</p> <ul style="list-style-type: none">Firmly drag the skin covering the injection site, displacing it by about an inch (2.5 cm). See Figure Q.Keep it held in this position for the injection.
<p>18. Insert the needle.</p>  <p>Figure R</p>	<ul style="list-style-type: none">Insert the needle to its full depth, or deep enough to reach the muscle. See Figure R.
<p>19. Inject the dose of medicine.</p>  <p>Figure S</p>	<ul style="list-style-type: none">Still holding the skin stretched – slowly press the plunger all the way down. See Figure S.Ensure the syringe is empty.Withdraw the needle and release the stretched skin immediately.

Injectable PrEP Administration

20. Assess the injection site.	
 An illustration showing a purple hand applying a white gauze pad to a brown skin surface, representing an injection site. The hand is positioned over the site, and the gauze is being pressed against it.	<ul style="list-style-type: none">• Apply pressure to the injection site using a gauze pad. See Figure T.• A small bandage may be used if bleeding occurs. <p>Do not massage the area.</p>
<p>Figure T</p>	

Injectable PrEP Follow Up

Follow-up care	<p><u>At follow-up visit 1 month after first injection</u></p> <ul style="list-style-type: none">• HIV Ag/Ab test and HIV-1 RNA assay <p><u>At follow-up visits every 2 months (beginning with the third injection – month 3) provide the following:</u></p> <ul style="list-style-type: none">• HIV Ag/Ab test and HIV-1 RNA assay• Access to clean needles/syringes and drug treatment services for PWID <p><u>At follow-up visits every 4 months (beginning with the third injection- month 3) provide the following:</u></p> <ul style="list-style-type: none">• Bacterial STI screening² for MSM and transgender women who have sex with men² – oral, rectal, urine, blood <p><u>At follow-up visits every 6 months (beginning with the fifth injection – month 7) provide the following:</u></p> <ul style="list-style-type: none">• Bacterial STI screening¹ for all heterosexually-active women and men – [vaginal, rectal, urine - as indicated], blood <p><u>At follow-up visits at least every 12 months (after the first injection) provide the following:</u></p> <ul style="list-style-type: none">• Assess desire to continue injections for PrEP• Chlamydia screening for heterosexually active women and men – vaginal, urine <p><u>At follow-up visits when discontinuing cabotegravir injections provide the following:</u></p>
	<ul style="list-style-type: none">• Re-educate patients about the “tail” and the risks during declining CAB levels• Assess ongoing HIV risk and prevention plans• If PrEP is indicated, prescribe daily oral F/TDF or F/TAF beginning within 8 weeks after last injection• Continue follow-up visits with HIV testing quarterly for 12 months

Injectable PrEP Follow Up

March 2024

SU	MO	TU	WE	TH	FR	SA
25	26	27	28	29	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

PCMC-COUNSELING ROOM

Fri 22

Time	Event
08 AM	
09 AM	Scheduled Appoint...
10 AM	
11 AM	
12 PM	LUNCH
01 PM	
	Scheduled Appoint...

- COE-STI NAZARIO
- DEMO-PCMC
- MEDSPEC-HIGH RISK
- PCMC-COUNSELING ROOM
- PCMC-SAGE-BEAUVAIS
- PCMC-SAGE-IANAS
- PCMC-SAGE-MARKMAN
- PCMC-SAGE-NAZARIO
- PCMC-SAGE-STELLMACHER
- PCMC-SAGE-TAYLOR
- PHARM-LTBI DOT
- PHN-STI

Injectable Meds - Documenting

Pt arrived to clinic to receive second injection of Cab-LA for HIV PrEP.

