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2026 HealthChoices PCMH Learning Network

July 29, 2026

PCMH Statewide Learning Session – HIV Screening, Prevention, and Treatment

Pittsburgh Regional Health Initiative

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In support of improving patient care, this activity has been planned and implemented by the University of Pittsburgh and The Jewish Healthcare Foundation. The University of Pittsburgh is jointly accredited by the **Accreditation Council for Continuing Medical Education (ACCME)** and the **American Nurses Credentialing Center (ANCC)**, to provide continuing education for the healthcare team. **1.0 hours are approved for this course.**

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Learning Objectives

- ✓ Discuss current approaches to HIV screening, prevention, and treatment in primary care settings, including opportunities to improve access and engagement across patient populations
- ✓ Describe emerging strategies for HIV prevention and treatment, including long-acting injectables
- ✓ Identify the roles of interdisciplinary care team members, including community health workers, in supporting HIV screening, linkage to care, treatment adherence, and prevention services
- ✓ Apply lessons from clinical cases to address common challenges and opportunities related to HIV screening, prevention, and care in primary care practice

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HIV Testing, Treatment, and Prevention

Ken Ho, MD, MPH, Associate Professor, University of Pittsburgh School of Medicine; Medical Director, Pitt Men's Study, Multicenter AIDS Cohort Study

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Testing, Treat, and Prevent

Ken Ho, MD

Test and Treat

Scope of the Problem (U.S.)

Approximately 1.2 million people in the U.S. have HIV.

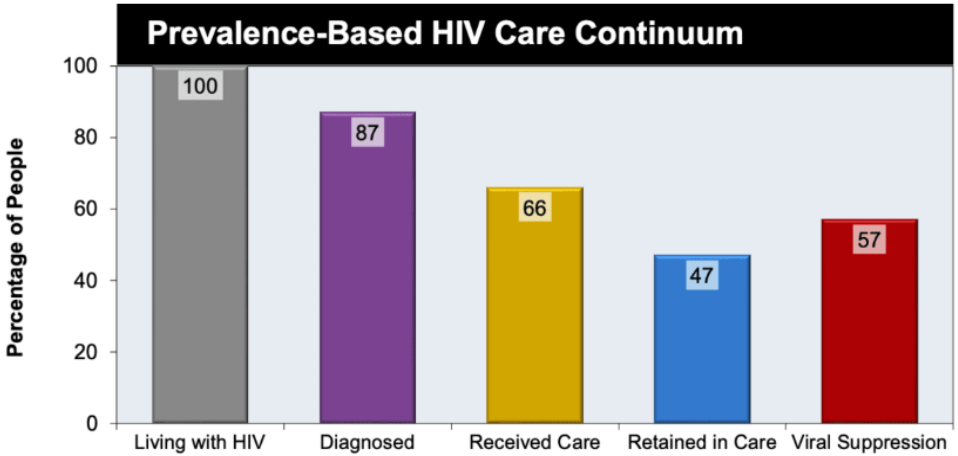
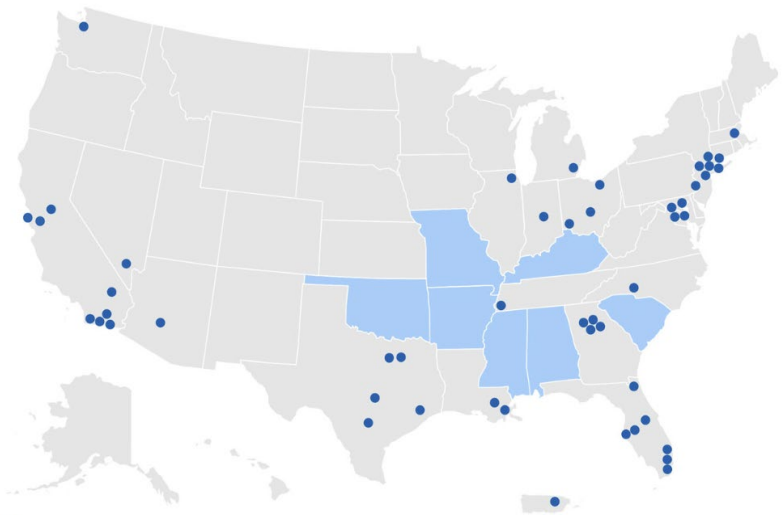
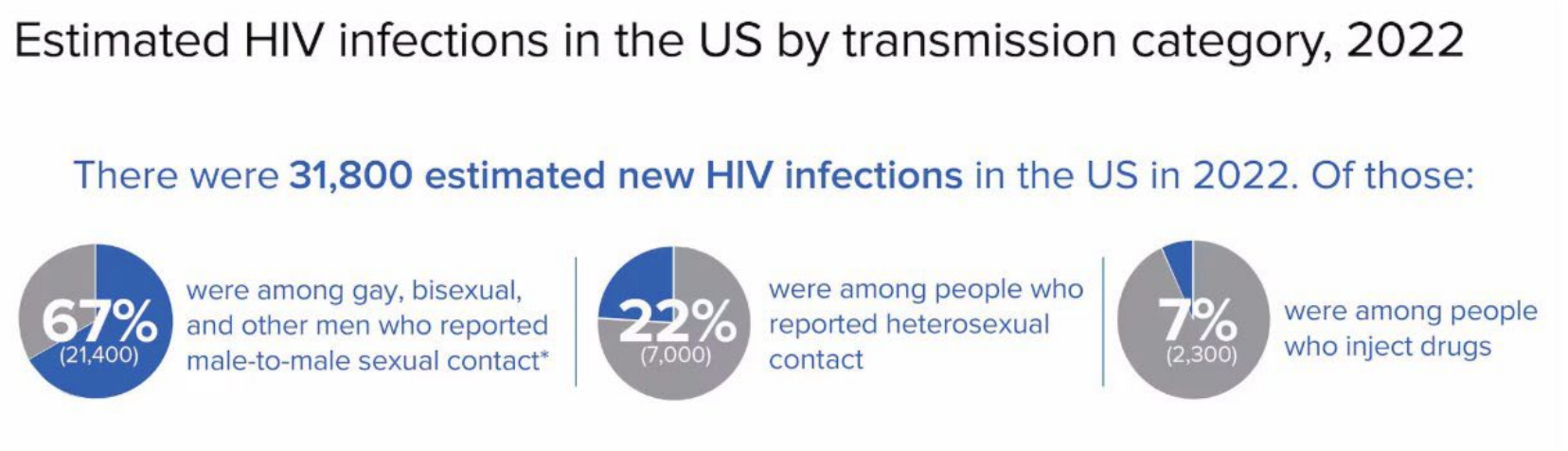


Figure 2. Prevalence-Based HIV Care Continuum, United States, 2022



Geographic Hotspots: The 48 counties, plus Washington, DC, and San Juan, PR, where >50% of HIV diagnoses occurred in 2016 and 2017, and an additional seven states with a substantial number of HIV diagnoses in rural areas

Risk Factors (US)



Transmission Risk

Estimated per-act probability of acquiring HIV from an infected source, by exposure route.

Exposure route	Risk per 10 000 exposures to an infected source	95% Confidence interval	Reference(s)
Parenteral exposure			
Blood transfusion	9250	(8900–9610)	[5]
Needle-sharing injection drug use	63[b]	(41–92)	[12]
Percutaneous needle stick	23	(0–46)	[5]
Sexual exposure[a]			
Receptive anal intercourse	138[c]	(102–186)	[3,13–15]
Insertive anal intercourse	11[d]	(4–28)	[13,14]
Receptive penile–vaginal intercourse	8[e]	(6–11)	[7]
Insertive penile–vaginal intercourse	4[e]	(1–14)	[7]
Receptive oral sex	Low[f]	(0–4)	[14,19]
Insertive oral sex	Low[f]	(0–4)	[19]
Vertical transmission			
Mother-to-child transmission	2260[g]	(1700–2900)	[8]

Rule of 3s

Patel et al. AIDS 2018

CDC Guidance for HIV Testing

KEY POINTS

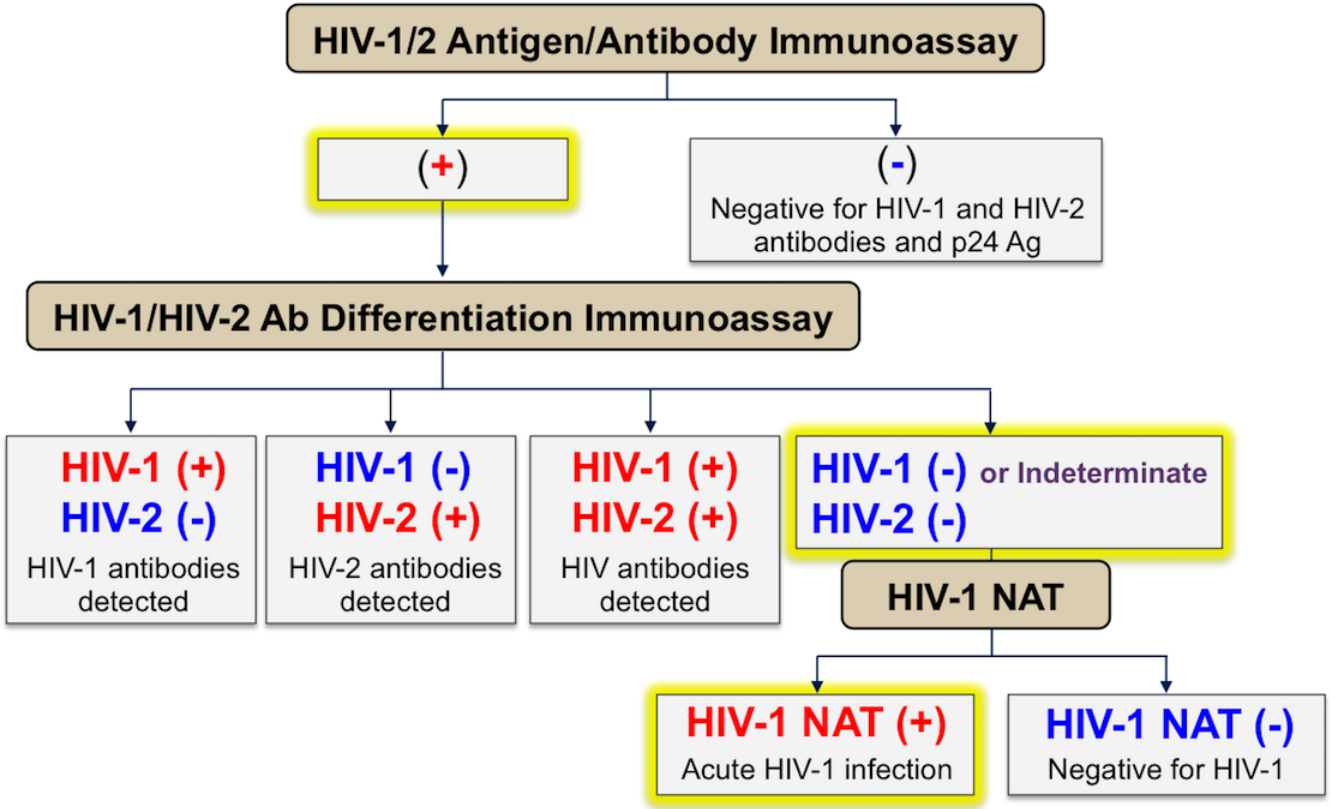
- Everyone between the ages of 13 and 64 should get tested for HIV at least once.
- People with certain risk factors should get tested more often.
- Most HIV tests are available for free or at a reduced cost.
- Visit gettested.cdc.gov to find HIV testing in your area.

