

HIV PREVENTION FOR HIV-DISCORDANT COUPLES THROUGH THE USE OF PREP

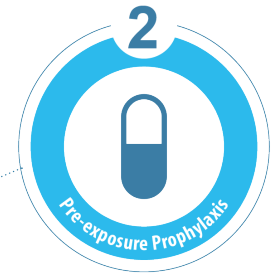


Biomedical Options for HIV Prevention in HIV-discordant Couples

2 important strategies for the use of antiretroviral therapy (ART) to prevent HIV transmission and acquisition in HIV-discordant couples (i.e., couples in which one partner is HIV-positive and the other is HIV-negative)



Correct and consistent use of male or female condoms are highly effective in preventing HIV and other sexually transmitted diseases (STDs) and provide additional protection when paired with biomedical options.

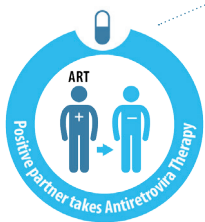


Achievement of viral suppression (defined as having less than 200 copies of HIV per milliliter of blood) or an undetectable viral load (<50 copies of HIV per milliliter of blood) in the partner with HIV¹.

Condom use is also a key component of the comprehensive strategy for HIV prevention in HIV-discordant couples before viral suppression is achieved².

Pre-exposure prophylaxis (PrEP) by the HIV-negative partner.

Treatment as Prevention

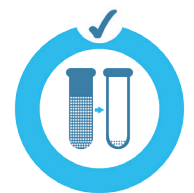


The HIV-positive partner takes ART to achieve and maintain an undetectable viral load. In addition to promoting the health of patients with HIV, this method is extremely effective for preventing sexual transmission of HIV.

Combined data from the PARTNER, Opposites Attract and PARTNER 2 studies produces a transmission risk estimate of 0.00 (0.00 – 0.14) per 100 couple-years, with the upper bound indicating a 0.14% annual risk for condomless sex amongst heterosexual or MSM couples (unpublished data)³.

These studies convincingly show that people who take ART daily as prescribed and achieve and maintain an undetectable viral load have effectively no risk of sexually transmitting the virus to an HIV-negative partner.

The success of treatment as prevention as an HIV prevention strategy depends on achieving and maintaining an undetectable viral load. The need for continued adherence to antiretrovirals and viral load monitoring in the HIV-positive partner is critical to the success of these strategies. People who are HIV negative who rely on their HIV positive partner's use of ART as primary prevention may benefit from additional prevention methods for HIV prevention (e.g., PrEP and/or condoms). Condoms are essential to STI prevention.



Pre-Exposure Prophylaxis (PrEP)

PrEP is a prevention method used by people who are HIV-negative and at high risk for being exposed to HIV through sexual contact or injection drug use.



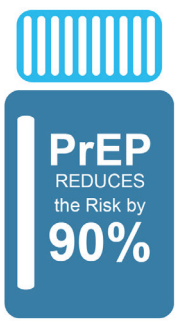
Currently, the only FDA-approved medication for PrEP is oral tenofovir disoproxil fumarate and emtricitabine (TDF-FTC), available as the fixed-dose combination tablet Truvada. Daily PrEP reduces the risk of getting HIV from sex by more than 90%^{5,6}.



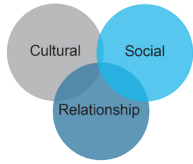
PrEP guidelines state that people taking PrEP should commit to taking the drug every day and seeing their health care provider for follow-up every 3 months. The risk of getting HIV from sex can be even lower if PrEP is combined with condoms and other prevention methods⁷.



Persons who inject drugs can substantially reduce their risk of getting and transmitting HIV, viral hepatitis and other blood borne infections by using a sterile needle and syringe for every injection.



Barriers and facilitators for PrEP initiation, medication adherence, and retention in care.



Cultural, social and relationship factors can impact the risk of HIV transmission between HIV-discordant partners.

Low levels of HIV-related health literacy and lack of knowledge about PrEP are barriers to effective PrEP uptake. Structural barriers such as lack of access to resources or PrEP delivery infrastructure are also important⁸.

In a relationship, the desire for sexual and emotional intimacy may be a powerful motivator for condomless sex⁹. The desire to conceive may outweigh fear of HIV transmission¹⁰.



Stigma and fear that ART initiation is indicative of HIV disease progression may decrease adherence¹⁰.

Within HIV-discordant couples, partners can provide important support to each other for medication adherence. In the Partners PrEP Study, HIV-negative members of HIV-discordant couples demonstrated high adherence to PrEP.

Qualitative interviews suggested that PrEP can be seen as an important tool for safeguarding health within the relationship¹¹.

Messages that health care organizations can communicate to patients to reduce HIV transmission within HIV-discordant couples

Within the Partners Demonstration Project, a framework for counseling HIV-discordant couples about an integrated strategy encompassing PrEP and ART included counseling about¹³.

- ▶ HIV discordance and testing
- ▶ The full range of biomedical prevention options (including ART and PrEP)

- ▶ The importance of ART use in the HIV-positive partner
- ▶ The important message that PrEP can be re-started if HIV risk changes



A comprehensive strategy for HIV prevention for HIV-discordant couples includes antiretroviral therapy of the person or partner with HIV, PrEP in the uninfected partner, and condom use in both partners to prevent STI's, and potential use of post-exposure prophylaxis (PEP) in the uninfected partner. HCOs can provide counseling to identify and address barrier to PrEP usage and clearly communicate messages about the full range of biomedical prevention options available to HIV-discordant couples. Correct and consistent use of condoms before viral suppression is achieved is paramount, as is the need for continued adherence and viral load monitoring in the partner with HIV.

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