



Can I Protect my Teen from HIV?

Current Options of HIV Pre-Exposure Prophylaxis (PrEP) for Adolescents



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Learning Goals

1. Describe current and future medications for the Pre-Exposure Prophylaxis (PrEP) in adolescents
2. Discuss algorithm for the HIV testing, PrEP referrals, initiation and management
3. Describe national and regional epidemiology of HIV and PrEP use in adolescents
4. Identify optimal approach to integrating PrEP with the prevention of other sexually transmitted infections (STIs) such as DoxyPEP

What is PrEP?



PrEP

- ***Use of antiretroviral drugs by a person with negative HIV status to prevent acquisition of HIV***
- PrEP can be ***oral, injectional & vaginal**** (*not approved for use in the US)
- Injectional and vaginal PrEP are long-acting
- PrEP works when taken either before the potential exposure (*oral or injectional*) or before and after sexual exposure (*oral PrEP on demand*)
- Oral and injectional PrEP reduce the risk of acquiring HIV from sex by ~99% when taken as prescribed
- Oral PrEP reduces the risk of acquiring HIV through intravenous drug use (IVDU) by $\geq 74\%$ when taken as prescribed



Oral PrEP

- **Truvada (*emtricitabine/tenofovir disoproxil fumarate, FTC/TDF, generic*)**
 - FDA approved in 2012, expanded to adolescents in 2018
 - oral daily tablet for **all people at risk for HIV through sex or IVDU** use and with weight ≥ 35 kg
 - can be used *on demand by MSM*
 - 7 days of daily oral PrEP for receptive anal sex protection
 - 21 days of daily oral PrEPs use for receptive vaginal sex & IVDU protection
- **Descovy (*emtricitabine/tenofovir alafenamide, FTC/TAF, generic in 2026*)**
 - FDA approved in 2019 including adolescents
 - oral daily tablet for **sexually active men at risk of getting HIV** and with weight ≥ 35 kg
 - cannot be used in women who are at risk for HIV through receptive vaginal sex



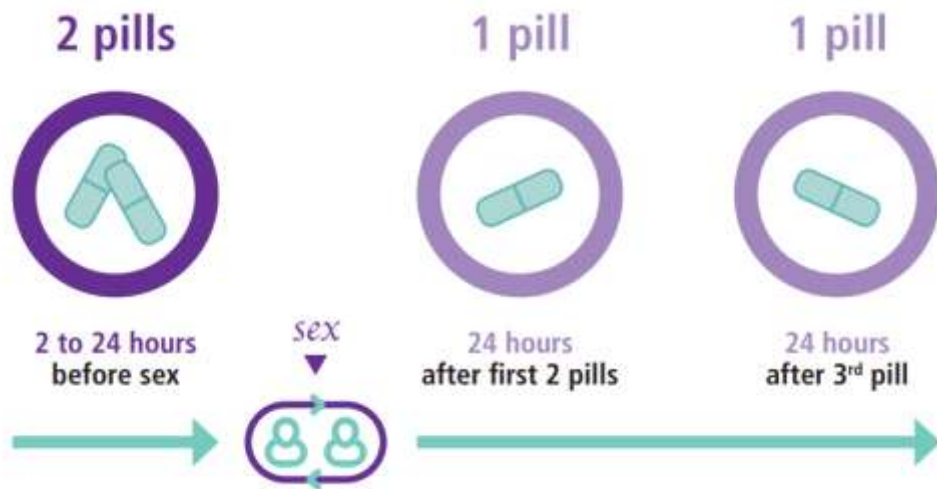
FTC/TAF



FTC/TDF



On Demand PrEP, FTC/TDF



<https://brownmedpedsresidency.org/on-demand-prep/>

MSM Only

- When having sex again while doing 2-1-1 then keep taking 1 pill daily until 48 hrs after last sex
- When completed 2-1-1 and then having sex again and it is < 7 days after completing 2-1-1 then resume 1 pill daily until 48 hrs after last sex
- > 7 days after completing 2-1-1 then restart 2-1-1 from beginning

