



Frequently Asked Questions: Pre-Exposure Prophylaxis (PrEP) for HIV Infection Massachusetts Department of Public Health – Updated July 2013

On July 16, 2012, the Food and Drug Administration (FDA) approved the use of Truvada^{®1} (TDF/FTC) as pre-exposure prophylaxis (PrEP) for HIV-uninfected individuals at high risk for sexually acquired HIV infection. Clinical trials² in several populations have demonstrated efficacy of TDF/FTC as PrEP to prevent HIV acquisition in HIV-uninfected individuals when combined with counseling about safer sex and other risk reduction methods. On June 14, 2013, the Centers for Disease Control and Prevention (CDC) recommended Truvada[®] as PrEP for injecting drug users (IDUs) at high risk for HIV acquisition³. Adherence to therapy, with adequate blood/tissue levels of active antiviral agents, appears to be the most important determinant of efficacy of TDF/FTC as PrEP. Strict commitment to following the PrEP treatment protocol must be made by the patient and the clinical provider.

1) What medication has been approved for use as part of a PrEP protocol for the prevention of HIV infection?

Truvada[®] is the only antiretroviral medication currently approved by the FDA for use as PrEP.⁴ Truvada[®] is an oral antiretroviral combination medication approved for the treatment of HIV infection since 2004. The current recommended treatment dose when prescribed as PrEP is tenofovir disoproxil fumarate (TDF) 300mg plus emtricitabine (FTC) 200mg, as one Truvada[®] daily.

2) Are there high risk individuals who should be considered potential candidates for PrEP?

Yes, individuals who meet one or more of the criteria below should be considered potential candidates for PrEP. Any recommendation to utilize PrEP must also be evaluated in the context of patient overall health status and readiness to adhere to the prescribed regimen. It is imperative **PrEP only be prescribed and utilized by persons who are confirmed to be HIV-uninfected with an RNA assay or 4th generation test and:**

- Are men who have sex with men (MSM) who currently have repeated unprotected anal and/or vaginal sex
- Are transgender females who currently have repeated unprotected anal and/or vaginal sex
- Are part of a heterosexual serodiscordant couple wishing to conceive and have been educated about the potential risks/benefits⁵

¹ Emtricitabine/tenofovir disoproxil fumarate (TDF/FTC, Truvada[®], Gilead)

² Details about completed and ongoing clinical trials can be found at www.avac.org/ht/d/sp/i/326/pid/326.

³ CDC. Update to Interim Guidance for Preexposure Prophylaxis (PrEP) for the Prevention of HIV Infection: PrEP for Injecting Drug Users. *Morb Mortal Wkly Rep*. 2013; 62:463-465.

⁴ The FDA has approved use of Truvada[®] as PrEP for HIV-uninfected individuals at high risk for sexually acquired HIV infection. Use of Truvada[®] as PrEP for injection drug users currently represents off-label use.

⁵ Information concerning the use of Truvada[®] during pregnancy can be found at <http://www.truvada.com>.

- Are injection drug users at risk for HIV acquisition through blood exposure secondary to sharing injection equipment
- Use “club drugs” in combination with unprotected sex
- Engage in commercial sex work
- Have recent or repeated diagnosis of syphilis, rectal gonorrhea, or rectal chlamydia infection
- Are otherwise deemed appropriate by the prescribing clinician⁶.

3) Are there high risk individuals who would not be considered potential candidates for PrEP?

- Persons who are HIV-infected or have not had an HIV test to rule out infection⁷
- Persons who have signs or symptoms of acute HIV infection⁸
- Persons seeking non-occupational post-exposure prophylaxis (nPEP)⁹
- Women who are breastfeeding
- Persons who are not able or willing to strictly adhere to treatment protocol as prescribed
- Persons who are not available or not willing to adhere to recommended counseling services
- Persons who are not available or not willing to participate in frequent diagnostic monitoring
- Persons who are successfully and consistently using other prevention methods

4) What side effects should be reported to the clinician and to the FDA?

Truvada[®] has been used for several years for treatment of HIV infection. Lactic acidosis and severe hepatomegaly with steatosis have been reported with long-term use. New onset or worsening renal impairment, changes in body fat distribution, osteopenia, and symptoms of inflammation have also been reported.

HIV resistance may emerge when HIV infection is not detected while using Truvada[®] as PrEP. In individuals whose hepatitis B infection was undetected before or while using Truvada[®] as PrEP, exacerbation of the infection has been reported when Truvada[®] was discontinued.

To assist in early identification of any of the above side effects, clinicians are advised to instruct patients to report any of the following symptoms. Clinicians should then report the side effects to the FDA at 1-800-FDA-1088 or www.FDA.gov/medwatch.

- Weakness, unusual muscle pain, fever, difficulty breathing, nausea, vomiting, feeling cold, dizzy, or light-headed
- Jaundice, dark urine, light-colored stools, decreased appetite, lower abdominal pain
- Symptoms of acute HIV infection

⁶ Details about completed and ongoing clinical trials can be found at www.avac.org/ht/d/sp/i/326/pid/326.

⁷ Development of HIV antibodies can take weeks to months. In June of 2010, a 4th generation HIV diagnostic test was approved by the FDA. This highly sensitive test can detect p24 antigen as well as HIV antibodies thus reducing the time from exposure to detection.

⁸ Acute retroviral syndrome symptoms appear 2-6 weeks post HIV exposure in close to 70% of those infected. Symptoms may include: fever, rash, fatigue, pharyngitis, generalized lymphadenopathy, urticaria, myalgia, arthralgia, anorexia, mucocutaneous ulceration, headache, retroorbital pain and neurologic symptoms.