- Confirmed HIV lab results negative, including not detected VL (seen in SQ). New labs completed today, will monitor results.
- Pt agrees to discontinue oral PrEP, last dose was yesterday. Notified pt exact timeframe to full protection is not known, but estimated to be 7 days. Agrees to use condoms consistently for at least 7 days, longer if desired.
- Sexual habits/safe sex discussed.
- Given FDA patient handout prior to administration, pt read & confirmed they would like to initiate Cab-LA for HIV PrEP today.
- Pt hep B immune, though testing not indicated for Cab-LA per CDC & Manufacturer.
- Managing injection site reactions per MFR recommendations.
 - **OTC pain soon prior to or after injection for 1-2 days PRN.
 - **Warm compresses or heating pad for 15-20 min after arriving home.

Injectable Meds - Documenting

- Need for HIV combo & HIV VL testing prior to each injection, ordered in EHR for release on 2/28, ~~pt~~ would like to complete prior to visit.
 - Seven day +/- window for injections with option to use oral CAB bridge up to 2 months, importance of on-time injections to prevent ~~sero-conversion~~ & delayed recognition of seroconversion associated w/ Cab-LA.
 - CBC, chem, Hep B, lipid panel, and liver enzymes NOT ordered - NOT indicated for Initiation nor monitoring of Cab-LA per CDC and manufacturer.
 - Pt agrees to follow up in 1 month, will complete HIV labs and be assessed for ~~s/sx~~ of acute HIV infection.
-

Injectable Meds - Documenting

Future Planning per 2021 CDC PrEP guidelines:

- At each bi-monthly visit, will assess for s/gx of acute HIV infection, administer Cab-LA, and respond to new questions.
- At least every 4 months - Evaluation as above + bacterial STI screening (pt is MSM), and typical 3-site testing (sooner if indicated).
- Every 12 months (beginning at 5th injection) - Tests as above + assess desire to continue Cab-LA.

Vaccines:

- Up to date, no additional vaccines recommended at this time.

ICD: Z29.81 - Encounter for HIV Pre-Exposure Prophylaxis

Activity Time: 30 Minutes

Injectable Meds - Documenting

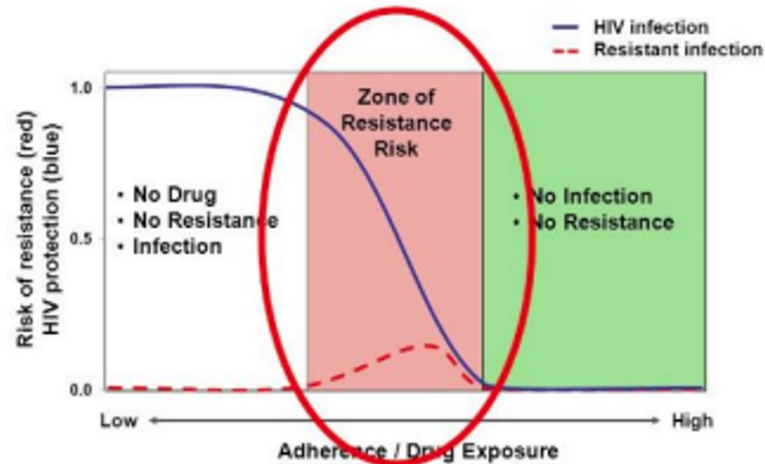
Medication is paid for by the patient assistance program by the manufacturer ViiV and NOT billed through PIMC. Medication is filled by an outside pharmacy and delivered to Phoenix Indian Medical Center and administered in the clinic.

Indication: Z29.81

Injectable PrEP Follow Up / Discontinuation

Figure 7 The trade-off of PrEP drug levels and risk of HIV infection with resistant virus

PrEP and HIV resistance



Slide modified from John Mellors, FDA 201

Discontinuing Injectable PrEP

- Stop after provider evaluation of HIV risk
- Discuss how to safely discontinue
- Consider use of oral PrEP for 12 months after discontinuation
 - If patient remains at risk for HIV
 - Drug levels will remain and are subtherapeutic
 - Drug levels are high enough to cause resistance