US Preventive Services Task Force

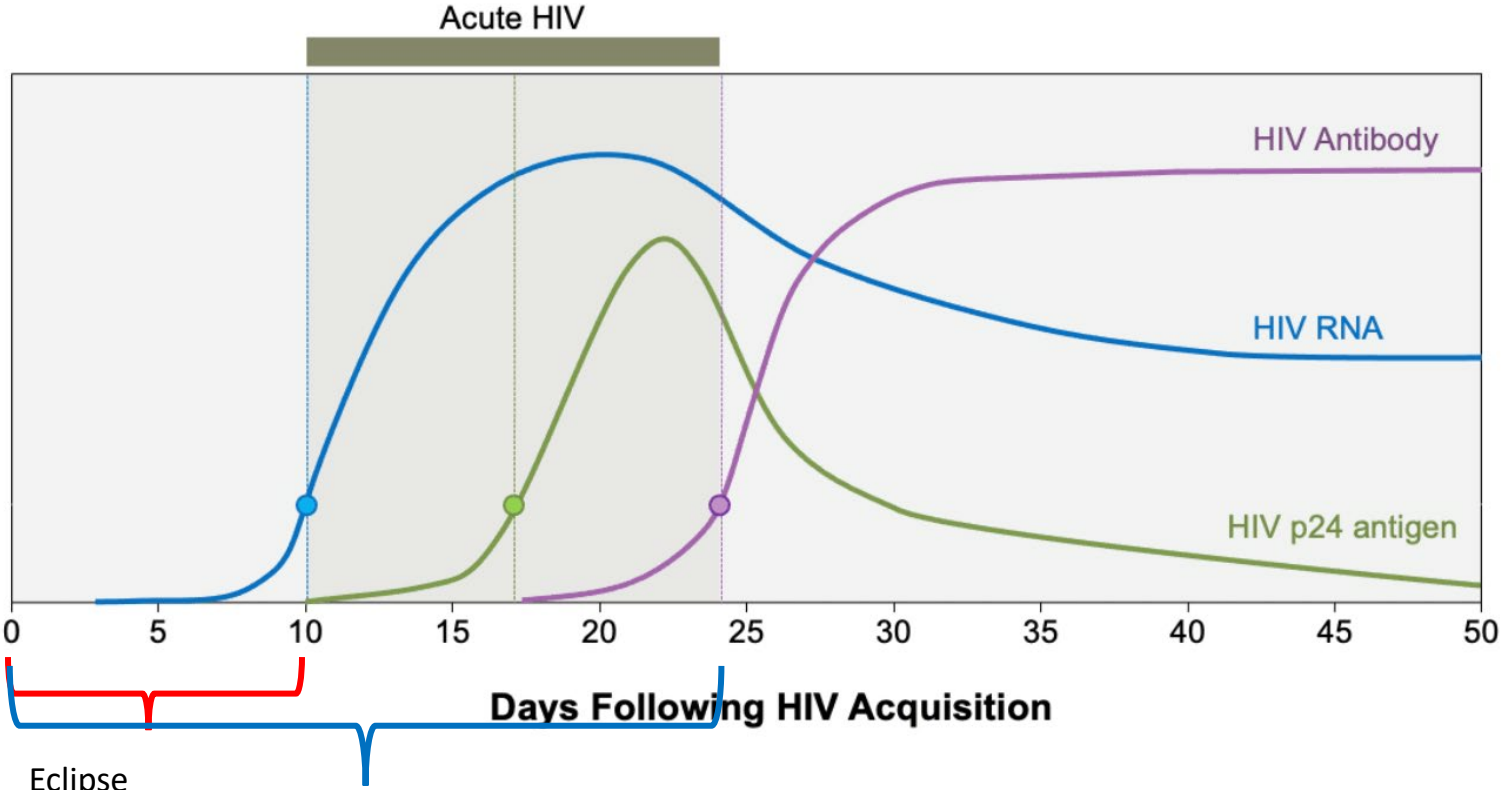
HIV

Population	Recommendation
Pregnant persons	The USPSTF recommends that clinicians screen for HIV infection in all pregnant persons, including those who present in labor or at delivery whose HIV status is unknown.
Adolescents and adults aged 15 to 65 years	The USPSTF recommends that clinicians screen for HIV infection in adolescents and adults aged 15 to 65 years. Younger adolescents and older adults who are at increased risk of infection should also be screened.

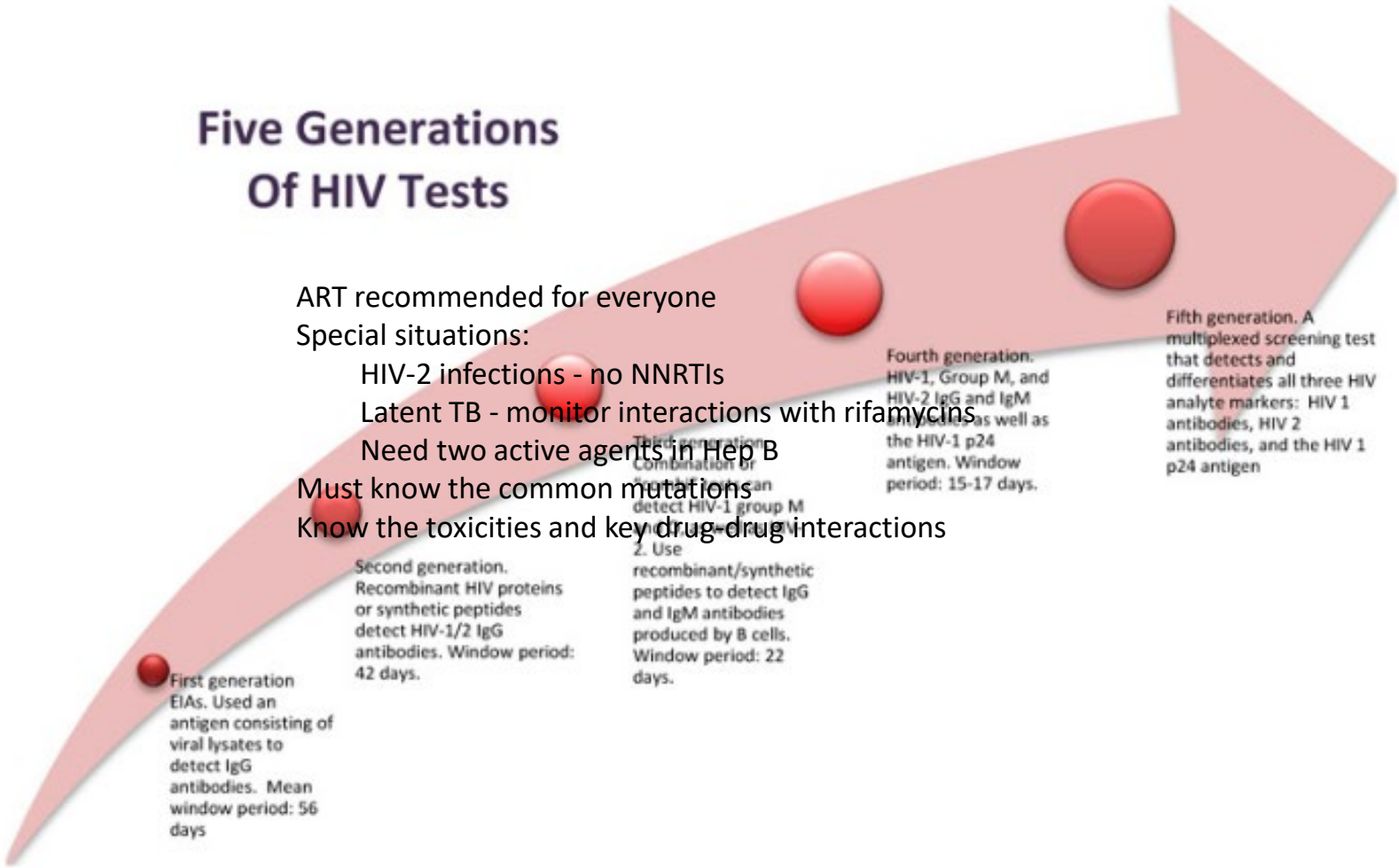
Testing Algorithm per CDC



Timing of Positivity of HIV Testing



CDC



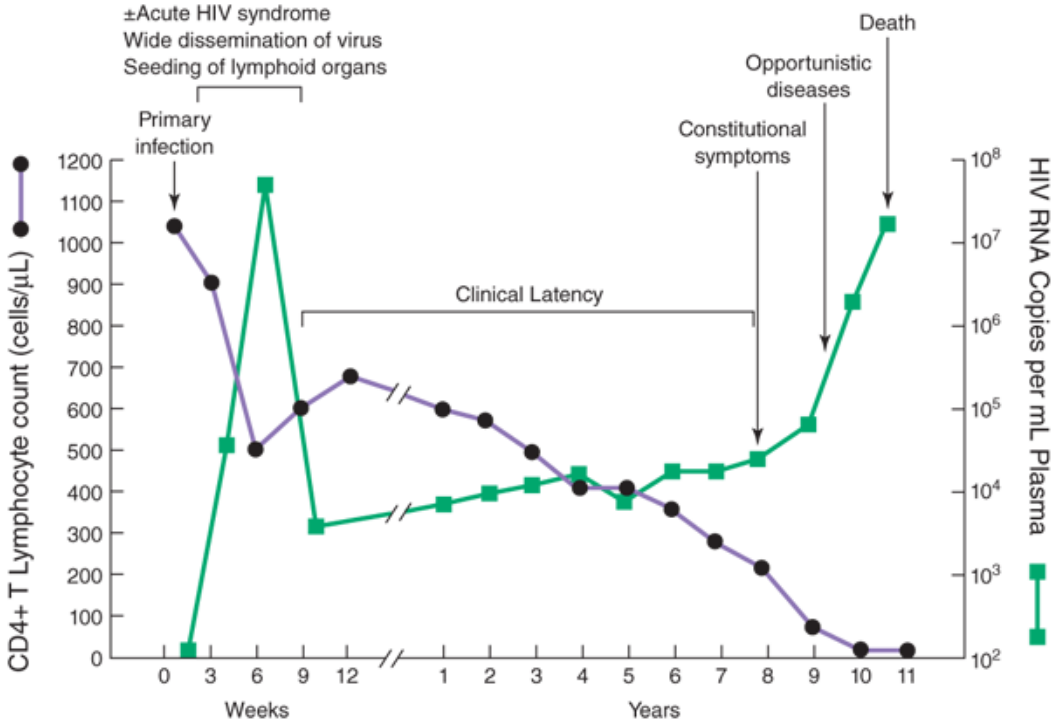
ART recommended for everyone
Special situations:
- HIV-2 infections - no NNRTIs
- Latent TB - monitor interactions with rifamycins
- Need two active agents in Hep B

Must know the common mutations
Know the toxicities and key drug-drug interactions

Testing

- *All subtypes (or clades) are detected by our testing*
  - B is most common in Europe, Americas
- *POC testing is less sensitive*
  - None can differentiate between HIV-1/2
  - Require confirmation
  - Useful in ER, women in labor, occupational exposure, low likelihood of follow up
- *False negative results:*
  - Acute HIV; lab error; defects in HIV specific immunity; very early receipt of ART; acquired HIV during PrEP; hypogammaglobulinemia; recent receipt of potent immunosuppressants
- *False positive results:*
  - Polyclonal cross-reactivity (pregnancy, flu vaccine, IVIG, HTLV-1/2, HIV vaccine study, recent viral infection); lab error; autoimmune condition; CAR-T

Natural History of HIV



Source: D. L. Kasper, A. S. Fauci, S. L. Hauser, D. L. Longo, J. L. Jameson, J. Loscalzo: Harrison's Principles of Internal Medicine, 19th Edition.
www.accessmedicine.com
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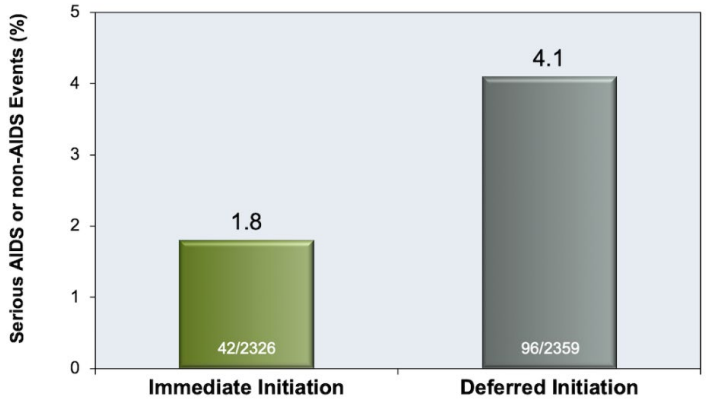
When to start ART?