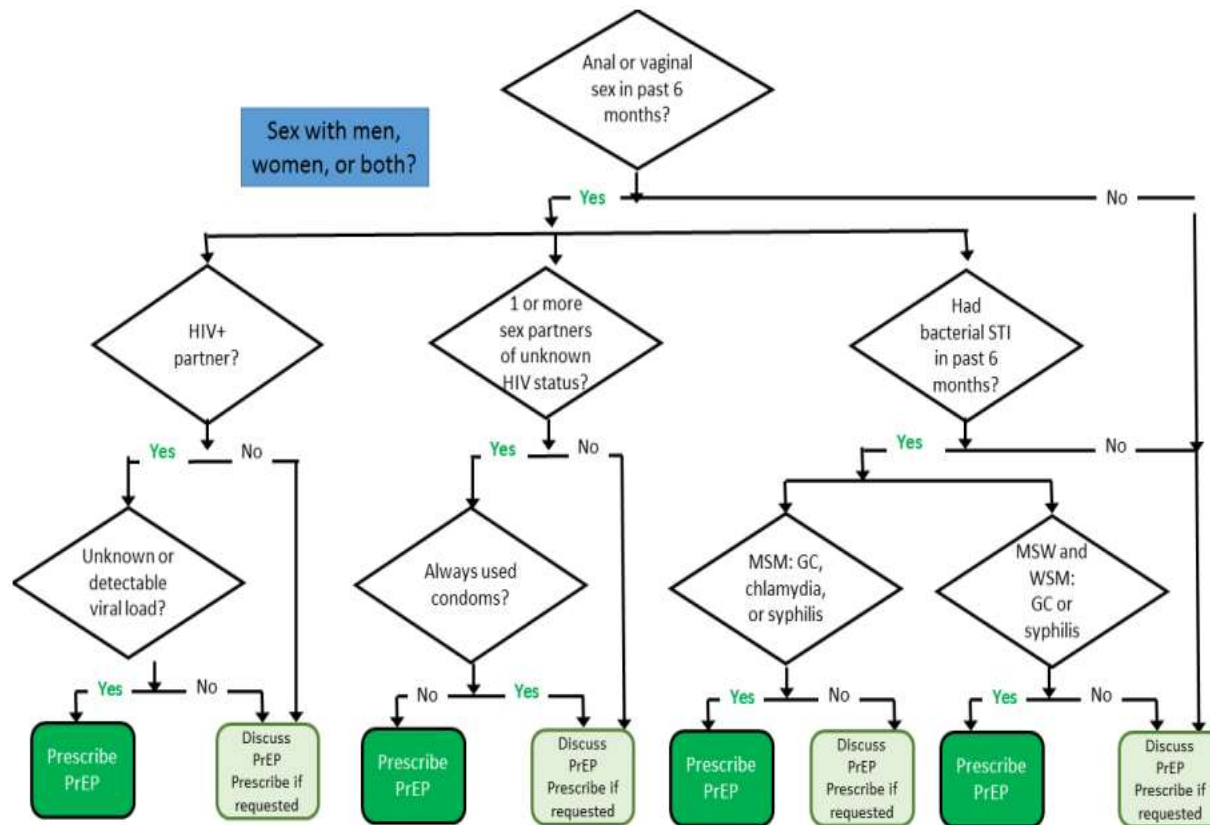


Clinical Considerations for PrEP

- **Common adverse events (AEs) with oral PrEP:**
 - *Headaches*
 - *Nausea*
 - *Abdominal pain*
 - *Diarrhea*
 - *Decreased renal function with TDF*
 - *Decreased bone mineral density with prolonged use of TDF*
 - *Triglyceride elevation with use of TAF*
 - *Weight gain with use of TAF*
- **AEs typically mild short lasting and reversible**
- **HBV status is required!**
- **Common AEs with injectable PrEP:**
 - *Injection site reactions - pain and swelling*
 - *Subcutaneous nodules SQ LEN*
- **Low rates of discontinuation in clinical trials and observational cohort**
- **Narrow injection window**
 - *LEN ± 2 weeks and CAB ± 1 week*
- **Long pharmacokinetic tail requires discontinuation strategy**
 - *Switch to oral PrEP with ongoing risk exposures*
- **Drug-drug interactions – LEN > CAB**



Key Guidelines

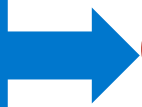


- CDC Guidelines - Preexposure Prophylaxis for the Prevention of HIV infection in the United States - 2021 Update. A clinical Practice Guideline. <https://stacks.cdc.gov/view/cdc/112360>
- Patel RR, Hoover KW, Lale A, Cabrales J, Byrd KM, Kourtis AP. Clinical Recommendation for the Use of Injectable Lenacapavir as HIV Preexposure Prophylaxis — United States, 2025. MMWR Morb Mortal Wkly Rep 2025;74:541–549.



Baseline Laboratory Testing PrEP

Within 7 days of the PrEP initiation



REQUIRED



HIV test (Ag/Ab test, preferably lab based), HIV RNA for injectable PrEP to confirm negative status



Kidney function

F/TDF: Estimated creatinine clearance (must be >60 mL/min)

F/TAF: Estimated creatinine clearance (must be >30 mL/min)

CAB: Not required

LEN: Not Required

Hepatitis B screening (F/TAF and F/TDF) because active infection is a potential safety issue

Lipid profile (triglyceride and cholesterol levels) for patients prescribed **F/TAF**, as this medication may be associated with triglyceride elevation