⁹ Medical professionals who are unsure if nPEP should be administered can call the National Clinicians' Post-Exposure Prophylaxis Hotline (PEPline) at 1-888-448-4911 for consultation.

5) What laboratory and clinical assessments are recommended as part of the PrEP protocol?

Before initiating PrEP

- Rule out HIV infection, including acute HIV infection, using practice/facility-preferred testing methods; document results.
- Confirm creatinine clearance is greater than 60mL/min (Cockcroft-Gault formula).
- Screen for viral hepatitis; immunize for hepatitis A and B as indicated. Arrange for treatment of chronic hepatitis B or C, if indicated.
- Rule out possible drug interactions.¹⁰
- Conduct pregnancy test for females. If a patient takes PrEP while pregnant, or becomes pregnant during utilization of PrEP, providers are encouraged to prospectively and anonymously submit information about the pregnancy to the *Antiretroviral Use in Pregnancy Registry*.¹¹

Every 2-3 months:

- Rule out HIV infection including, acute HIV infection, using practice/facility-preferred testing methods, document results.
- Assess for symptoms of sexually transmitted infections, then test, treat as indicated, and refer to Massachusetts Department of Public Health (MDPH) Partner Services (PS).¹²
- Screen for hepatitis C, and arrange for treatment if indicated.
- Conduct pregnancy test for females.
- Evaluate adherence and need for more intensive support services.

Three months after medication initiation:

- Check serum creatinine and calculate serum creatinine clearance.

Every 6 months:

- Screen for sexually transmitted infections, even in asymptomatic patients: treat as indicated and refer to Massachusetts Department of Public Health (MDPH) Partner Services (PS).¹⁰
- Check serum creatinine and calculate serum creatinine clearance.

6) What social/psychological support services are recommended as part of the PrEP protocol?

- At each follow-up visit ensure availability of risk reduction counseling services and condoms; evaluate the need for more intensive support services. For injecting drug users, ensure availability of and/or access to sterile needles, syringes and other injection equipment; and use each visit to explore readiness for entry into drug treatment.
- At each follow-up visit, or more frequently if needed, evaluate and support adherence to PrEP medication. The general recommendation is to prescribe no more than a 90-day supply of medication to be renewed following negative HIV testing results.
- Adverse events in long term administration of Truvada[®] in uninfected individuals have not been fully assessed. Data from clinical trials indicated significant levels of nausea, vomiting and dizziness were reported by some participants during the initiation stage. Clinicians should discuss side effects that may contribute to medication non-adherence and provide treatment/support as indicated.
- If pregnant, coordinate care and follow-up with prenatal care provider.

¹⁰ Full prescribing information can be found at <http://www.truvada.com>.

¹¹ An Antiretroviral Pregnancy Registry (APR) has been established. Register patients by calling 1-800-258-4263. <http://www.apregistry.com>.

¹² The PS program for HIV and STDs offers a range of options to assist individuals to identify and inform their sex and/or drug injection partners about possible exposures. These services provide information about risk and facilitate linkages to testing and care. More info: 617-983-6999.

7) When is it appropriate to discontinue the PrEP protocol?

- If patient tests positive for HIV infection or has suspected acute infection
- If patient wishes to discontinue treatment
- If patient is clinically diagnosed with any medical condition or has an abnormal lab value inconsistent with the safe administration of Truvada[®] as PrEP¹³
- Diminishing patient commitment to the treatment protocol

8) Is PrEP covered by most health insurance plans, including Mass Health? Is there a prior authorization process?

The annual cost of once daily Truvada[®] and the associated visits/tests is estimated to be \$13,000. As a result of FDA approval for the use of Truvada[®] as PrEP, many health insurers, including MassHealth, will cover the cost. Prior authorization may be required; check with the health insurance company.

9) Will there be a cost to my patient to utilize PrEP?

Co-payments, as dictated by the patient's insurance plan, will be the responsibility of the patient. Gilead Sciences, the manufacturer of Truvada[®], has established a patient assistance program to help people without health insurance or other coverage to obtain access to Truvada[®]. Information about eligibility for this program is available by calling 1-855-330-5479.

10) What resources are available on PrEP?

- Truvada[®] was approved by the FDA with a Risk Evaluation and Mitigation Strategy (REMS). A detailed description of this strategy as well as a list of educational resources for health care professionals is available at <https://www.truvadapreprems.com>.
- The CDC offers current PrEP information and links to additional resources at www.cdc.gov/hiv/prep including:
 - [Interim Guidance for Clinicians Considering the Use of Preexposure Prophylaxis for the Prevention of HIV Infection in Heterosexually Active Adults](#)
 - [Interim Guidance: Preexposure Prophylaxis for the Prevention of HIV Infection in Men Who Have Sex with Men](#)
 - [Update to Interim Guidance for Preexposure Prophylaxis \(PrEP\) for the Prevention of HIV Infection: PrEP for Injecting Drug Users](#)
- Massachusetts Department of Public Health at www.mass.gov/dph/aids
- Project Inform at www.projectinform.org/prep/
- U.S. Department of Health and Human Services Health Resources and Services Administration *Guide to HIV/AIDS Clinical Care* <http://hab.hrsa.gov/deliverhivaidscares/clinicalguide11>

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¹³ Full prescribing information can be found at <http://www.truvada.com>.

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