- ALL guidelines recommend starting ART regardless of CD4
- Data came from START and TEMPRANO trials (2015)
  - 50% reduction in morbidity and mortality among HIV infected individuals with CD4 counts >500 cells/mm^3 randomized to receive ART immediately versus delaying initiation of ART



Lundgren et al, NEJM 2015

Rapid Initiation of ART

- Pregnancy
- AIDS-defining condition
- Acute opportunistic infection
- Lower CD4 count (eg, <200 cells/µL)
- Acute/recent infection
- Rapid decline in CD4
- Higher viral load (eg, >100,000 copies/mL)
- HIV associated nephropathy (HIVAN)
- HBV coinfection
- HCV coinfection

Coffey et al, *AIDS*. 2019

Goals of Treatment

- Reduce HIV-related morbidity and mortality
- Suppress viremia
- Preserve and restore immune responses
- Reduce emergence, transmission of ARV resistance
- Minimize toxicity and disruption of lifestyle
- Reduce HIV transmission
- Decrease chronic inflammatory state (CAD)

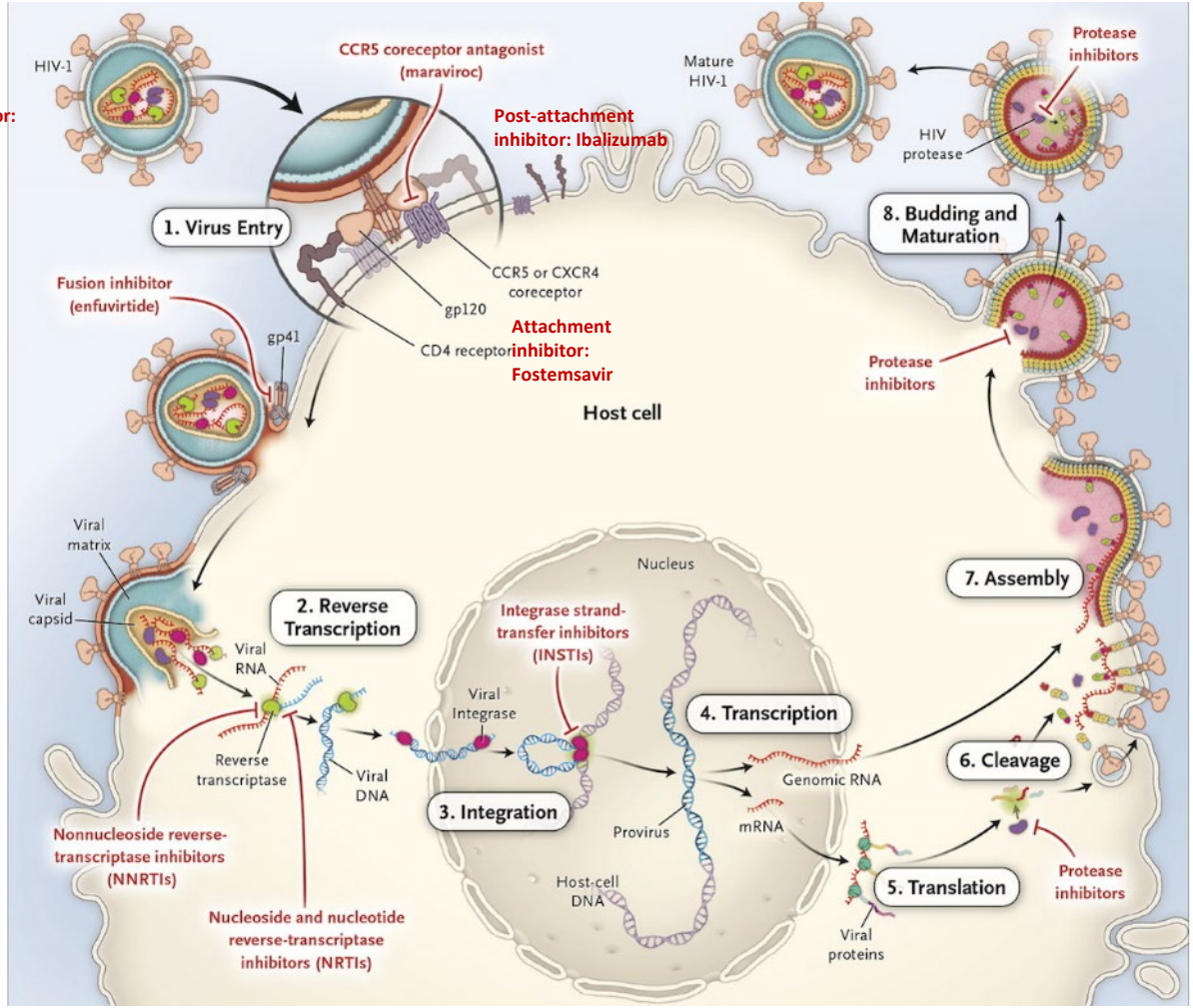
Baseline Assessment

- *Laboratory confirmation/staging of HIV infection*
  - CD4+ cell count with percentage
  - Plasma HIV RNA level (viral load)
  - HIV drug resistance testing (genotype)
    - Transmitted ARV resistance possible → usually NNRTIs
    - History of using CAB-LA as PrEP
  - HLA-B*5701 if planning for abacavir treatment
    - If positive → abacavir causes hypersensitivity reaction
    - 5% have this (m/c in Northern Europeans)
  - Tropism assay
    - Maraviroc is only effective against R5 co-receptor and not with X4 or dual tropic virus
- *Health status*
  - Pregnancy test
  - CBC w/diff; CMP
  - Urinalysis, Fasting lipid panel, hemoglobin A1C
- *Co-infections*
  - Immunity to HAV, HBV, HCV infection
  - TB (interferon gamma release assay [IGRA])
  - Toxoplasmosis serology
    - Important if need to risk assess and/or provide prophylaxis
    - G6PD
  - STDs (syphilis, gonorrhea, chlamydia, trichomonas)
  - Anal cancer screening
    - Receptive anal intercourse or abnormal cervical pap results and all with genital warts; age >25

Selecting a Regimen

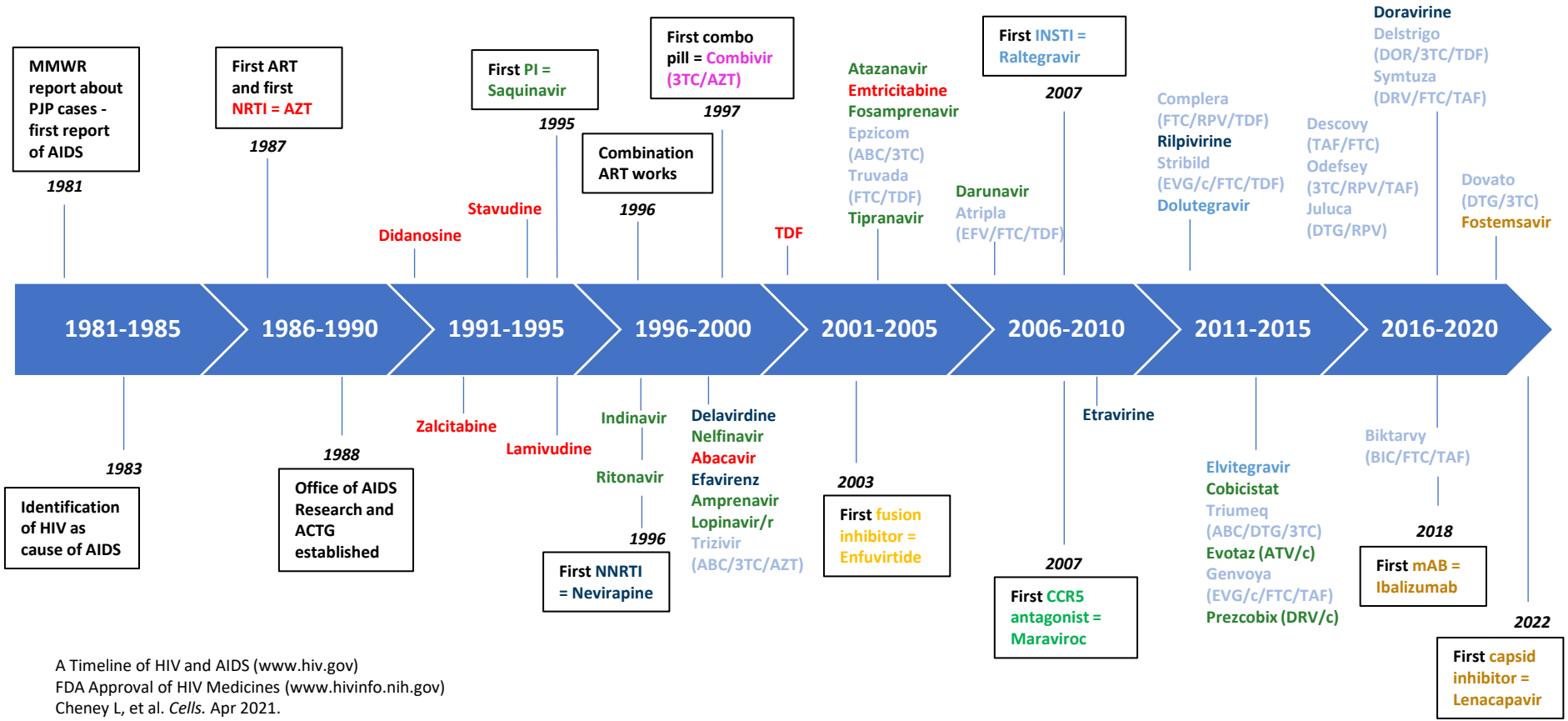
- *What about comorbidities or other conditions?*
  - Hepatitis B co-infection, CVD, hyperlipidemia, renal disease, osteoporosis, psychiatric illness, neurologic disease, narcotic replacement therapy, drug use
- *Which regimen is best overall?*
  - Genetic barrier to resistance, potential adverse effects, drug-drug interactions, convenience, cost, food requirements, what will the patient take!

Capsid inhibitor: Lencapavir



Gandhi et al. NEJM 2014

HIV Treatment: The Eras Tour



A Timeline of HIV and AIDS (www.hiv.gov)
FDA Approval of HIV Medicines (www.hivinfo.nih.gov)
Cheney L, et al. *Cells.* Apr 2021.

ALL THE DRUGS!!



CABENUVA
cabotegravir + rilpivirine
A long-acting injectable regimen administered as two intramuscular injections every four weeks after a one-month lead-in period with oral Vocabria (cabotegravir) + Edurant (rilpivirine). Take with food.



RUKOBIA
fostemsavir
One 600 mg tablet twice a day for people with HIV treatment experience. Take with or without food.

