How PrEPped Are Our Providers?: Assessing Vermont Primary Care Providers' Knowledge and Awareness of Pre-Exposure Prophylaxis (PrEP) Options for HIV Prevention

Pre-Exposure Prophylaxis (PrEP) for HIV Information Sheet

What is PrEP (pre-exposure prophylaxis)?

- Medications aimed at preventing HIV infection. Can be taken by individuals who are currently HIV-negative *and* at high-risk of contracting HIV from sex or injection drug use. It does not prevent other sexually transmitted infections or pregnancy.

Currently available medications and dosing strategies

Medications

- Truvada (tenofovir disoproxil fumarate-emtricitabine); approved by FDA in 2012
- Descovy (tenofovir alafenamide fumarate-emtricitabine); approved by FDA in 2019

Dosing strategies

- Once daily pill
- "On demand" or "event-driven" (2-1-1): 2 pills taken **at least 2 hours** (preferably 24 hours) **before** having sex, then **1 pill 24-hours + 1 pill 48-hours** after the 2-pill dose
    - Safe and highly effective method to reduce risk of HIV infection with comparable efficacy in preventing HIV as daily PrEP use in **men having sex with men** (MSM)
    - Targeted toward MSM engaging in less frequent (< 2/week, on average) sexual activity
    - Only studied with Truvada currently
    - ***Not*** currently an FDA-approved dosing strategy, but approved by World Health Organization
    - Currently approved for gay/bisexual MSM, but ***not*** cisgender/transgender women, transgender men engaging in vaginal sex, cisgender men having vaginal/anal sex with women, individuals with chronic hepatitis B, or those unable to reliably predict sexual encounters
    - Benefits: reduced pill burden, decreased costs, provides choice and convenience for MSM who may be at high risk for HIV for brief periods or having infrequent sex
    - Risks: potential confusion about dosing strategy and eligibility for dosing regimen
- PrEP reaches maximal protection against HIV for receptive anal sex after 7 days of use and for receptive vaginal sex and injection drug use after 21 days of use; limited data about insertive anal sex

How effective is PrEP?

- PrEP has been shown to be 99% effective at preventing HIV infection when taken as prescribed
    - Less information about PrEP efficacy with IV drug use, but known to reduce risk of HIV by at least 74% when taken as prescribed
- Medication efficacy is highly dependent on patient adherence and minimizing barriers to adherence (e.g. living arrangements, forgetfulness, side effects, stigma, etc.), thus warranting further consideration and discussion with patient prior to prescribing

Patient payment options

- Most insurance plans and state Medicaid programs cover PrEP
- Other programs provide PrEP for free or at a reduced cost, including: Ready, Set, PrEP; Co-pay assistance programs and state-specific PrEP assistance programs

USPSTF recommendation information

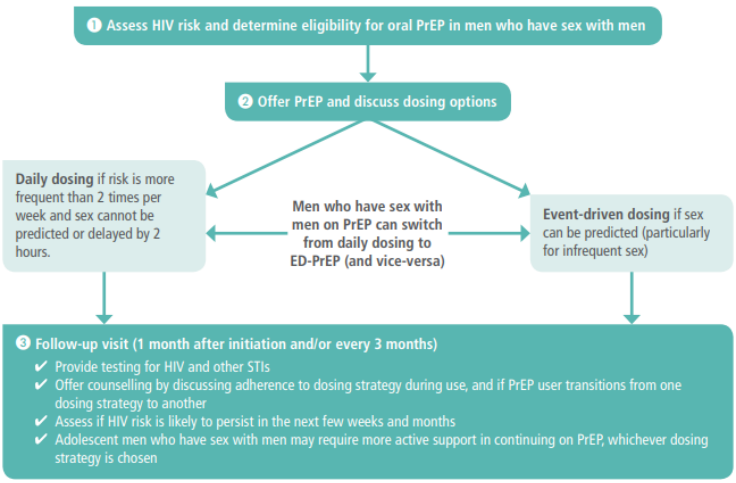
- **Grade A recommendation**: *The USPSTF concludes with high certainty that the net benefit of the use of PrEP to reduce the risk of acquisition of HIV infection in persons at high risk of HIV infection is substantial.*
    - This recommendation requires that PrEP be covered by most health plans without cost sharing (i.e., no copay, coinsurance, or deductible), however, does not specify coverage regarding routine lab work and/or medical appointments.

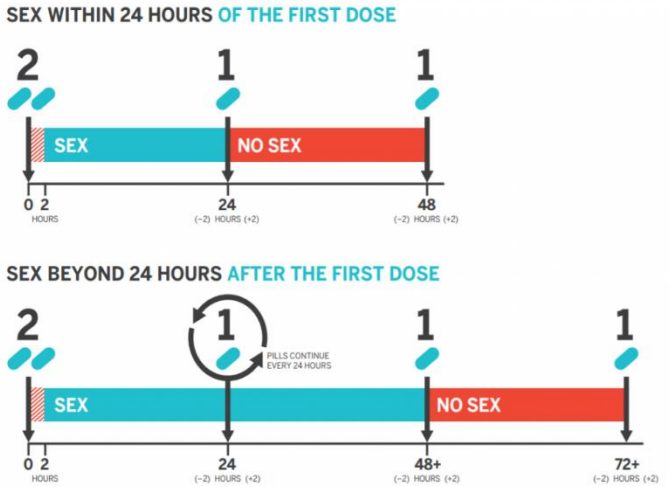
Additional information/resources: Updated: May 2021

www.cdc.gov/hiv/basics/prep.html

Pre-Exposure Prophylaxis (PrEP) for HIV Information Sheet

	Truvada	Descovy
Effectiveness	>99% effective	>99% effective
Dosing regimen(s)	Daily use and On-Demand (2-1-1)	Daily use *Limited clinical data available to support On-Demand dosing*
Target populations	Gay/bisexual cis men, trans women, trans men, heterosexuals, cis women, people who inject drugs	Gay/bisexual cis men, trans women *No clinical data supporting prevention of HIV for people who inject drugs or engage in vaginal sex*
General safety	Very low rates of side effects overall; short-term GI symptoms (nausea, vomiting, diarrhea) common in some with medication initiation with resolution after several weeks of use	
Bone health	Avoid in patients with osteoporosis	Safer for patients with osteoporosis
Kidney health	Avoid in patients with decreased renal function or strong family history of renal disease	Safer for patients with decreased renal function or strong family history of renal disease, though close monitoring still recommended
Weight effects	May cause minor weight loss	May cause minor weight gain
Cholesterol effects	May cause minor decrease in total cholesterol, LDL and HDL	May cause minor increase in LDL cholesterol and triglycerides
Medical follow-up	**Initial visit**: HIV test (4th gen., ideally), creatinine, gonorrhea/chlamydia and syphilis screening, HBsAb/Ag, HCV Ab, pregnancy test **Every 3 months**: HIV test (4th gen., ideally), pregnancy test, assess adherence, evaluate need to continue PrEP, 3-month refill **Every 6 months**: gonorrhea/chlamydia and syphilis screening	
Contraindications	HIV-positive, eGFR < 60ml/min, possible HIV exposure within prior 72 hours	





Additional information/resources:
www.cdc.gov/hiv/basics/prep.html

Updated: May 2021