Hepatitis B

Test and Result	Interpretation	Action
HBsAg—Positive Total anti-HBc — Positive IgM anti-HBc — Positive Anti-HBs — Negative	Acute infection	Link to hepatitis B care
HBsAg — Positive Total anti-HBc — Positive IgM anti-HBc — Negative ¹ Anti-HBs — Negative	Chronic Infection	Link to hepatitis B care
HBsAg — Negative Total anti-HBc — Positive Anti-HBs — Positive	Resolved Infection	Counsel about HBV infection reactivation risk
HBsAg — Negative Total anti-HBc — Negative Anti-HBs — Positive ²	Immune from receipt of prior vaccination (if documented complete series)	If no documentation of full vaccination, then complete vaccine series per ACIP recommendations.
HBsAg — Negative Total anti-HBc — Positive Anti-HBs — Negative	<i>Only core antibody is positive. See possible interpretations and corresponding actions:</i>	
	Resolved infection where anti-HBs levels have waned	Counsel about HBV infection reactivation risk
	Occult infection	Link to hepatitis B care
	Passive transfer of anti-HBc to an infant born to an HBsAg-positive gestational parent	No action
	A false positive, thus patient is susceptible	Offer HepB vaccine per Advisory Committee on Immunization Practices (ACIP)
	A mutant HBsAg strain that is not detectable by laboratory assay	Link to hepatitis B care
HBsAg — Negative Total anti-HBc — Negative Anti-HBs — Negative ³	Susceptible, never infected (if no documentation of HepB vaccine series completion)	Offer HepB vaccine per ACIP recommendations

Patient Reports

- Patient satisfaction in clinic at PIMC
 - Soreness & local pain x 2-3 days
 - No discontinuations so far
 - Great adherence with keeping appointments
 - No other complaints



Search... 

[Login](#) | [Register](#) | [Donate](#)

Clinician Consultation

Clinical Resources

About the Center



HIV/AIDS Management

Expert clinical advice on providing optimal care to your HIV-positive patients, from initiating antiretroviral regimens to managing HIV/AIDS and comorbidities.

[HIV/AIDS Guidelines »](#)
[Antiretroviral Drug Tables »](#)

 [Get HIV/AIDS Management Advice](#)



Perinatal HIV/AIDS

Immediate advice on HIV management in pregnant people and their infants, including referral to care.

[Perinatal ReproID HIV Listserv »](#)

 [Get Perinatal HIV Advice](#)



Hepatitis C Management

Expert clinical advice on HCV testing, staging, monitoring, and treatment including hepatitis C mono- and co-infection.

 [Get Hepatitis C Management Advice](#)



Substance Use Management

Expert clinical advice for healthcare providers on substance use evaluation and management.

[National Substance Use Warmline »](#)
[California Substance Use Line »](#)

 [Get Substance Use Management Advice](#)



PEP: Post-Exposure Prophylaxis

Expert advice on managing occupational and non-occupational exposures to HIV and hepatitis B & C.

[Online PEP Quick Guide »](#)

 [Get PEP Advice](#)



PrEP: Pre-Exposure Prophylaxis

Up-to-date clinical advice on providing PrEP as a prevention tool, from determining when prescribing PrEP is appropriate to understanding follow-up tests.

[Online PrEP Quick Guide »](#)

 [Get PrEP Advice](#)



The SeroPrEP Study

SeroPrEP is a study for people who may have acquired HIV after receiving pills or injections for PrEP.

The SeroPrEP study is being done to better understand why some people acquire HIV while taking oral PrEP or CAB LA. We enroll participants and support sample collection from all 50 U.S. states and Puerto Rico.

→ If you are **PrEP client** who may have acquired HIV infection while taking PrEP, you may complete the [participant consent form](#).

→ If you are a **clinician** who has a patient who may have acquired HIV infection while taking PrEP, you may refer your patient using the [link for clinicians](#).