HIV Medication Chart

Combination Antiretrovirals

Atripla (EFV/TDF/FTC)	**Biktarvy** (BIC/TAF/FTC)	**Combivir**† (ZDV/3TC)	**Complera** (RPV/TDF/FTC)	**Delstrigo** (DOR/TDF/3TC)
Descovy (TAF/FTC)	**Dovato** (DTG/3TC)	**Epzicom**† (ABC/3TC)	**Genvoya** (EVG/COBI/TAF/FTC)	**Juluca** (DTG/RPV)
Odefsey (RPV/TAF/FTC)	**Stribild** (EVG/COBI/TDF/FTC)	**Symtuza** (DRV/COBI/TAF/FTC)	**Triumeq** (DTG/ABC/3TC)	**Truvada** (TDF/FTC)

Nucleoside/Nucleotide Reverse Transcriptase Inhibitors (NRTI)

Emtriva* (emtricitabine, FTC)
Epivir*† (lamivudine, 3TC)
Retrovir*† (zidovudine, ZDV)
Viread*† (tenofovir DF, TDF)
Ziagen*† (abacavir, ABC)
Vemlidy (tenofovir alafenamide, TAF) FDA approved for HIV only

Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI)

Edurant (rilpivirine, RPV)
Intelence (etravirine, ETR)
Pifeltro (doravirine, DOR)
Sustiva† (efavirenz, EFV)
Viramune*† (nevirapine, NVP)

Protease Inhibitors (PI)

Evotaz (ATV/COBI)
Kaletra* (lopinavir/ritonavir, LPV/RTV)
Lexiva* (fosamprenavir, FPV)
Prezcobix (DRV/COBI)
Prezista* (darunavir, DRV)
Reyataz*† (atazanavir, ATV)
Viracept* (nelfinavir, NFV)

Entry Inhibitors

Fuzeon (enfuvirtide, T-20) Fusion Inhibitor
Selzentry (maraviroc, MVC) CCR5 Antagonist
Trogarzo (ibalizumab, IBA) Post-Attachment Inhibitor

Integrase Inhibitors (INSTI)

Isentress*▲ (raltegravir, RAL)
Isentress HD (raltegravir, RAL)
Tivicay (dolutegravir, DTG)

Boosting Agents

Norvir*† (ritonavir, RTV)
Tybost (cobicistat, COBI)

All pills shown in relative size/scale. *Medication brand names appear in bold. Generic names and commonly used abbreviations appear in parentheses.*

*Also available in liquid or powder form. †Generic formulation available. ▲Chewable form available.

6/19

"-navir"

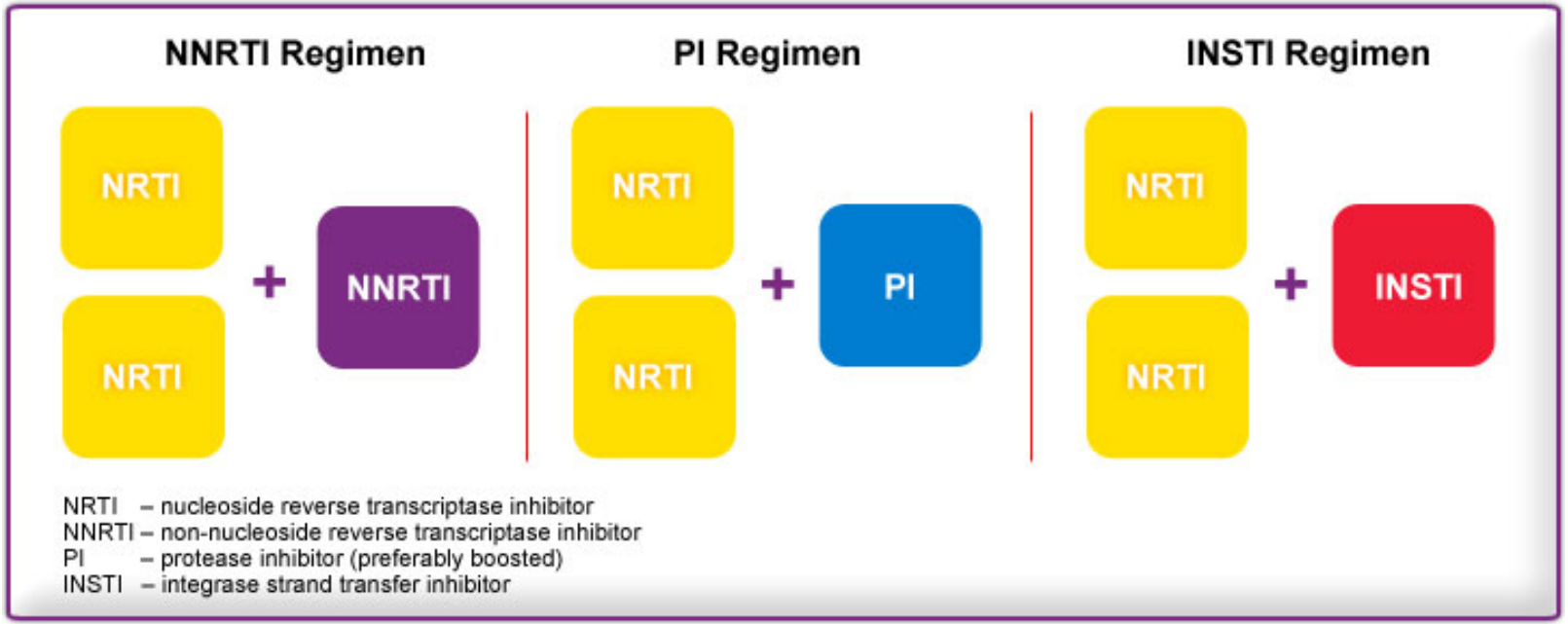
"-virine"

"-gravir"



SUNLENCA
lenacapavir
Sunlenca tablets are taken as a loading dose, with injections once every six months thereafter. Take with or without food.

What to Start?



Current DHHS Guidelines

Table 6a. Recommended Initial Regimens for Most People With HIV

Recommended regimens are those with demonstrated durable virologic efficacy, favorable tolerability and toxicity profiles, and ease of use. Choice of ART during pregnancy should be guided by recommendations from the **Perinatal Guidelines.**

For people who do not have a history of using CAB-LA as PrEP, one of the following regimens is recommended[a]:

- BIC/TAF/FTC **(AI)**
- DTG plus (TAF or TDF)[b] plus (FTC or 3TC) **(AI)**
- DTG/3TC **(AI),** except for individuals with HIV RNA >500,000 copies/mL, HBV coinfection, or in whom ART is to be started before the results of HIV genotypic resistance testing for reverse transcriptase or HBV testing are available.

For people who have a history of CAB-LA use as PrEP, INSTI genotype resistance testing should be performed before starting ART. If ART is to be started before results of genotypic testing results, the following regimen is recommended:

- DRV/c[c] or DRV/r with (TAF or TDF)[b] plus (FTC or 3TC)—pending the results of the genotype test **(AIII)**

DHHS September 2024

Integrase inhibitors: Considerations

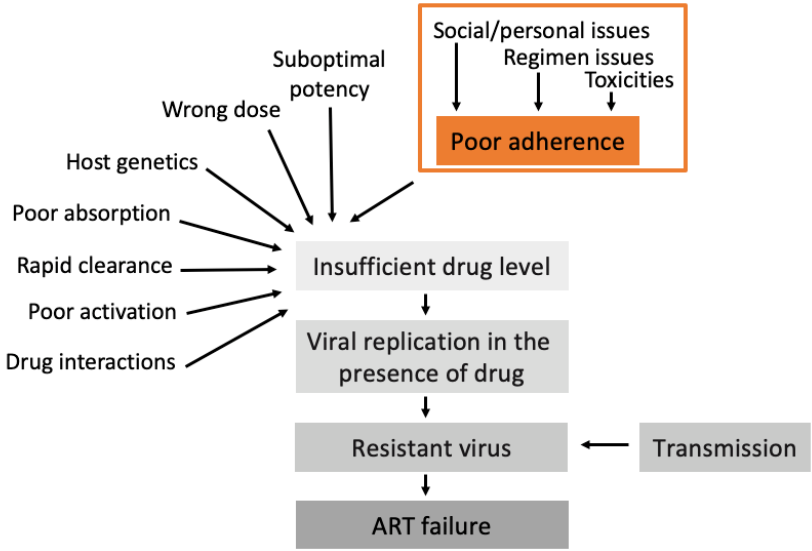
- All associated with insomnia, depression and suicidality - reported
- **Weight gain: Particularly DTG and BIC - impacted women and Black and Hispanic persons (especially when combined with tenofovir AF-emtricitabine)**
- RAL, DTG: rhabdomyolysis, myopathy, and myositis have been reported (elevated CPK)
- Cabotegravir: injection site pain, risk of resistance if used for PrEP

Monitoring Viral Load

- Check at baseline
- 2-4 weeks (not > 8 weeks) after start or change of ART, then every 4-8 weeks until suppressed to <200 copies/mL
- **Every 3-4 months with stable patients once suppressed**
- **Every 6 months for stable, adherent patients with VL suppression >1 year**
- Isolated “blips” may occur (transient low-level RNA, typically <200 copies/mL followed by suppression), are not thought to predict virologic failure

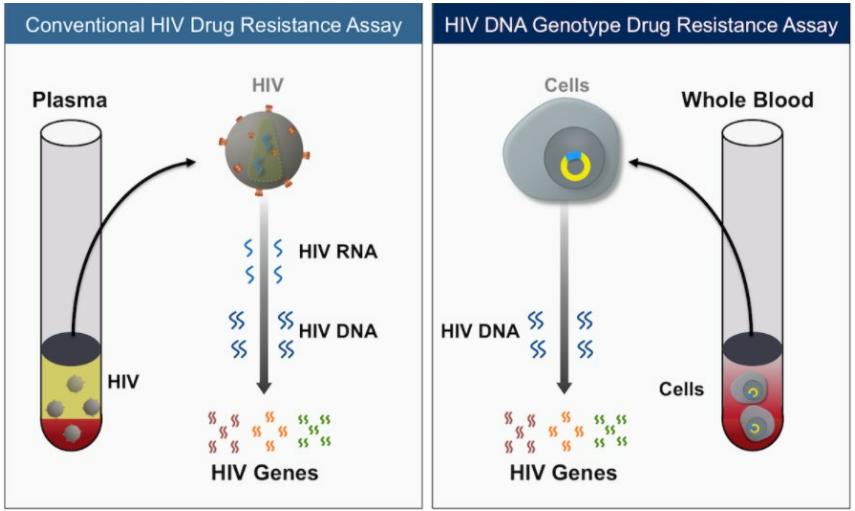
Why does my patient have a high viral load?