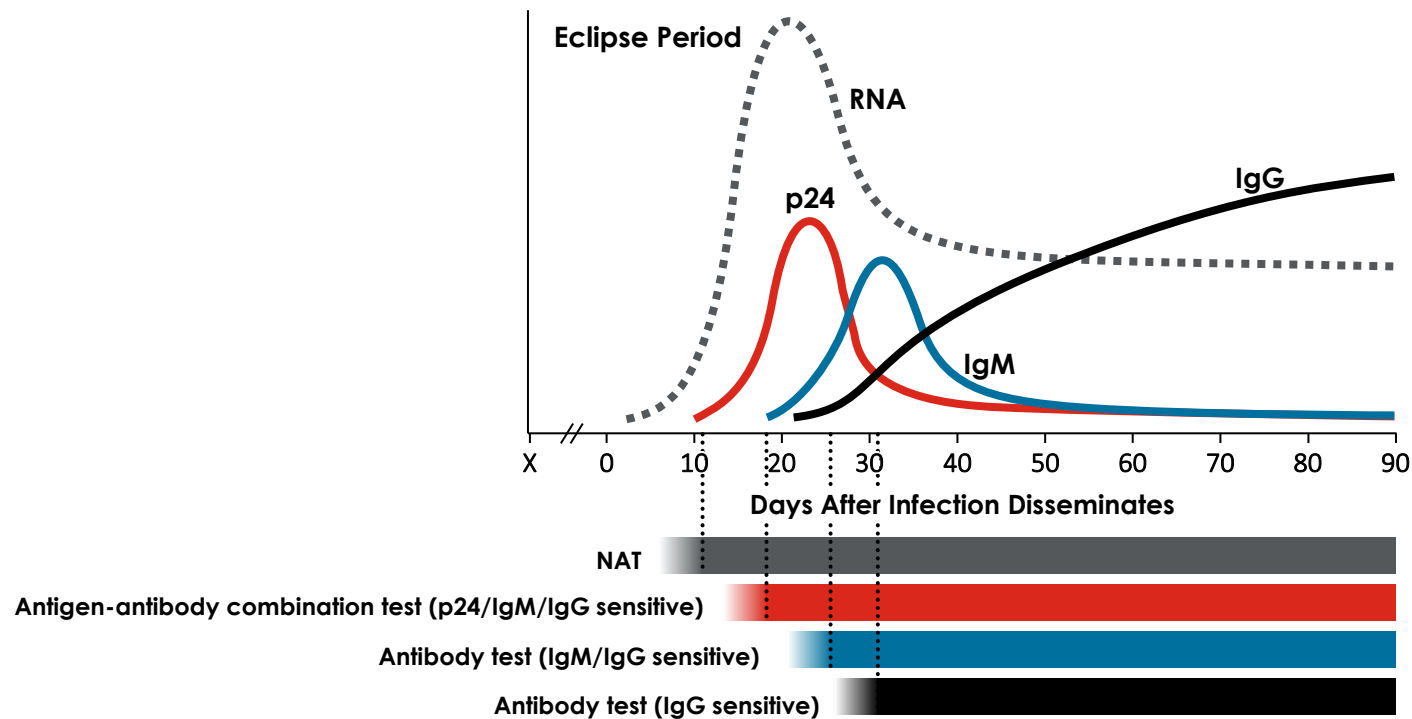
STI tests for chlamydia, gonorrhea, and syphilis for all sexually active adults

F/TDF: emtricitabine/tenofovir disoproxil fumarate (Truvada® or generic)
F/TAF: emtricitabine/tenofovir alafenamide (Descovy® or generic)
CAB: cabotegravir (Apretude®)
LEN: lenacapavir (Yeztugo®)

Adapted from CDC *Preexposure prophylaxis for the prevention of HIV infection in the United States—2021 update—a clinical practice guideline.*
<https://stacks.cdc.gov/view/cdc/112360>



Timing of HIV Tests Reactivity



Hurt CB, Nelson JAE, Hightow-Weidman LB, Miller WC. Sex Transm Dis. 2017;44(12):11.



Diagnostic Tests for HIV

WHAT IS THE WINDOW PERIOD FOR THE HIV TEST I TOOK?

Nucleic Acid Test (NAT)*
window period
10-33 days



Antigen/Antibody Lab Test*
window period
18-45 days

Rapid Antigen/Antibody Test†
window period
18-90 days



Antibody Test‡
window period
23-90 days



* Performed by a lab on blood from a vein.
† Done with blood from a finger stick.
‡ Most rapid tests and self-tests are antibody tests.