Funding and Acquisition

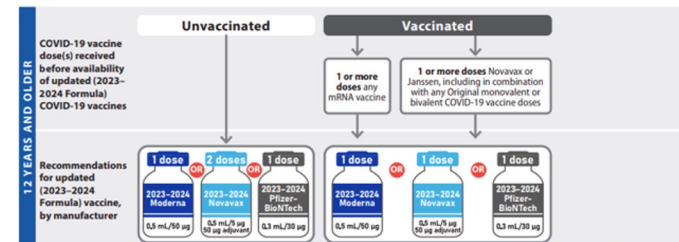
- Patient Assistance delivers directly to PIMC pharmacy
- Have patients wet sign paperwork in clinic if any doubt about funding
 - PAP is extremely efficient at verifying patient coverage, saves time
- AHCCCS has published prior authorization criteria online
- Insurance Companies may cover under medical or pharmacy coverage
 - Sometimes require outside pharmacy or specific contracted companies
 - Creates complexity with out-of-pocket costs and deductibles
- Can request facility P&T assistance

Vaccines

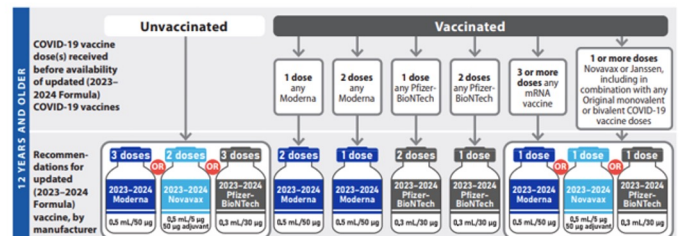
Immunizations for HIV (non-pregnant adult)	Immunizations for PrEP (non-pregnant adult)
<p>Jynneos: 2 doses, 4 weeks apart, offer if at risk (MSM, recent STI, etc.) *Consider hold if CD4 < 200 unless at significant risk, non-replicating*</p> <p>MCV4: 2 doses, 2 months apart then every 5 years.</p> <p>MenB: Rarely need, CDC routine indications (16-23 yrs, microbiologist, asplenia, shared decision, etc.).</p> <p>Shingrix: Need positive varicella titers first - 2 doses, 2-6 months apart regardless of age.</p> <p>COVID-19: See table on back of sheet. If recent <u>COVID infxn</u>, can get when symptoms resolve, or hold x 3 months. Consider immunocompromised recommendations if in severe condition.</p> <p>Flu: annual (high dose if CD4 < 200 and/or age 65 + preferred, but give whatever is in stock).</p> <p>Hep A: Titers first. If negative, repeat with 2 doses > 6 months apart, repeat titers 1-2 months after dose #2.</p> <p>Hep B: Titers first. If negative, 2 doses of <u>heplisav</u>, 4 weeks apart, repeat titers 1-2 months after second dose. For non-responders, consider annual boosters.</p> <p>HPV9: 3 doses at 0, 1-2, and 6 months. < 45 yrs or w/ shared decision, <u>Consider</u> repeat HPV9 even if previously completed w/ HP4 or HPV2.</p> <p>Tdap: once as adult, then Td/Tdap every 10 years.</p> <p>Pneumo: Most need 1 dose PCV20 5 years after last PPSV23/PCV20, review latest CDC immunocompromised guideline.</p> <p>MMR: Review titers, if any individual titer is "negative or equivocal," repeat series of 2 doses, 4 weeks apart. Document immune, do not repeat titers. *Contraindicated if CD4 < 200*</p> <p>Varicella: Titers first & repeat series if negative with 2 doses, 9 months apart. Need positive first before <u>shingrix</u> at any age. Document immune. *Contraindicated if CD4 < 200*</p> <p>RSV: 1 dose if 60+ years old or if 32-36 weeks pregnant</p>	<p>Jynneos: 2 doses, 4 weeks apart, offer if at risk (MSM, recent STI, etc.).</p> <p>MCV4: 2 doses, 2 months apart for CDC routine (college student, travel, asplenia, etc.).</p> <p>MenB: Rarely need, CDC routine indications (16-23 yrs, microbiologist, asplenia, shared decision, etc.).</p> <p>Shingrix: 2 doses, 2-6 months apart for age 50 +</p> <p>COVID-19: See table on back of sheet. If recent <u>COVID infxn</u>, can get when symptoms resolve, or hold x 3 months. Consider immunocompromised recommendations if in severe condition.</p> <p>Flu: annual (high dose if age 65 + preferred, but give whatever is in stock).</p> <p>Hep A: 2 doses, > 6 months apart documented.</p> <p>Hep B: Complete series documented, will vary by brand (2 doses <u>heplisav</u>, 3 doses <u>engix/b/prehevirio</u>, or incomplete series finalized w/ <u>heplisav</u>).</p> <p>HPV9: 3 doses at 0, 1-2, and 6 months. < 45 yrs or w/ shared decision, <u>Consider</u> repeat HPV9 even if previously completed w/ HP4 or HPV2.</p> <p>Tdap: once as adult, then Td/Tdap every 10 years.</p> <p>Pneumo: Most need 1 dose PCV20, review latest CDC routine recommendations (alcoholism, chronic heart/lung/kidney dx, DM, malignancy, etc.).</p> <p>MMR: CDC routine – At least 1 documented dose (Hold if born before 1957 or positive titers/immunity documented).</p> <p>Varicella: CDC routine 2-doses, 4 weeks apart (hold if fx of medically diagnosed chickenpox, documented 2-dose series, positive titer, born before 1980, etc.)</p> <p>RSV: 1 dose if 60+ years old or if 32-36 weeks pregnant</p>