- Assess reason for virologic failure
  - Adherence
  - Poor absorption
  - Interactions
  - Drug resistance ★



HIV Resistance Testing

- Genotyping lists the most common HIV variants
  - Abundance >15% to be detected
  - Usually need ~ >500 copies/ml
- Phenotyping quantifies drug susceptibility *in vitro*
- Assays to detect resistance in cell associated DNA in whole blood instead of plasma
  - Genosure Archive (can be undetectable)
- Obtain at baseline, re-entry into care, virologic failure



Drug Drug Interactions

- BOOSTED HIV regimens use medications that are CYP3A4 inhibitors to optimize drug levels of certain medications
- Examples include
  - Genvoya (F/TAF + elvitegravir + cobicistat)
  - Prezcobix (darunvavir + cobicistat)
  - Norvir (ritonavir)
  - Any regimen containing a protease inhibitor
- Interactions:
  - Nasal, inhaled, injected steroids – can cause iatrogenic Cushings and secondary renal insufficiency
  - Increased levels of certain drugs – statins, apixaban – dose adjustment needed

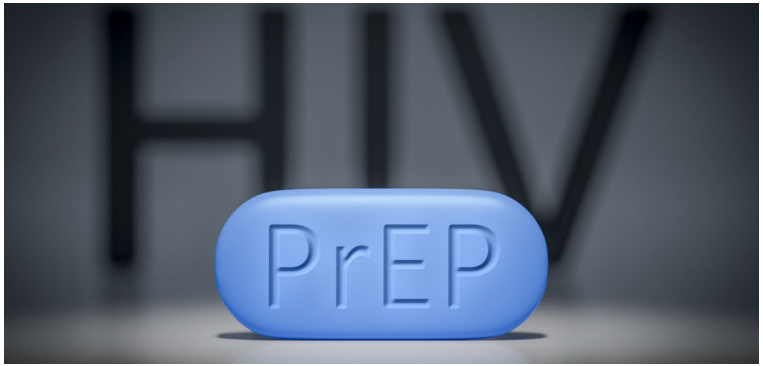
Summary

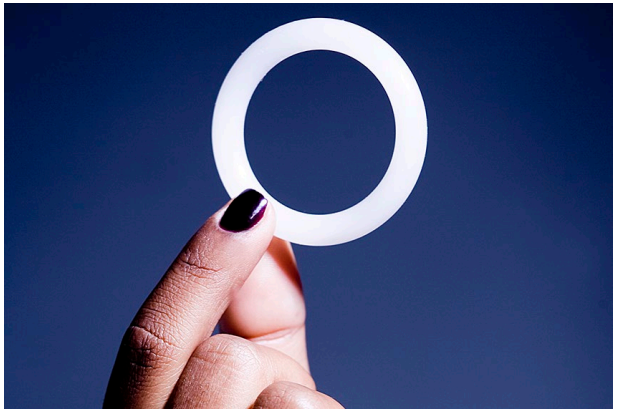
Testing

- HIV testing recommended for all people ages 15-65 (USPSTF) or 13-64 (CDC) independent of risk factors
- Repeat screening based on risk factors
- Consider window period in selection of HIV testing strategy

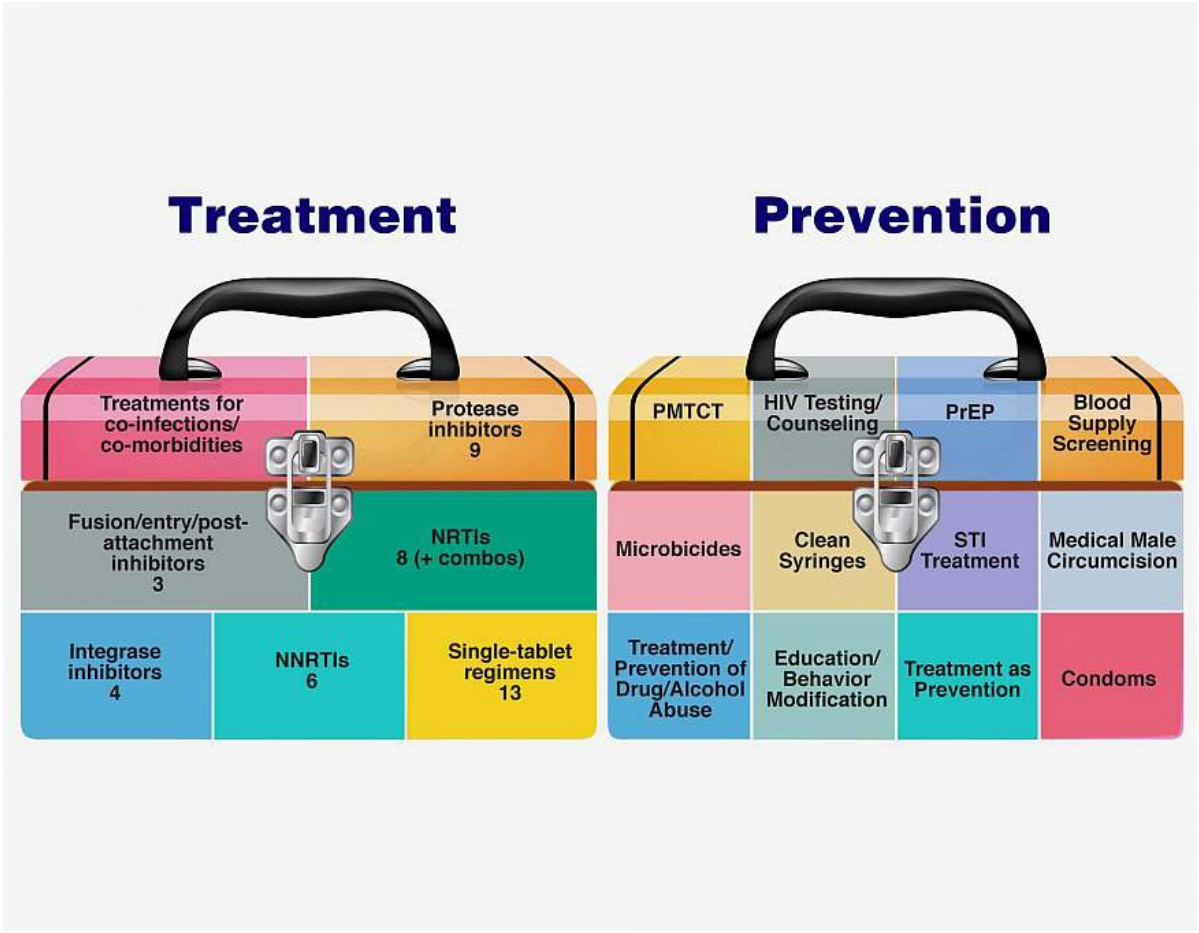
Treatment

- ART recommended for everyone and should be started ASAP
- Combination ART usually consists of NRTI backbone + another agent (usually integrase) FTC/TAF/BIC + DTG/3TC are preferred by most recent guidelines
- Adherence critical for suppression

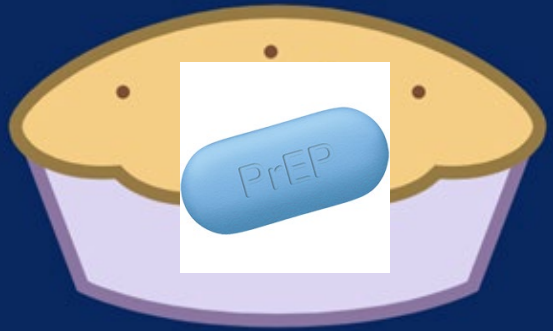

HIV
PrEP



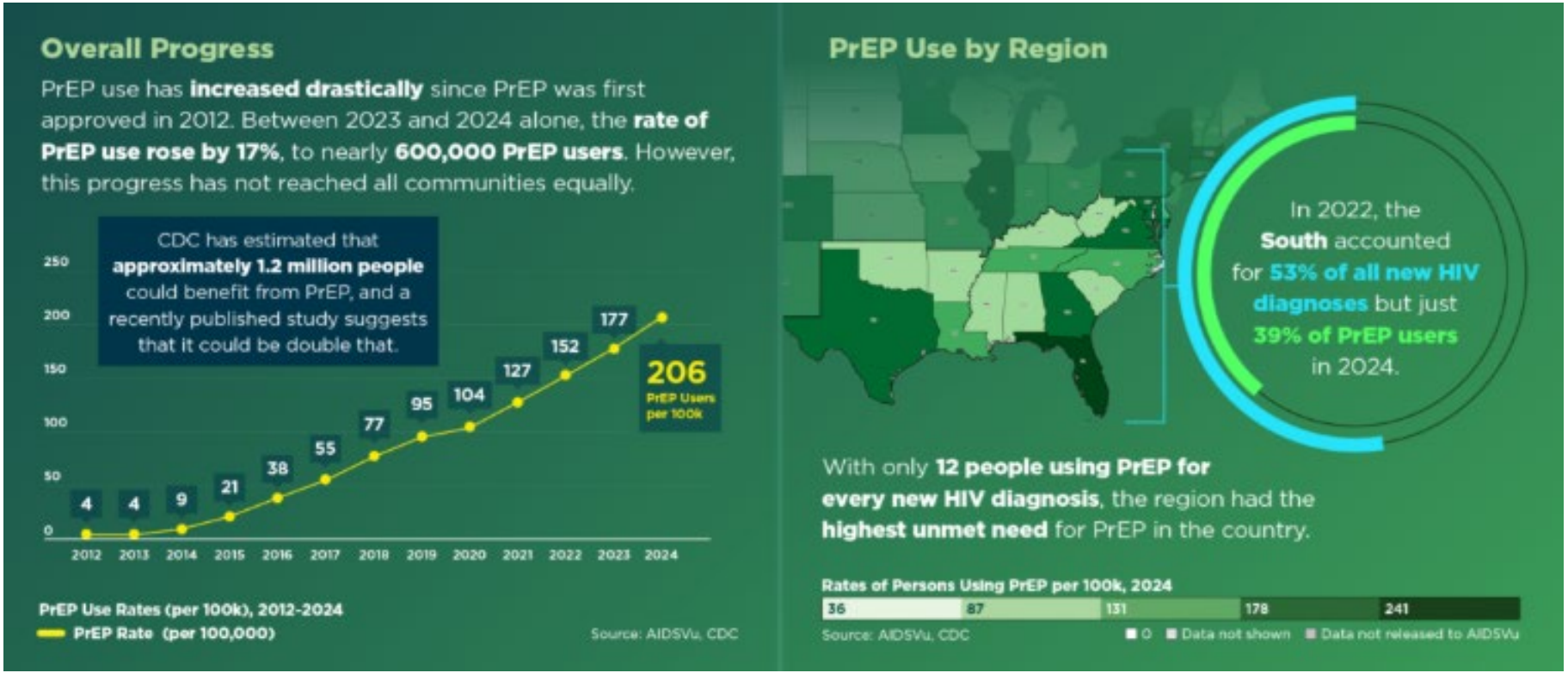

PrEP


Treatment
Prevention
Treatments for co-infections/ co-morbidities
Protease inhibitors 9
Fusion/entry/post-attachment inhibitors 3
NRTIs 8 (+ combos)
Integrase inhibitors 4
NNRTIs 6
Single-tablet regimens 13
PMTCT
HIV Testing/ Counseling
PrEP
Blood Supply Screening
Microbicides
Clean Syringes
STI Treatment
Medical Male Circumcision
Treatment/ Prevention of Drug/Alcohol Abuse
Education/ Behavior Modification
Treatment as Prevention
Condoms