For more information, visit www.cdc.gov/hiv/basics/testing.html





Ongoing Assessments for Patients Using Oral PrEP

HIV
Ab/Ag
&
HIV PCR

At least every 3 months:

- Repeat HIV testing and assess for signs or symptoms of acute infection
- Provide a prescription or refill authorization of daily oral PrEP medication for ≤ 90 days
- Assess and provide support for medication adherence and risk-reduction behaviors
- Test sexually active patients with signs or symptoms of STIs and screen asymptomatic men who have sex with men and are at high risk for recurrent bacterial STIs
- Provide access to sterile needles/syringes and substance use disorder treatment services for people who inject drugs
- Respond to questions and provide new information

At least every 6 months:

- Monitor eCrCl for patients who are ≥ 50 years or had an eCrCl < 90 mL/min when they started oral PrEP
 - Monitor more frequently or perform additional tests if there are other threats to kidney safety
- Screen sexually active people for STIs:
 - Syphilis for all PrEP users
 - Gonorrhea for all PrEP users
 - Chlamydia for men who have sex with men and transgender women, even if asymptomatic
- Assess interest in continuing or discontinuing PrEP

At least every 12 months:

- Monitor eCrCl for all patients continuing on PrEP medication
- For patients using F/TAF, monitor triglyceride and cholesterol levels and weight
- Screen heterosexually active people for chlamydia, even if asymptomatic

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*. 2021. <https://stacks.cdc.gov/view/cdc/112360>



Ongoing Assessments for Patients Using Injectable PrEP

HIV
Ab/Ag
&
HIV PCR

At visit 1 month after initial injection for CAB:

- Test for HIV and assess for signs or symptoms of acute infection
- Administer CAB injection
- Respond to new questions
- Provide medication adherence and behavioral risk-reduction support

At each injection visit:

- Test for HIV and assess for signs or symptoms of acute infection
- Administer LA PrEP injection
- Provide access to sterile needles/syringes and substance use disorder treatment services for people who inject drugs
- Respond to questions and provide any new information
- Discuss the benefits of persistent PrEP use and adherence to scheduled injection visits

At least every 4 months (every other injection):

- Screen men and transgender women who have sex with men for bacterial STIs

At least every 6 months:

- Screen heterosexually active people for bacterial STIs

At least every 12 months:

- Assess desire to continue PrEP
- Screen heterosexually active people for chlamydia, even if asymptomatic

Adapted from 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*. 2021. <https://stacks.cdc.gov/view/cdc/112360>



Paying for PrEP

- Most insurance plans and state Medicaid programs cover PrEP and related clinic visits and lab tests
- Some insurance plans denial LEN without prior use of oral PrEP or CAB PrEP
- Co-pay assistance programs help lower the costs of PrEP medications and income is not a factor in eligibility:
 - <https://www.gileadadvancingaccess.com/>
 - <https://www.viivconnect.com/>
- Selected states have PrEP assistance programs
 - some programs cover PrEP medication, while others cover clinic visits and lab tests
 - some programs cover both



The screenshot shows a digital interface for finding HIV services. At the top, a word cloud features terms like "Substance Use Treatment", "Self-Testing", "HIV PrEP", "Family Planning", "Health Centers", "Doxy PEP", "Mental Health", "HIV Testing", "HIV PEP", "HIV Treatment", "STI Testing & Treatment", "Condoms", and "Housing Assistance". Below this is a search bar with the text "Find Services Near You" and a placeholder "Enter City, State or ZIP". The interface is powered by HIV.gov and includes social media icons for Facebook and X, along with the "Ending the HIV Epidemic" logo and the CDC logo.

https://www.cdc.gov/hiv/prevention/prep.html#cdc_prevention_pre-paying-for-prep

Does Youth Need PrEP?



HIV in Adolescents and Young Adults

In 2022, adolescents and young adults (aged 13 to 24 years) accounted for **19%** (7,099) of all new HIV diagnoses. Among those, **80%** were 20 to 24 years old.



Nearly 1 in 5 of all new HIV diagnoses were among adolescents and young adults.

Source: Centers for Disease Control and Prevention (CDC)

For more information, visit HIVinfo.NIH.gov.