Last Reviewed 1/5/24 - Full references available, derived from mixture of CDC, ACIP, and clinic experience.

COVID-19 Non-Immunocompromised adult as of 10/13/23



COVID-19 Moderate/Severe Immunocompromised adult as of 10/13/23



Pneumococcal Vaccines for most patients 19-64 w/ HIV

Prior vaccines	Option A	Option B
None*	PCV20	PCV15 >8 weeks PPSV23
PPSV23 only	>1 year → PCV20	>1 year → PCV15
PCV13 only	>1 year → PCV20	>8 weeks → PPSV23 >5 years → PPSV23 Review pneumococcal vaccine recommendations again when your patient turns 65 years old.
PCV13 and 1 dose of PPSV23	>5 years → PCV20	>5 years → PPSV23 Review pneumococcal vaccine recommendations again when your patient turns 65 years old.
PCV13 and 2 doses of PPSV23	>5 years → PCV20	No vaccines recommended at this time. Review pneumococcal vaccine recommendations again when your patient turns 65 years old.

Unique Pneumococcal names in E.H.R Immunization Package **Pneumo-PS = PPSV23 **Pneumo-NOS = Pneumococcal vaccine, not otherwise specified **PCV-NOS = PCV conjugate, not otherwise Specified

Last Reviewed 1/5/24 - Full references available, derived from mixture of CDC, ACIP, and clinic experience.

Outreach - Challenges

- Referrals and consults for PrEP/PEP/nPEP
 - STI clinic, urgent care, ED, primary care, inpatient, outside facilities, etc.
- Community outreach, decreasing stigma
- Funding, state medicaid
- Transportation, mobility issues
- Refill automation, shipping to remote areas
- Patient social issues, substance use disorders
- Staffing with increased patient load

Outreach - Barriers to Care

The Washington Post
Democracy Dies in Darkness

Subscribe

HEALTH

Health Care

Medical Mysteries

Science

Well+Being

Sober homes promised help and shelter. Some delivered fraud, officials say.