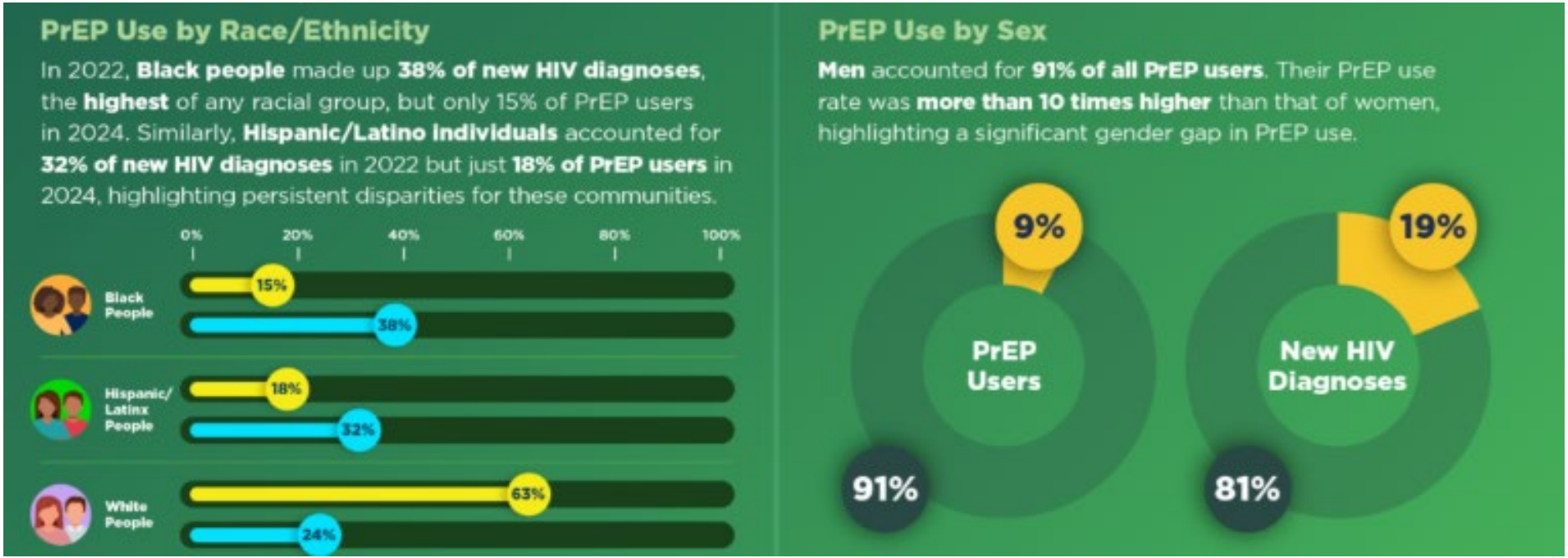
Easy as Pie



When something is easy as pie, it is very easy to do, presenting no difficulty.



https://aidsvu.org/news-updates/aidsvu-releases-2024-prep-use-data-showing-growing-use-across-the-u-s/



https://aidsvu.org/news-updates/aidsvu-releases-2024-prep-use-data-showing-growing-use-across-the-u-s/

FDA Approved HIV Pre-exposure Prophylaxis

- 2012: Daily FTC/TDF (TRUVADA) approved for HIV prevention in adults and adolescents over 35 kg/77 lbs

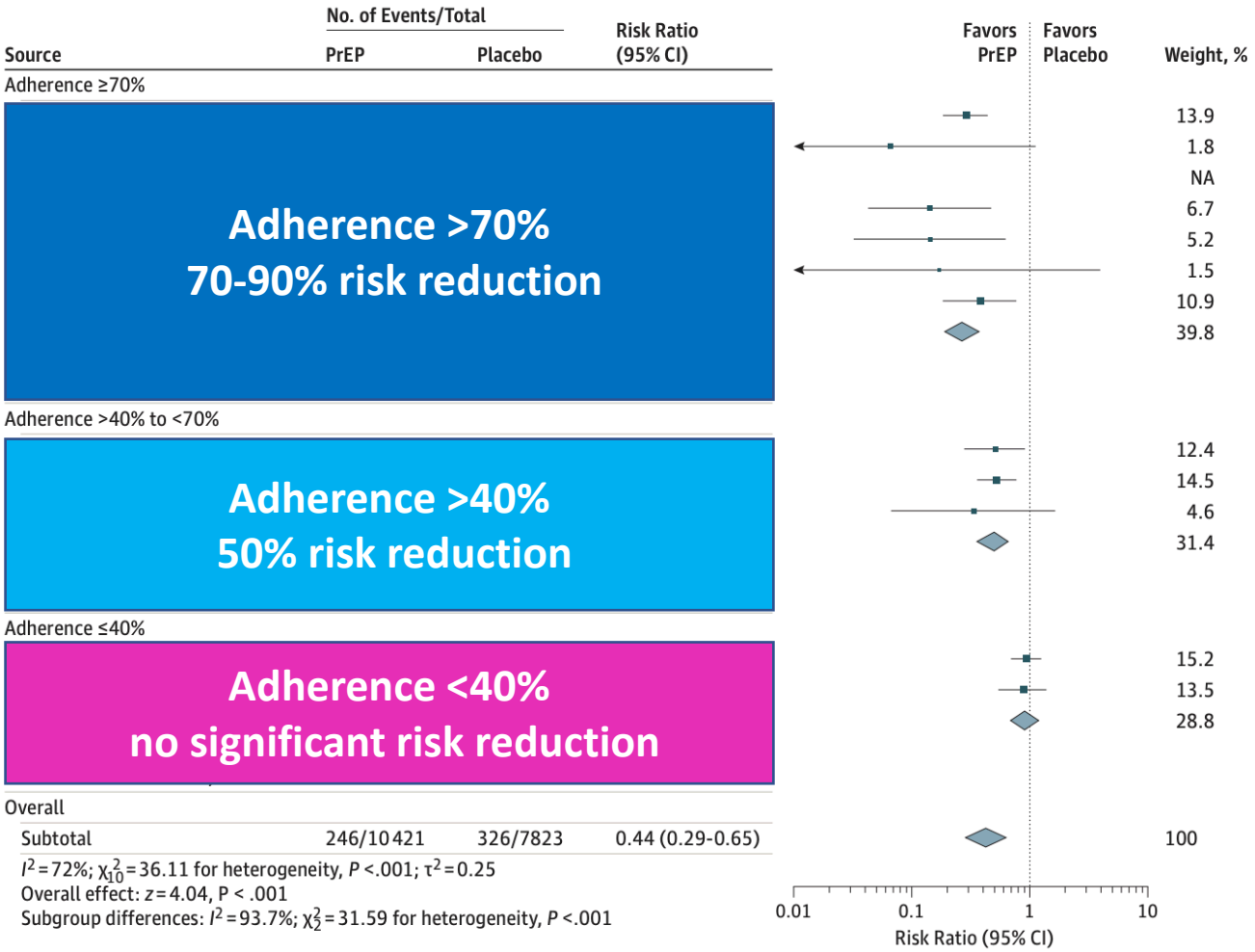
- 2019: Daily FTC/TAF (DESCOVY) approved for HIV prevention in people **whose risk factor is not receptive vaginal or frontal sex**

- 2021: Bimonthly injectable cabotegravir (APRETUDE) approved for prevention of HIV in adults and adolescents

- 2025: Subcutaneous lenacapavir (YEZTOGO) every six months approve HIV prevention

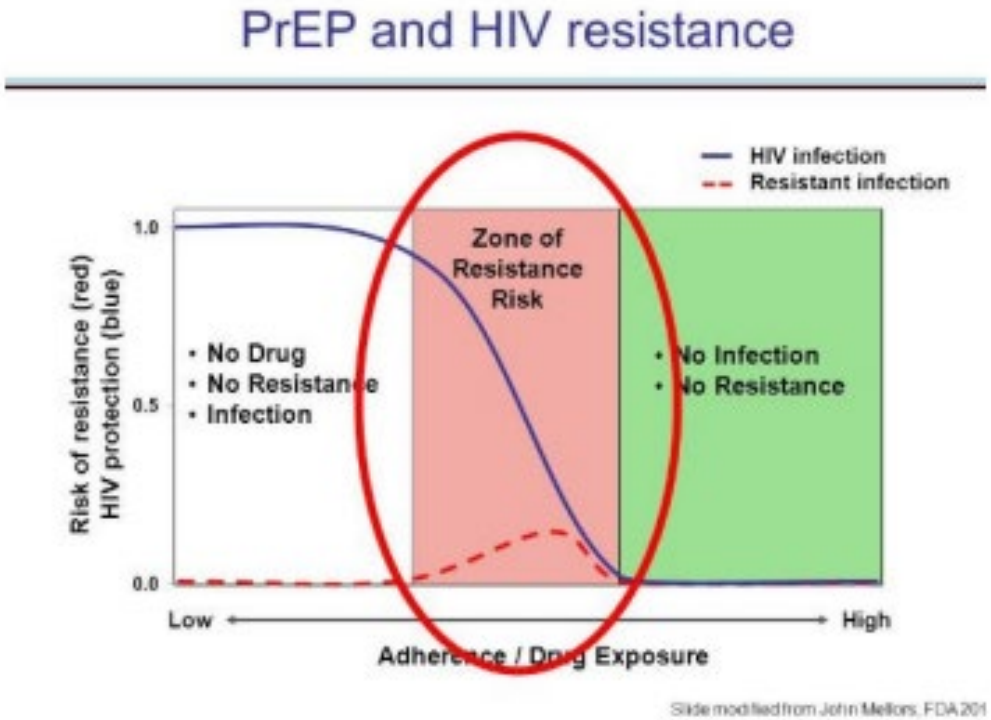


Figure 4. Meta-analysis: HIV Infection Stratified by Adherence



“Risks” of PrEP

- Side Effects
- Resistance
- Risk compensation
- Out of pocket expen



Side Effects

Truvada (FTC/TDF)

- Nausea (other GI side effects)
- Weight loss
- Headache
- Fanconi Syndrome
  - Loss of kidney function, sugar and protein in urine
- Loss of bone mineral density
  - ~1-2%
  - Studies have not demonstrated increased fracture risk

Descovy (FTC/TAF)

- Nausea
- Weight gain
- Fanconi Syndrome possible
- Lipid abnormalities



Side Effects

Cabotegravir (Apretude)

- ISR – injection site reactions
- Headache

Lenacapavir (YEZTOGO)

- Painful nodules

Table 6. Adverse Drug Reactions (All Grades) Reported in ≥2%[a] of Participants Receiving YEZTUGO in PURPOSE 1 or PURPOSE 2

	PURPOSE 1		PURPOSE 2	
Adverse Reaction	**YEZTUGO N=2140**	**TRUVADA[b] N=1070**	**YEZTUGO N=2183**	**TRUVADA[b] N=1088**
Injection Site Reactions	69%	34%	83%	69%
Headache	7%	8%	2%	2%
Nausea	5%	11%	2%	4%
Dizziness	4%	6%	<1%	1%
Vomiting	4%	7%	<1%	1%
Diarrhea	4%	4%	2%	2%

a. Frequencies of adverse reactions are based on all adverse events attributed to study drug (or to the procedure for injection site reactions) by the investigator.

b. Participants received placebo subcutaneous injections (polyethylene glycol 400).

Table 1a: Summary of Clinician Guidance for Daily Oral PrEP Use

	Sexually-Active Adults and Adolescents[1]	Persons Who Inject Drug[2]
Identifying substantial risk of acquiring HIV infection	Anal or vaginal sex in past 6 months AND any of the following: • HIV-positive sexual partner (especially if partner has an unknown or detectable viral load) • Bacterial STI in past 6 months[3] • History of inconsistent or no condom use with sexual partner(s)	HIV-positive injecting partner OR Sharing injection equipment
Clinically eligible	**ALL OF THE FOLLOWING CONDITIONS ARE MET:** • Documented negative HIV Ag/Ab test result within 1 week before initially prescribing PrEP • No signs/symptoms of acute HIV infection • Estimated creatinine clearance ≥30 ml/min[4] • No contraindicated medications	
Dosage	• Daily, continuing, oral doses of F/TDF (Truvada®), ≤90-day supply OR • For men and transgender women at risk for sexual acquisition of HIV; daily, continuing, oral doses of F/TAF (Descovy®), ≤90-day supply	
Follow-up care	**Follow-up visits at least every 3 months to provide the following:** • HIV Ag/Ab test and HIV-1 RNA assay, medication adherence and behavioral risk reduction support • Bacterial STI screening for MSM and transgender women who have sex with men[3] – oral, rectal, urine, blood • Access to clean needles/syringes and drug treatment services for PWID **Follow-up visits every 6 months to provide the following:** • Assess renal function for patients aged ≥50 years or who have an eCrCl <90 ml/min at PrEP initiation • Bacterial STI screening for all sexually-active patients[3] – [vaginal, oral, rectal, urine- as indicated], blood **Follow-up visits every 12 months to provide the following:** • Assess renal function for all patients • Chlamydia screening for heterosexually active women and men – vaginal, urine • For patients on F/TAF, assess weight, triglyceride and cholesterol levels	