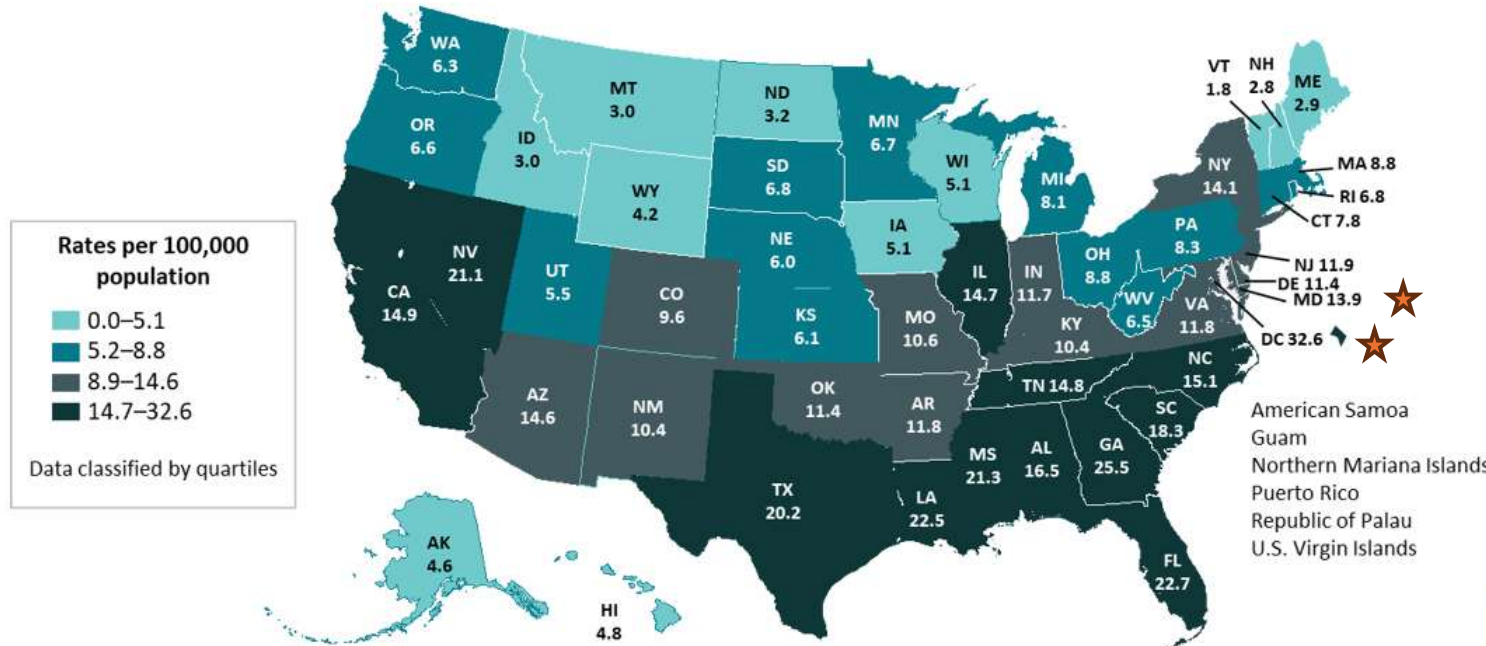
~44% of adolescents and young adults with HIV do not know their diagnosis

~44% of adolescents and young adults with known HIV are not virally suppressed



New HIV Diagnoses, US, 2023

N = 39,201
Total Rate = 13.7



Rates per 100,000 population

- 0.0–5.1
- 5.2–8.8
- 8.9–14.6
- 14.7–32.6

Data classified by quartiles

- 0.0
- 3.1
- 4.8
- 13.5
- 0.0
- 14.8

- American Samoa
- Guam
- Northern Mariana Islands
- Puerto Rico
- Republic of Palau
- U.S. Virgin Islands

Note. Data are presented for persons aged ≥ 13 years at diagnosis.



HIV Diagnoses, Deaths, and Prevalence. CDC. 2025.
<https://www.cdc.gov/hiv-data/nhss/hiv-diagnoses-deaths-prevalence.html>.



Maryland, 2022-2023

- Youth aged 13–24 accounted **for ~18% of new HIV diagnoses**
- In 2022, about 77% of new cases among youth were attributed to male-to-male sexual contact (MMSC)
- Most new infections among young people were among Non-Hispanic Black youth
- As of 2023, youth aged 13–24 had **the highest proportion of people who are unaware of their HIV status** - estimated at ~38%
- **Prince George's County** reported a significant number of young people living with HIV, with 226 cases in the 13–24 age group at the end of 2022

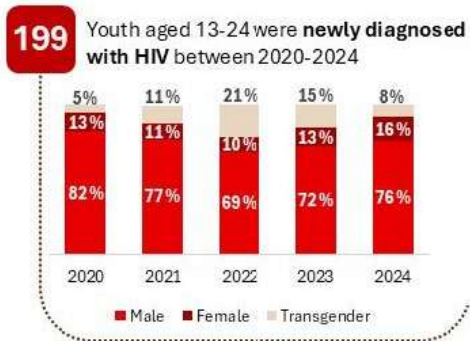


Maryland Annual HIV Epidemiological Profile 2023. Maryland Department of Health, Baltimore, MD. 2024.