By [David Ovalle](#)

September 18, 2023 at 6:00 a.m. EDT

Outreach - Education



Outreach - Education

Native STAND is a comprehensive sexual health curriculum for Native high school students that focuses on sexually transmitted infections, HIV/AIDS, and teen pregnancy prevention, while also covering drug and alcohol use, suicide, and dating violence. Twenty-seven sessions support healthy decision-making through interactive discussions and activities that promote diversity, self-esteem, goals and values, team building, negotiation and refusal skills, and effective communication. The 1.5 hour lessons contain stories from tribal communities that ground learning in cultural teachings.

AGE GROUP DESIGNED FOR: High School

LGBT INCLUSIVE: Yes

TRAUMA INFORMED: Yes

PROGRAM SETTING: Flexible

HEALTH TOPICS COVERED: Healthy Relationships, Other Healthy Life-Skills, Sexual Health

DURATION: 27 sessions (90 minutes each)

COST TO PURCHASE: Free (plus cost of materials for class activities, roughly \$500)

Outreach - Research



National Native HIV/AIDS Awareness Day is March 20

Celebrate by learning about HIV prevention!

- Get tested! CDC recommends that everyone between the ages of 13 and 64 get tested for HIV at least once as part of routine health care.
- PrEP (Pre-Exposure Prophylaxis) is a once-daily pill that is 99% effective at preventing HIV, and
- PrEP is available at PIMC! Talk to a provider for more information or you can make your own appointment to start HIV prevention by calling 602-263-1541 and leaving your contact information and that you are interested in starting PrEP. A team member will get back to you within 1 business day.



Outreach - Community Service & Fundraising



Outreach - Creative Strategies

- New PHN-STI clinic has provider rapid-starting patients
- Very flooded with PrEP management
 - Considering possible exclusive case manager
 - Asking PCP's to take more active role
 - Small handful of other department providers comfortable with managing
- Incentive gift card at the moment – but currently limited to HIV patients only, available through national program.
 - Looking into similar programs for PrEP

References

- 1.CDC. STI treatment guidelines. Centers for Disease Control and Prevention. Published 2021. <https://www.cdc.gov/std/treatment-guidelines/default.htm>
- 2.Phoenix Indian Medical Center (PIMC) | Healthcare Facilities. Phoenix Area. Accessed February 29, 2024. <https://www.ihs.gov/phoenix/healthcarefacilities/phoenix/>
- 3.Aguirre BP. McConaughy to make \$6,000 for each course he co-teaches at UT Austin, \$12,000 independently. *San Antonio Express-News*. <https://www.expressnews.com/news/local/article/Matthew-McConaughy-to-make-6-000-for-each-14455564.php>. Accessed February 29, 2024.
- 4.Barbee L. *Mountain West AIDS Education and Training Center Self-Collected Extra-Genital Gonorrhea and Chlamydia Testing for MSM*. https://depts.washington.edu/nwaetc/presentations/uploads/227/selfcollected_extragenital_gonorrhea_and_chlamydia_testing_for_msm.pdf
- 5.Visual Guides. University of Washington STD Prevention Training Center. Accessed February 29, 2024. <https://www.uwptc.org/visual-guides>
- 6.CDC. Mycoplasma genitalium - STI Treatment Guidelines. www.cdc.gov. Published July 14, 2021. <https://www.cdc.gov/std/treatment-guidelines/mycoplasmagenitalium.htm>
- 7.Mycoplasma genitalium Treatment Failure Registry. airc.cdc.gov. Accessed February 29, 2024. <https://airc.cdc.gov/surveys/?s=7NCDWJAYF7ML4PRK>
- 8.Efficacy of Doxycycline as PEP to Prevent Bacterial STIs. www.cdc.gov. Published August 28, 2023. <https://www.cdc.gov/std/treatment/doxycycline-as-pep-toe.htm>
- 9.Primary Prevention Methods. www.cdc.gov. Published April 3, 2023. <https://www.cdc.gov/std/treatment-guidelines/clinical-primary.htm#CautionsForDoxyPEP>
- 10.HIV and STI Prevention | San Francisco City Clinic. www.sfcityclinic.org. Accessed February 29, 2024. <https://www.sfcityclinic.org/providers/guidelines/hiv-and-sti-prevention>

