HIV Pre-Exposure Prophylaxis (PrEP) Fact Sheet for Prescribers

What is PrEP?

PrEP is the use of an HIV medication by HIV negative individuals to prevent HIV infection. Pre-exposure means it is taken *before* a potential exposure, compared to PEP which refers to use of HIV medications to prevent HIV infection *after* an exposure has already occurred.

What does PrEP consist of?

PrEP is an oral therapy. It is a combination tablet of two medications Tenofovir and Emtricitabine – TDF/FTC.

Is PrEP approved in Canada?

Yes. The use of TDF/FTC for PrEP received Health Canada approval in February 2016.

Who should use PrEP?

PrEP should be used by anyone at elevated risk for acquiring HIV infection. In British Columbia, the majority of new diagnoses occur in men who have sex with men (MSM). PrEP is recommended in those who are at particular risk -- MSM with recent infectious syphilis, or rectal bacterial STI. MSM with elevated clinical risk score (using a tool called the HIRI-MSM risk index, those with a score above 10 are at elevated risk, and those with a score above 25 are at high risk for HIV infection).

PrEP can be used for other populations such as heterosexual couples or persons who share drug paraphernalia where one partner is known to be HIV positive not yet on antiretroviral therapy or who does not have an undetectable viral load.

How effective is PrEP?

PrEP has been evaluated in three large studies in MSM. Overall these studies suggest that PrEP is able to reduce risk of HIV infection by about 86%. Real-world studies in the USA suggest that PrEP might be even more effective (>98% or more reduction in risk of HIV infection). The effectiveness of PrEP depends on high levels of adherence to the therapy.

How long does it take before it is effective?

It takes at least 7 days to achieve protective levels if the medication is taken daily.

How should I advise someone to take PrEP?

The best evidence is for once daily use of a single tablet, regardless of whether the person is having sex daily or not. An alternative strategy assessed in only a single study is "on-demand" PrEP, where PrEP is used before, during and 2 more days after the last sexual encounter. Use of on-demand PrEP is considered off-label use in Canada.

What are the side effects of PrEP?

PrEP is very well tolerated. In the first few weeks a small number of people (less than 10%) may experience GI upset (nausea, bloating, occasional diarrhea) or headaches, but these usually fade away. More serious side effects of TDF/FTC include kidney damage, but this is very rare, and has been mild when seen in PrEP users. Nonetheless, monitoring is recommended. Loss of bone density with TDF/FTC has been reported, but again is not clinically significant in PrEP users, and returns to baseline when PrEP is stopped

How do I assess someone for PrEP?

In addition to an evaluation for HIV risk (including signs or symptoms of acute HIV infection), assessment of underlying health issues/medications which could affect kidney/bone health is important. An assessment for chronic hepatitis B infection is important as TDF/FTC can affect HBV and additional monitoring may be required. Baseline 4th generation HIV testing should be performed, with careful consideration of the window period (about 4 weeks). Additional testing of liver and kidney function, STI screens and hepatitis serology should be ordered.

How do I prescribe and monitor PrEP?

An initial prescription usually consists of 30 days, followed by a visit to assess tolerability and adherence. Subsequently 90 day scripts can be given. If a person is using generic medications, only 90 day scripts can be given, but a visit after 30 days is recommended. Laboratory monitoring consists of repeat HIV, STI and kidney monitoring at 30 days, and subsequently quarterly HIV, STI and kidney monitoring (creatinine and urine albumin:creatinine ratio).

Can someone stop PrEP?

Yes. Individuals on regular PrEP can stop if they wish to do so, but they should continue for at least 48 hours after their last sexual contact. Repeat HIV testing a month after stopping is recommended. HIV testing should also be repeated prior to restarting PrEP.