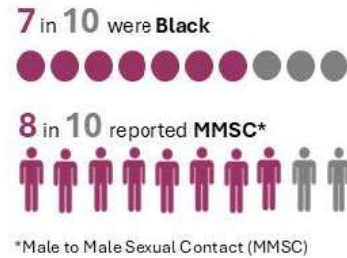


Washington, DC, 2024

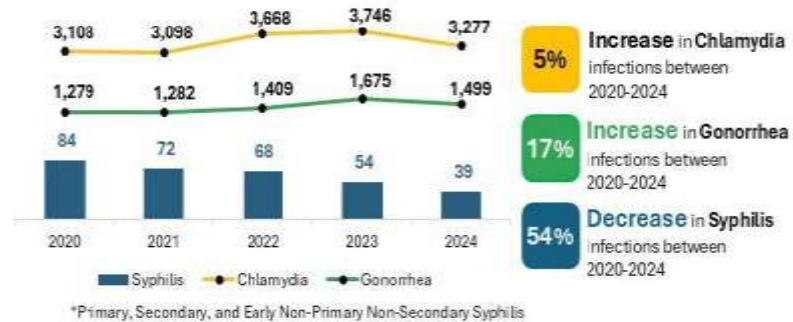
Youth Aged 13-24



Youth Newly Diagnosed with HIV, 2024



Newly Reported Early Syphilis, Chlamydia, and Gonorrhea Diagnoses, 2020-2024



•Despite progress, HIV remains a concern for young people in the city, particularly for youth aged 20-24 who may have been infected at younger ages

Annual Epidemiology & Surveillance Report: Data Through December 2023. District of Columbia Department of Health, HIV/AIDS, Hepatitis, STI, & TB Administration 2024. <https://dchealth.dc.gov/service/hiv-reports-and-publications>



Suboptimal PrEP Use among Youth in the US

- PrEP uptake among adolescents and young adults remained strikingly low, particularly among **minors, females, and youths residing in the South**
- Among 100,536 youths (71.2% female; mean age 18.8 yrs), 1,598 filled a PrEP prescription during the follow-up period - **incidence rate of 6.9/1000 person-years**
- PrEP receipt was more likely among males and older youths (20-21 vs <18 yrs)
- Presence of state-level LGBTQ+ protective laws was associated with higher PrEP uptake
- **Pediatricians documented conditions suggesting a potential benefit from PrEP in 8.8% of the 1598 youths who filled a prescription but accounted for only 4.8% of the documented filled PrEP prescriptions**

Venturelli N, Krakower D, Garabedian L. JAMA Pediatr. 2026 Apr 6:e260682. doi: 10.1001/jamapediatrics.2026.0682.



Key Barriers to PrEP Uptake and Retention

- Need for ongoing engagement with in-person medical appointments
- Need for regular laboratory monitoring and HIV/STI testing
- ***Confidentiality concerns for young PrEP candidates who are on their parents' health insurance***
- ***Low awareness and inconsistent messaging about PrEP***
- Extensive and time-consuming CDC Guidelines (94 pages) are daunting for new prescribers
- ***Prescribing providers are understaffed for PrEP navigation, pre-authorization and patient tracking and retention support***

<https://education.aahivm.org/courses/41538>



AAP Clinical Report, 2023

- Routine HIV screening is recommended for all youth 15 years or older, at least once, in health care settings
- After initial screening, youth at increased risk, including sexually active youth, should be rescreened at least annually, potentially as frequently as every 3 to 6 months if at high risk
- Opt-out HIV testing is preferred if allowed by state laws
- Education and counseling about PrEP integrated in STI counselling

<https://doi.org/10.1542/peds.2021-055207>

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®

Adolescents and Young Adults: The Pediatrician's Role in HIV Testing and Pre- and Postexposure HIV Prophylaxis

Katherine K. Hsu, MD, MPH, FAAP;^{1*} Natella Yurievna Rakhmanina, MD, PhD, FAAP;^{1*} Committee on Pediatric AIDS