[1] adolescents weighing at least 35 kg (77 lb)

[2] Because most PWID are also sexually active, they should be assessed for sexual risk and provided the option of CAB for PrEP when indicated

[3] Sexually transmitted infection (STI): Gonorrhea, chlamydia, and syphilis for MSM and transgender women who have sex with men including those who inject drugs; Gonorrhea and syphilis for heterosexual women and men including persons who inject drugs

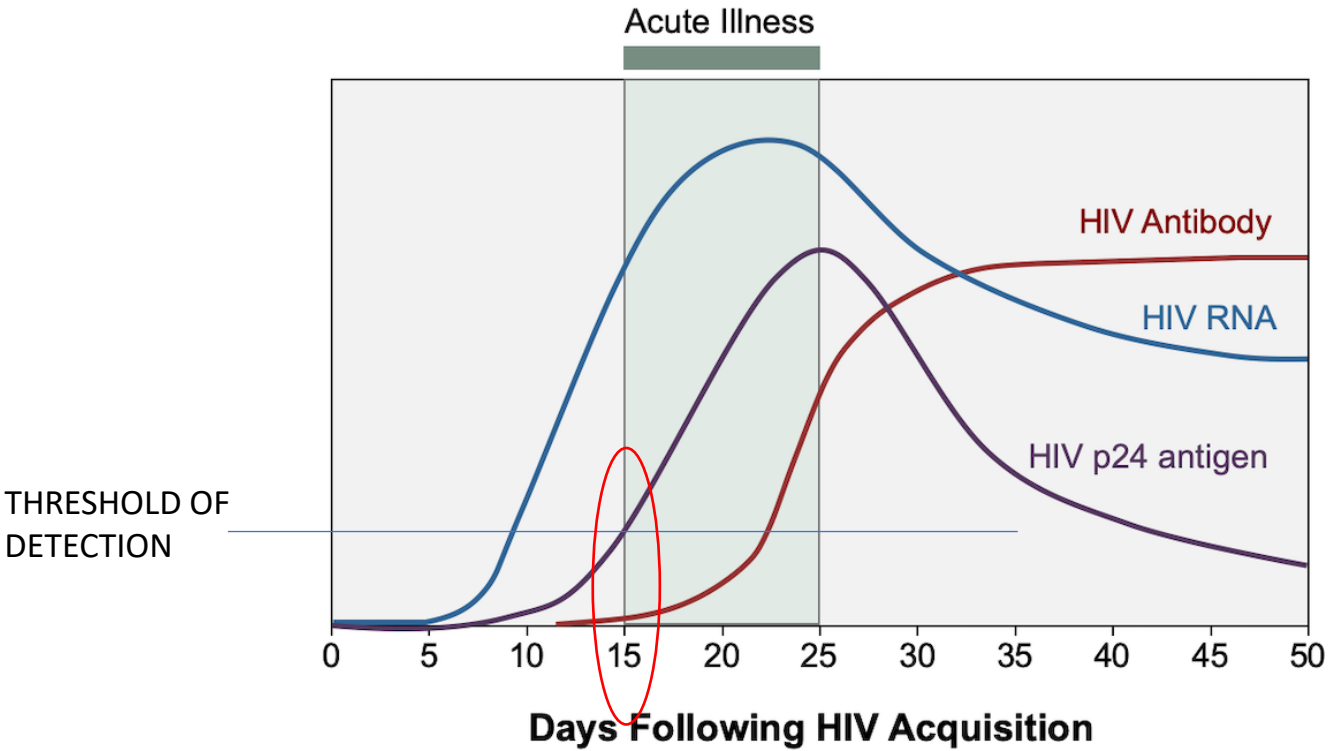
[4] estimated creatine clearance (eCrCl) by Cockcroft Gault formula ≥60 ml/min for F/TDF use, ≥30 ml/min for F/TAF use

CLINICAL INDICATIONS

Table 1a: Summary of Clinician Guidance for Daily Oral PrEP Use

	Sexually-Active Adults and Adolescents[1]	Persons Who Inject Drug[2]
Identifying substantial risk of acquiring HIV infection	Anal or vaginal sex in past 6 months AND any of the following: • HIV-positive sexual partner (especially if partner has an unknown or detectable viral load) • Bacterial STI in past 6 months[3] • History of inconsistent or no condom use with sexual partner(s)	HIV-positive injecting partner OR Sharing injection equipment

Guidelines recommend “in addition to taking a very brief history to identify persons with indications for PrEP, providers prescribe PrEP to anyone who requests it, **even if they do not report specific HIV risk behaviors”**



Acute HIV Infection

Phase of HIV disease that occurs immediately after HIV acquisition, characterized by detectable HIV RNA or HIV p24 antigen in the absence of detectable anti-HIV antibodies.

Illustration: David H. Spach, MD, National HIV Curriculum

If the patient has taken oral PrEP or PEP medication in the past 3 months
OR
has received a cabotegravir injection in the past 12 months



Oral PrEP

- Guidelines recommend prescribing no more than 90 days (3 months) at a time to ensure that patients follow up with appropriate safety monitoring

Dosage	• Daily, continuing, oral doses of F/TDF (Truvada®), ≤90-day supply OR • For men and transgender women at risk for sexual acquisition of HIV; daily, continuing, oral doses of F/TAF (Descovy®), ≤90-day supply

FDA Approves First Injectable Treatment for HIV Pre-Exposure Prevention

Drug Given Every Two Months Rather Than Daily Pill is Important Tool in Effort to End the HIV Epidemic

Share Tweet LinkedIn Email Print

For Immediate Release: December 20, 2021

Today, the U.S. Food and Drug Administration approved Apretude (cabotegravir extended-release injectable suspension) for use in at-risk adults and adolescents weighing at least 35 kilograms (77 pounds) for pre-exposure prophylaxis (PrEP) to reduce the risk of sexually acquired HIV. Apretude is given first as two initiation injections administered one month apart, and then every two months thereafter. Patients can either start their treatment with Apretude or take oral cabotegravir (Vocabria) for four weeks to assess how well they tolerate the drug.

Cabotegravir (Apretude)



- Adults and Adolescents 35 kg or greater
- Long acting Cabotegravir 600 mg (3 mL) gluteal injection
- Two initiation injections administered one month apart, and then e
  or every two months thereafter
- Oral lead (4 weeks) 30 mg by mouth daily (optional)
- Side effects include injection site reactions, headache, fever, fatigue, back pain, myalgia, liver toxicity, and rash

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

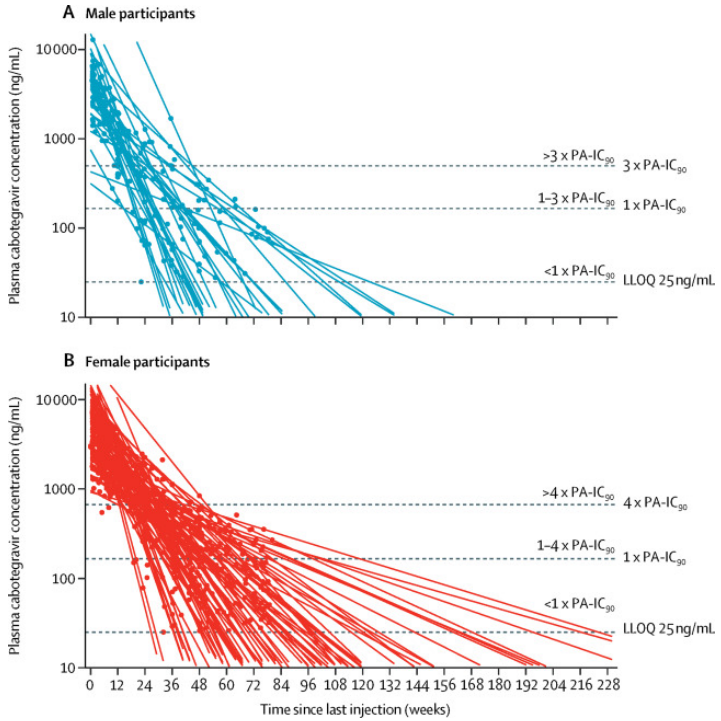
* HIV-1 RNA assay

X all PrEP patients

^ men who have sex with men

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

Cabotegravir Tail



- CAB levels slowly wane over many months
- HPTN 077, median time to undetectable CAB plasma level
  - 44 weeks for men
  - 67 weeks for women

- During this “tail” phase, CAB levels will fall below a protective threshold and persist for some time at nonprotective level against HIV

- May select for integrase resistance mutations which can complicate HIV treatment

- Consider use of oral PrEP/PEP

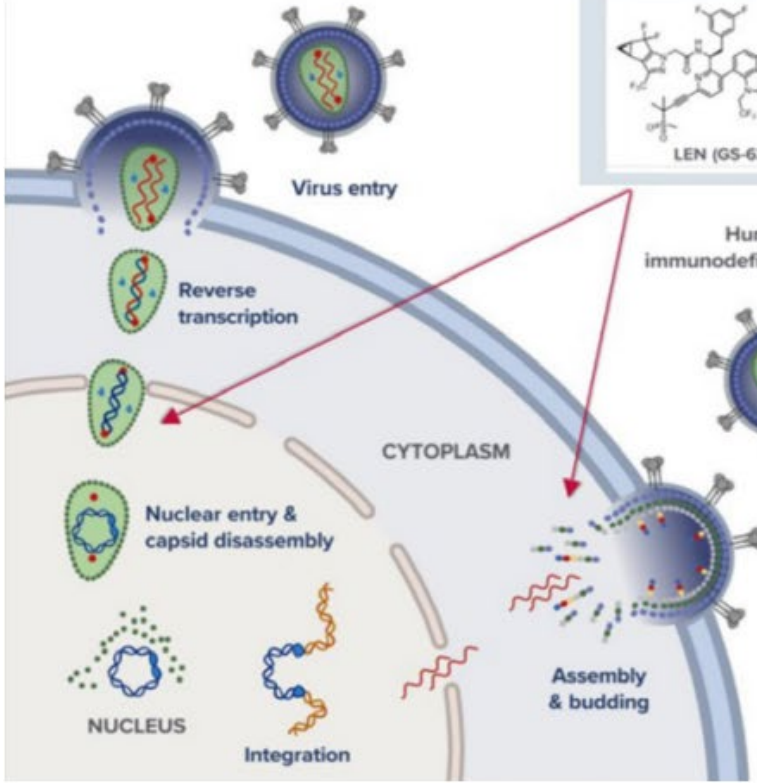
Landovitz R et al. Lancet 2020

CAB Discontinuation

- 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

Challenges

- Identifying populations who would benefit most
- Increased demand on staff (more frequent visits, follow up)
- Insurance coverage/access to cabotegravir
- Balancing safety monitoring with patient burden
- Addressing losses to follow up



Lenacapavir (LEN) is a small molecule capsid inhibitor with:

- Potency: (EC_{50} = 100 pM)
- Multimodal mechanism & no overlapping resistance
- Well Characterized clinical pharmacokinetics including long half-life
- Flexible dosing profile (oral or injectable)

Treatment
LEN as part of a combination therapy

Prevention
LEN as a single agent

Note: LEN is approved in combination with an optimized background regimen for persons with multidrug-resistant HIV-1 infection. It is not approved for HIV treatment otherwise or for prevention (PrEP) by any regulatory authority globally; its safety and efficacy have not been established for these uses.

EC_{50}: half-maximal effective concentration; PrEP: pre-exposure prophylaxis

Dvory-Sobol H, *et al. Curr Opin HIV AIDS* 2022; 17:15–21.

