



In Major PARTNER Study, HIV Rate Is High Outside of Main Relationship

HIV-negative members of mixed-HIV-status couples often had high-risk sex with non-primary partners—with low use of PrEP and PEP.

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The HIV-negative members of the mixed-HIV-status gay couples in the major PARTNER study never contracted the virus from their primary partner but had a high infection rate as a result of sex outside of their relationship, [aidsmap](#) reports. Additionally, this largely European group of men who have sex with men (MSM) had a low rate of use of pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP).

The PARTNER study recruited both male-female and male-male couples in which only one member was living with HIV at the study's outset and that individual was on antiretroviral (ARV) treatment. In [2014](#) and again in [2016](#), the study authors reported that none of the HIV-negative partners had contracted the virus from their primary partners.

Such findings, along with those from other similar studies, have led major scientists, including those at the Centers for Disease Control and Prevention (CDC) and the National Institute of Allergy and Infectious Diseases, to conclude that having an undetectable viral load thanks to successful ARV treatment is associated with [effectively no risk](#) of transmitting the virus.

The PARTNER study investigators have continued gathering data about gay couples only in a study known as PARTNER 2.

Presenting findings at the 16th European AIDS Conference in Milan, the investigators conducted an analysis of the use of PrEP and PEP among HIV-negative members of PARTNER 1 and 2 as well as HIV acquisitions among them, all of which presumably came from outside of their primary partnership.

By 2016, 11 members of PARTNER 1 had contracted HIV, including 10 gay men. Genetic testing indicated that none of these cases were linked to the individual's primary partner's virus. Eight of these individuals disclosed sex outside of their relationship; presumably the remaining three engaged in such sex as well.

Among the gay men, these figures translated to an HIV infection rate of 2.3 percent per year, or

7.2 percent per year among just those members of the study who said they had had sex with individuals outside of their primary partnership.

Among the 737 HIV-negative gay male study members who responded to a sexual behavior questionnaire both upon entry into the study and at one or more follow-up visits, 17.5 percent of those in PARTNER 1 and 17.9 percent of those in PARTNER 2 had ever taken PEP before entering the study. An additional 3 percent of those in PARTNER 1 and 4.6 percent of those in PARTNER 2 used PEP during the study. At the study's outset, 1.5 percent of those in PARTNER 1 and 3.9 percent of those in PARTNER 2 reported having used PrEP. During the two studies, an additional 3 percent in PARTNER 1 and 5 percent in PARTNER 2 used PrEP. All told, 8.2 percent of those in PARTNER 2 used PEP, PrEP or both.

Those HIV-negative gay male participants who disclosed having sex outside of their relationship were two and three times more likely to report use of PEP and PrEP, respectively.

The researchers concluded that among the 35 percent of these HIV-negative men who reported having condomless anal sex with men outside their relationships, PEP or PrEP provided protection against HIV for just 12 percent of such high-risk sex acts. This figure was 1.5 percent among men who did not report such sexual activity.

To read the aidsmap article, [click here](#).