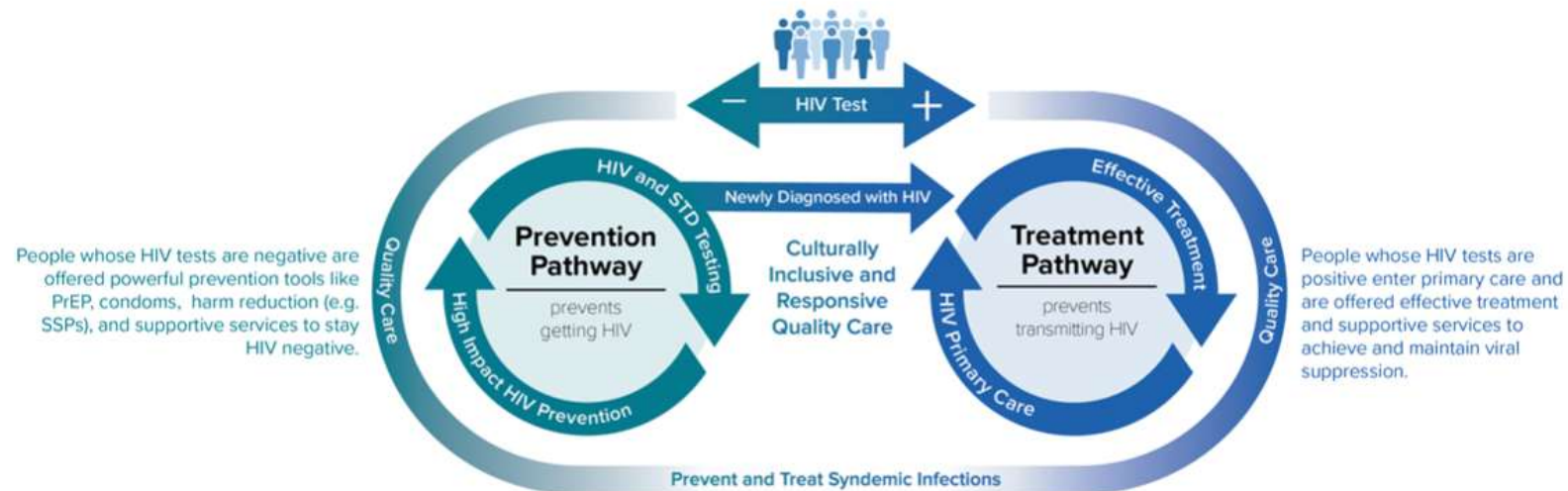
Managing PrEP for Youth

Pediatric Health Network





Status Neutral HIV Prevention and Care



Follow CDC guidelines to test people for HIV. Regardless of HIV status, quality care is the foundation of HIV prevention and effective treatment. Both pathways provide people with the tools they need to stay healthy and stop HIV.



Care Team (physicians, APPs, nurses):

- Dr. Natella Rakhmanina, MD, PhD
- Dr. Kathy Ferrer, MD
- Tierra Williams, MSN, APRN, FNP-C, AAHIVS
- Tanisha Worthy-Williams, DNP, MSN, CPNP-AC
- Kim Bright, RN, BSN, CPN, ACRN
- Cory Hess, RN
- Mavis Okumko, LPN

Medical Case-Managers:

- Nara Lee, LICSW
- Simba Kapfumvuti, LICSW
- Nicole Cornick, LGSW
- Shingirai Gadsden-Sams, LGSW

Mental Health Specialists

- Dr. Bhavin Dave, MD
- Dr. Andrew Barnett, PhD
- Bria Brown, LICSW

Nutrition Services

- Suzanne Bruels, MPH, RDN, CLC

Patient Care Navigators

- Justin Unternaher, MPH
- Hanifa Mohiuddin, MS
- Zoe Mungai-Barris, MPH
- Chukwuamaka Onyewadume, MPH
- Khadijah Abdullah, MPH

HIV Prevention and Treatment Services (HPTS), CNH

- Comprehensive, Ryan White-funded HIV program for infants, children, adolescents and young adults
- Maintaining strong partnerships with:
 - Regional hospitals and Departments of Health
 - Diverse youth health programs
 - DC schools and school nursing program
 - Community primary care providers
 - Community-based organizations



Services for HIV/STI Prevention, CNH

Access to all current PrEP options including oral pill and injections

Access to the PrEP Hotline: 202-476-7779 (24 hours/7 days) with direct access to providers

Confidential e-mail for non-urgent PrEP referrals and questions

Team of dedicated PrEP youth-friendly experienced social workers

Mental health services by our team of HIV/youth psychologists

Peer support groups to encourage patient engagement and retention in care

Insurance assistance programs for PrEP access

Transportation assistance to qualified patients to and from appointments

In-house laboratory testing for all PrEP related tests

On-site pharmacy access at the main campus with navigation services for PrEP access

Access to STI and contraception counselling and care

Research opportunities for groundbreaking studies

Meal vouchers for youth patients

Wellness packages for youth patients

Collaborations with ED, adolescent medicine, and multiple regional providers



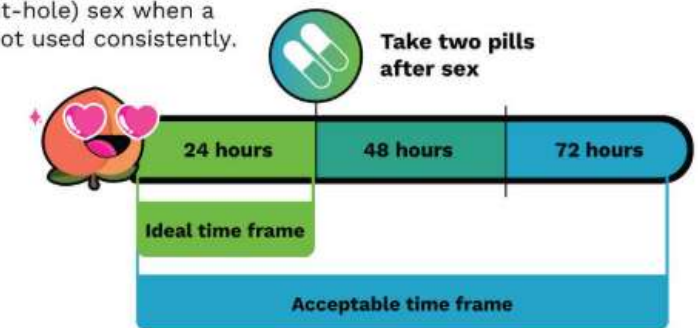


DoxyPEP

- High rates of STIs among youth in the US
- DoxyPEP has been shown to be highly effective in gay, bisexual and other men who have sex with men (MSM) reducing incidence of STIs by 65%
- Data on efficacy of DoxyPEP in females are contradictory
- Use of DoxyPEP by young gay, bisexual and other MSM is limited
- Data on efficacy of DoxyPEP in young people including females are needed

How to Take Doxy-PEP

Doxy-PEP works best when taken within 24 hours of condomless sex (and no later than 72 hours). Condomless sex means oral, anal or vaginal (front-hole) sex when a condom is not used consistently.



https://www.instagram.com/p/C2s6kGYp1_I/

Luetkemeyer AF, et al. *N Engl J Med.* 2023 Apr 6;388(14):1296-1306. doi: 10.1056/NEJMoa2211934.



