

# HIV preexposure prophylaxis in Canadian primary care and community settings

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In Canada HIV continues to be a challenge, with more than 2500 new cases reported per year<sup>1</sup> despite the considerable resources available compared with other countries that bear the brunt of this pandemic. Approximately 21% of HIV-infected individuals are unaware of their HIV-positive status and might be contributing to further disease transmission.<sup>1</sup> Human immunodeficiency virus preexposure prophylaxis (PrEP) is an HIV prevention approach that protects individuals from infection, and the use of PrEP in Canada and worldwide has increased over the past few years. Canadians at elevated risk of HIV acquisition are approaching their family physicians for PrEP care in greater numbers. This article will outline several aspects of PrEP care to help you accommodate those patients in need.

## PrEP care

**Description of PrEP.** Preexposure prophylaxis is a proactive HIV prevention technique in which HIV-negative individuals who are at greater risk of HIV acquisition use antiretroviral medications to prevent infection.<sup>2</sup> This approach has demonstrated success in considerably reducing the risk of HIV acquisition in clinical trials and in real-world situations,<sup>3</sup> including Canadian settings.<sup>4</sup>

**Indications for PrEP.** Indications for PrEP include men who have sex with men and trans individuals having condomless anal sex with individuals of unknown HIV serostatus, or with HIV-positive individuals who have a “detectable” viral load (meaning the viral load is greater than 40 copies/mL). Heterosexual individuals might also benefit from PrEP should they engage in vaginal sex with an HIV-positive partner with detectable viral loads. Last, people who inject drugs and share needles or other drug paraphernalia might benefit from PrEP.<sup>5</sup>

**Facilitating PrEP care in clinical settings.** Providing PrEP care is rather straightforward. Before initiation of care, baseline investigations must first rule out HIV and other sexually transmitted infections (STIs) such as syphilis, chlamydia, and gonorrhea. In addition, individuals must be screened for hepatitis B and C infections, and should be vaccinated for hepatitis A and B if not immune. Baseline investigations should also include a complete blood count, creatinine test, urinalysis, and pregnancy test (if indicated). Also important, individuals being considered for PrEP should be screened for concomitant mental health issues and alcohol and drug abuse, and should be connected with appropriate care or harm reduction strategies where necessary.

Individuals who are starting PrEP require proper counseling on what this approach entails: PrEP involves taking 1 tablet that is a combination of emtricitabine (also called FTC) and tenofovir disoproxil fumarate (TDF) either daily or around the time of sex<sup>5</sup> (“on demand” PrEP). Inform patients that, if used properly, PrEP can considerably reduce the risk of HIV acquisition by approximately 90% (or possibly more), but that it is not 100% protective.<sup>3-5</sup> Patients typically receive a 3-month supply of the FTC-TDF combination drug and should receive follow-up in clinic every 3 months. Inform patients that PrEP will not protect them from other STIs such as syphilis, chlamydia, and gonorrhea, and that condoms should be used with sexual activity. Where appropriate, discuss and promote the use of sterile needles and injection drug harm reduction strategies. Finally, notify individuals initiating PrEP about the low potential for renal and bone toxicity while taking FTC-TDF.

*A small tip on providing PrEP care based on our experience:* We provide PrEP care to hundreds of individuals. For our patients taking PrEP, we prescribe a 4-month supply (rather than the recommended 3 months) of FTC-TDF, and we follow up with patients every 3 to 3 and a half months. We believe this provides a bit of wiggle room for unexpected life events to occur (eg, illness, work, forgetfulness) and ensures that patients will still have medications and are protected.

**Follow-up.** Quarterly follow-up appointments revolve around evaluating patients for drug adherence and toxicity, as well as signs and symptoms of HIV acquisition and other STIs; counseling around safe sexual and drug use practices; and determining whether an individual still requires PrEP based on his or her risk factors over the previous 3 months. Investigations at follow-up appointments include rescreening for HIV and STIs, along with completing a complete blood count and creatinine test.<sup>5</sup> Preexposure prophylaxis can be discontinued 2 to 28 days after a patient’s last potential HIV exposure, only if he or she is no longer at increased risk of HIV acquisition. These patients should still have follow-up HIV testing 8 to 12 weeks later.

## Removal of barriers to PrEP care

The wide-scale implementation of PrEP in Canada has been slow. Currently a small proportion of family medicine and infectious diseases physicians have included PrEP in their routine clinical practice; however, many more providers will be needed to accommodate the growing demands of Canadians. Fortunately, several

events are enabling better PrEP access in community settings. First, FTC-TDF is now much more affordable, as generic versions are priced at approximately \$200 for a month's supply. Second, Ontario's provincial drug program now subsidizes PrEP medications for those in financial need; the drug cost is covered in other provinces (eg, Quebec), and it is likely that other provinces will follow suit soon. Finally, Canadian PrEP guidelines are now published<sup>5</sup> and freely available, and will provide front-line health care providers with the necessary tools to offer PrEP care. Prevention strategies for HIV are more accessible than ever. Let's bring high-quality HIV prevention care to Canadians. 

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**Competing interests**  
None declared

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