

# [Modes of hiv transmission and prevention](https://assignbuster.com/modes-of-hiv-transmission-and-prevention/)

Modes of HIV transmission and prevention -HIV and the Acquired Immunodeficiency Syndrom- -Prevention of HIV infection-Jan 25, 2006 Sexual Transmission HIV infection is a sexually transmitted disease (STD). Like other STDs, HIV spreads bidirectionally and appears to be transmitted from male to female and female to male with greater efficiency (up to three-fold) from male to female. Although the majority of sexually transmitted cases reported in the United States occur via male homosexual activity, heterosexual transmission is one of the fastest growing modes of transmission reported in the United States and is the primary mode of disease acquisition in many African countries, where male-to-female prevalence ratios are approximately 1. 1: 1. Certain cofactors are associated with an increased risk of acquiring HIV infection. Among homosexual men, receptive anal intercourse and contact with a large number of different sexual partners are the most important risk factors. Activities that may lead to damage of the rectal mucosa, such as rectal douching, manual penetration of the rectum (" fisting"), and concomitant ulcerative STDs, increase the likelihood of disease acquisition. Insertive rectal intercourse, fellatio, and ingestion of semen are associated with HIV transmission to a lesser degree. The likelihood of heterosexual acquired disease increases with a higher number of sexual partners, contact with intravenous drug users (IVDUs), prostitution, sexual practices that damage vaginal or rectal mucosa, and a previous history of other STDs. Female-to-female transmission has been reported via orogenital contact. Prevention Abstinence is the only absolute way of preventing sexual acquisition of HIV infection. Persons who have been engaged in a mutually monogamous relationship since the mid-1970s are at extremely low risk of acquiring disease; however, the assurance that both partners have remained “ faithful" is sometimes difficult to confirm. For the majority of sexually active individuals it should be assumed that their partner is seropositive until demonstrated otherwise. Verbal claims of seronegativity should be viewed with skepticism. When a couple, heterosexual or homosexual, is establishing a long-term relationship, it may be recommended that they undergo serologic testing to determine their HIV status. However, the decision to be tested should be of mutual consent and viewed in the context that exposures outside the relationship may lead to seropositivity in the future. In situations in which a decision to engage in sexual activity has been made and the HIV status of the partner is unknown or in doubt, safe sexual practices (" safe sex") should be implemented (Table 410-1) . Mutual masturbation is considered “ safe, " assuming it is nontraumatic and not followed by ingestion of body fluids such as semen or vaginal secretions. Transmission of HIV has never been documented to occur through saliva; however, no group of patients has ever been studied who engage in deep “ French" kissing as their sole means of sexual activity. Because HIV exists in saliva, albeit in very low titers, deep French kissing cannot be considered absolutely safe even though the likelihood of HIV transmission is extremely low. Condom use is the most effective means of preventing HIV infection among individuals who engage in oral, vaginal, or anal intercourse. To be effective, however, the condom should be made of latex and must be used properly. Natural skin condoms have been shown to leak in laboratory studies, whereas latex condoms maintain their integrity and are more durable. Nonoxynol-9, a spermicide with some antiviral activity, enhances the protective effects of condoms and should be used in conjunction with condoms either as a spermicidal jelly or impregnated into the latex condom itself. Petroleum-based lubricants enhance the likelihood of latex condom rupture and should be avoided. If needed, water-based lubricants such as K-Y Jelly should be used. Both partners should be knowledgeable about the correct use of condoms. Discussions regarding condom use should occur before the need arises, and ideally, condom placement should be practiced in advance. A new condom should be used for each act of intercourse and each condom should be used only one time. Even under the best of circumstances, a 5 to 15% failure rate has been noted among couples using condoms as their sole means of contraception, and HIV transmission has been reported in discordant couples using condoms. Condom ineffectiveness most often is due to improper placement, falling off during intercourse, and rupture. Therefore, although condom use during intercourse is considered “ safer" sex, it is not absolutely safe. Read more: Modes of HIV transmission and preventionhttp://www. health. am/aids/more/modes\_of\_hiv\_transmission\_and\_prevention/#ixzz2Smv8UGcU