NIH Funded Adolescents Trials Network Studies



Foxy Doxy

Launched February 2026

- A randomized trial is to assess **the efficacy of doxyPEP to reduce incidence of bacterial STIs** among young females while also **evaluating acceptability and antimicrobial resistance** to inform public health policy
- **13-29yo females** with history of an STI

HPTS_Research@childrensnational.org

Pediatric **Health** Network

CHOOSE

Launched in May 2026

- A clinical trial aimed to evaluate the **efficacy** of the **PrEP Choice mobile health support package on PrEP uptake and adherence** among young gay, bisexual, and other men who have sex with men (**YGBMSM**)
- **13-24yo males** who self-report anal or vaginal sex



Customer Engagement

- **Youth Advisory Board**
- In-person and virtual monthly meetings
- **Customer Advisory Board**
- Youth, caregivers and community members/organizations meet quarterly



YAB Meeting, 2025



YAB Led Social Media Outreach

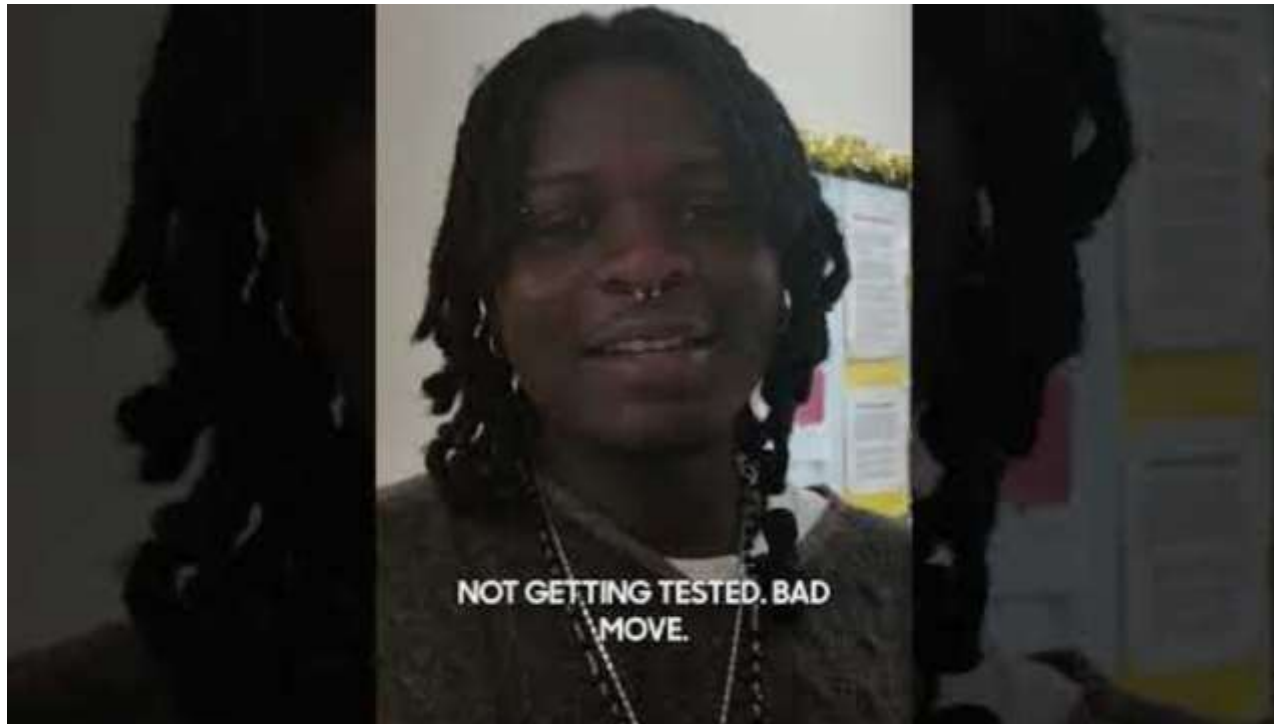


PrEP THE YOUTH 





Voices of YAB Members





PrEP Referrals

Red Carpet concierge 202-476-7779
(M-F, 8am-5pm, calls returned in 24 hours)

HPTS/SIS on call 202-476-5000 (24/7)

Contact HPTS by email: PrEPServicesSIS@childrensnational.org

Requested information:

- Patient name and MRN
- Best patient contact number
- Is patient and/or family aware of the referral?
- What services are being requested?
- Any additional pertinent information
- Your contact information

- Serving patients up to 24 years old
- STI testing, treatment and management
- PrEP counseling/navigation/initiation/follow up



CNH HIV Program Team during Retreat – April 2026

nrakhman@childrensnational.org