GILEAD | HIV

nature reviews drug discovery

NEWS IN BRIEF | 08 July 2025

FDA approves twice-yearly capsid inhibitor for HIV prevention

Eligibility

- **Weight ≥77 lbs (≥35 kg) and at risk for HIV acquisition**[†]
- **No signs or symptoms of acute HIV infection.** If acute HIV infection is suspected, appropriate clinical care is recommended, including HIV RNA testing.
- **Negative blood-based HIV antigen/antibody test result within 7 days before first lenacapavir (LEN) dose**
- **Negative confirmatory HIV RNA test, if available.** However, results of RNA assay should not delay initial LEN injection. Obtain up-to-date individual contact information to relay any positive test results and next steps.
- **Negative blood-based HIV antigen/antibody test result (no confirmatory RNA test needed) when switching from oral tenofovir-based or cabotegravir preexposure prophylaxis (PrEP) without interruption**[§]
- **No known significant drug interactions or contraindications.** Significant drug interactions and supplemental LEN dosing are available from the Food and Drug Administration (FDA)in the LEN prescribing information .

Patel et al. MMWR Sept 18, 2025 74(35). 541-9.

Dosage

Significant drug interactions and supplemental LEN dosing are available from FDA in the LEN prescribing information.

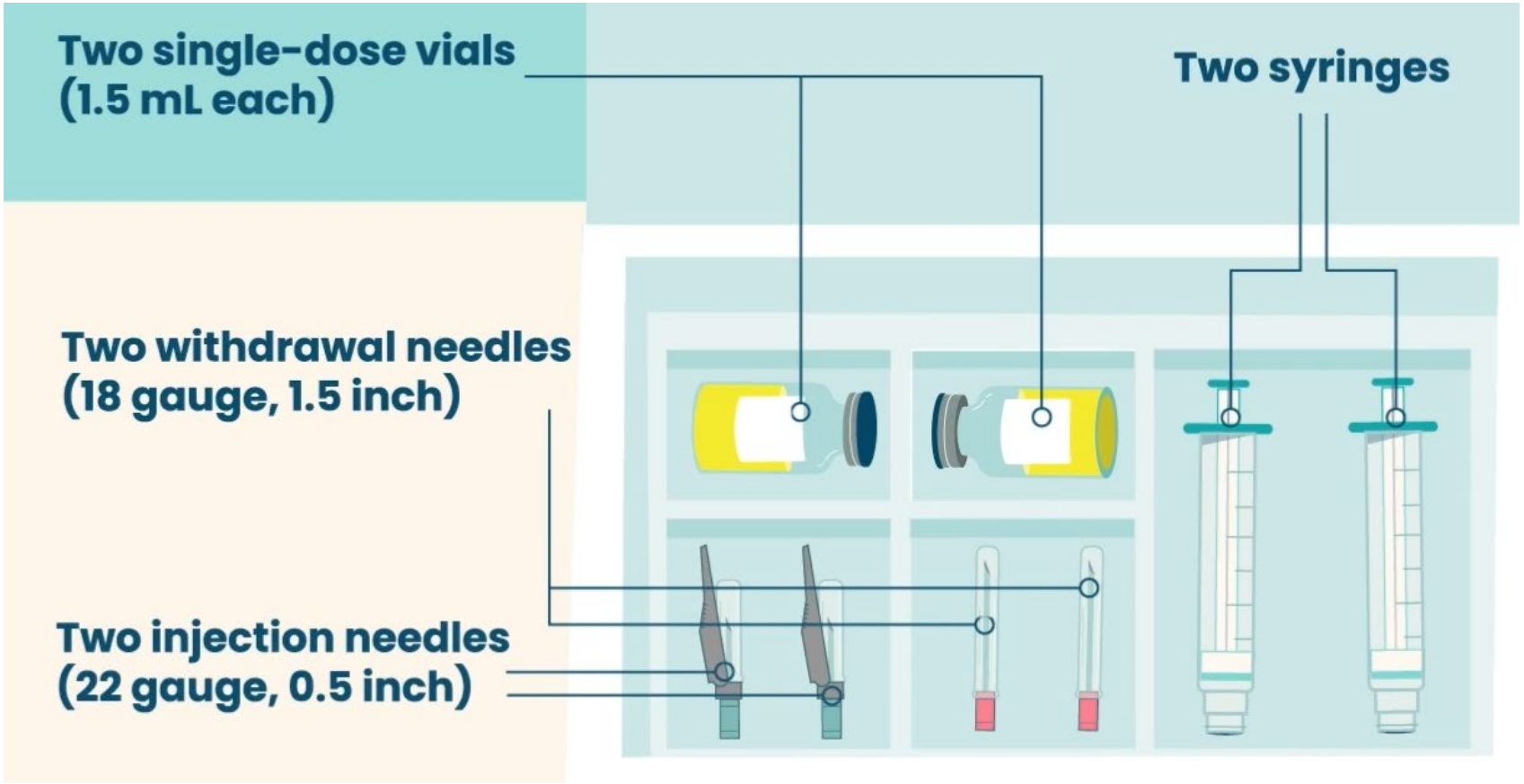
- **Loading**
  - Day 1: 927 mg (3 mL) LEN by subcutaneous injection (two 1.5-mL injections at least 4 inches apart) and 600 mg orally (two 300-mg tablets)¶
  - Day 2: 600 mg LEN orally (two 300-mg tablets)
- **Maintenance:** Every 6 months (26 weeks) ±2 weeks, from the date of the last injection, 927 mg (3 mL) LEN by subcutaneous injection (two 1.5-mL injections at least 4 inches apart)¶

Drug-Drug Interactions

Significant drug interactions and supplemental LEN dosing are available from FDA in the LEN prescribing information.

- Coadministration of strong and moderate cytochrome P450 3A (CYP3A) inducers requires supplemental LEN dosing.
- LEN increases the concentration of certain medications for up to 9 months after the last injection, requiring dose adjustments and monitoring for side effects.

Patel et al. MMWR Sept 18, 2025 74(35). 541-9.



https://www.yeztugohcp.com/dosing-administration

Discontinuation of LEN

- Inform PrEP users that when LEN is discontinued, medication levels in the body decline over 18 months, starting 6 months after the last injection, and do not offer HIV protection after 6 months; the period of declining medication levels over time is called the tail.
- Assess ongoing HIV risk and prevention plans and offer other PrEP options.

Planned Missed Injection

Oral bridging (weekly oral maintenance) if a maintenance injection is anticipated to be ≥14 days late

- Prescribe a maintenance dose of 300-mg LEN orally every 7 days for <6 months (<26 weeks). The first oral dose should be taken 6 months after the last LEN injection. Resume the maintenance LEN injection within 7 days after the last oral LEN dose.
- If oral LEN is not feasible during the planned missed maintenance injections, prescribe another form of PrEP until maintenance LEN injections resume.
- If maintenance injections cannot resume after 6 months of oral LEN bridging, then prescribe another form of PrEP.

Patel et al. MMWR Sept 18, 2025 74(35). 541-9.

Summary - Prevention

- HIV PrEP has been shown to be a highly efficacious and safe biomedical prevention strategy for HIV
- Oral pills, long acting injectable options are now available and have their own individuals risks and benefits
- Adherence and persistence and critical for protection against HIV
- Community education, engagement, navigation services will play an important role towards ensuring that populations that are most impacted by HIV can access PrEP

Patel et al. MMWR Sept 18, 2025 74(35). 541-9.

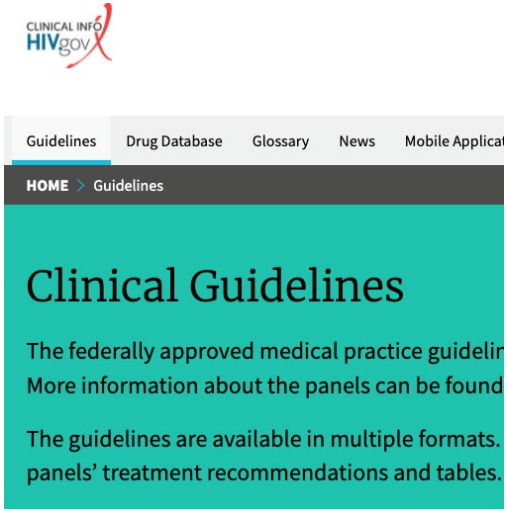
Sharon Weiss ▶ Marie Callender's
2d ·





Resources


National HIV Curriculum
Antiretroviral Medications
Course Modules
Question Bank
Tools & Calculators
Clinical Consultation
HIV Resources
National HIV Curriculum
The National HIV Curriculum is an AIDS Education and Training Center Program and led by the University of Washington.
Contributors
Site Overview
Funded by
Health Resources and Services Administration (HRSA)


CLINICAL INFO
HIVgov
Guidelines
Drug Database
Glossary
News
Mobile Applicat
HOME > Guidelines
Clinical Guidelines
The federally approved medical practice guidelir
More information about the panels can be found
The guidelines are available in multiple formats.
panels' treatment recommendations and tables.


Stanford University
HIV DRUG RESISTANCE DATABASE
A curated public database to represent, store and analyze HIV drug resistance data.


IAS–USA
International Antiviral Society–USA
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Activiti
HIV Drug Resistance Mutations


HIV Drug Interactions
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Next Steps, Wrap Up & Session Evaluation

Robert Ferguson

Pittsburgh Regional Health Initiative

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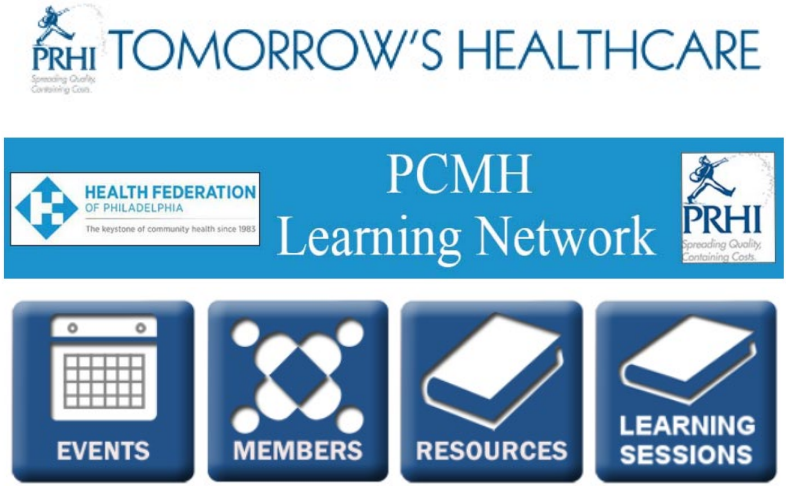
PCMH Online Community

https://www.tomorrowshealthcare.org/

Members of your PCMH's multi-disciplinary learning team will receive log-ins



- Access the session materials in "Learning Sessions"
- Look for guides and tools in "Resources"
- Find session dates and registration links under "Events"

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Supplemental Sessions

Community Referral to Home Health
September 8, 2026
9:00 am – 10:00 am

Oral Cancer Prevention and Early Detection
September 24, 2026
9:00 am – 10:00 am

Contraceptive Care: IUD Pain Management
October 29, 2026
9:00 am – 10:00 am



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CEU Process

You will receive a follow up email with links to

Complete the survey at: https://www.surveymonkey.com/r/77KV967 by Wednesday, August 5th

1. Please be sure to designate which CEU credits you are requesting **CME, CNE, Social Worker or Certificate of Attendance**. If you already have an account with the UPMC Center for Continuing Education, please be sure the email you enter on the survey matches the UPMC CCE account email that you create.
2. The UPMC Center for Continuing Education will follow up with you via email after August 5th with instructions on how to claim your credits.
   - ❑ To prepare, we recommend you create an account with UPMC CCE via this website https://cce.upmc.com.
   - ❑ Please plan to check your UPMC CCE account 2 weeks post-session to confirm credits have been received

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Thank You!

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