References

11. Leutkemeyer A. Doxycycline post-exposure prophylaxis for STI prevention among MSM and transgender women on HIV PrEP or living with HIV: high efficacy to reduce incident STI's in a randomized trial. Aids2022.org. Published 2022. <https://programme.aids2022.org/Abstract/Abstract/?abstractid=13231>
12. A new injection to prevent HIV, rather than pills, is a game-changer, scientists say. NPR.org. <https://www.npr.org/2021/12/23/1067366345/hiv-aids-injection-fda-approval-cabotegravir-apretude-prep>.
13. Cabenuva HIV Medication. POZ. <https://www.poz.com/drug/cabenuva>
14. Sunlenca HIV Medication. POZ. Accessed February 29, 2024. <https://www.poz.com/drug/sunlenca>
15. See Boxed Warning | What is APRETUDE? | APRETUDE (cabotegravir). apretude.com. Accessed February 29, 2024. https://apretude.com/about-apretude/what-is-apretude/?utm_source=google&utm_medium=cpc&utm_term=apretude&gad_source=1&gclid=CjwKCAiAivGuBhBEEiwAWiFmYRmsJSDjnwAEnESrpRL0G4aXnPiqs-IKHUurluaysKhC4aXCFjpRYZBoC4rcQAvD_BwE&gclidsrc=aw.ds
16. CDC. *PREEXPOSURE PROPHYLAXIS for the PREVENTION of HIV INFECTION in the UNITED STATES -2021 UPDATE a CLINICAL PRACTICE GUIDELINE.*; 2021. <https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf>
17. APRETUDE (cabotegravir 200 mg/mL) Efficacy | HCP Website. apretudehcp.com. Accessed February 29, 2024. <https://apretudehcp.com/efficacy/>
18. *HIGHLIGHTS of PRESCRIBING INFORMATION.* https://gskpro.com/content/dam/global/hcpportal/en_US/Prescribing_Information/Apretude/pdf/APRETUDE-PI-PIL-IFU.PDF
19. Injection Scheduling Tool | APRETUDE (cabotegravir 200 mg/mL) Official HCP Website. planner.apretudehcp.com. Accessed February 29, 2024. <https://planner.apretudehcp.com/>

References

20. CDC. Interpretation of Hepatitis B Serologic Test Results | CDC. www.cdc.gov. Published March 3, 2023. <https://www.cdc.gov/hepatitis/hbv/interpretationOfHepBSerologicResults.htm>
21. National Clinician Consultation Center. UCSF National Clinician Consultation Center. Accessed February 29, 2024. <https://nccc.ucsf.edu>
22. The SeroPrEP Study. The SeroPrEP Study. Accessed February 29, 2024. <https://seroprep.ucsf.edu/>
23. O'Valle D. Sober homes promised help and shelter. Some delivered fraud, officials say. Washington Post. Published September 18, 2023. <https://www.washingtonpost.com/health/2023/09/18/sober-homes-arizona-medicaid-fraud/>
24. Hilleary C. Some Native Americans Fear Blood Quantum is Formula for “Paper Genocide.” VOA. Published July 24, 2021. https://www.voanews.com/a/usa_some-native-americans-fear-blood-quantum-formula-paper-genocide/6208615.html
25. Native STAND. Healthy Native Youth. <https://www.healthynativeyouth.org/curricula/native-stand/>

Contact

Jonathan Enchinton PharmD, BCPS, AAHIVP
Phoenix Indian Medical Center - Phoenix, Arizona
HIV Center of Excellence - Clinical Pharmacist

Jonathan.Enchinton@ihs.gov

602-581-6726

Acknowledgements

CAPT Heather Huentelman, PharmD, BCPS, AAHIVP

Chinwe Okoye, MD, MPH

HIV-COE Team