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Latex Condoms and Sexually Transmitted Diseases – Prevention Messages –

Prevention message for HIV, the virus that causes AIDS
Latex condoms, when used consistently and correctly, are highly effective in preventing the transmission of HIV, the virus that causes AIDS.

AIDS is, by far, the most deadly sexually transmitted disease and considerably more scientific evidence exists regarding condom effectiveness for prevention of HIV infection than for prevention of other STDs.

The body of research on the effectiveness of latex condoms in preventing sexual transmission of HIV is both comprehensive and conclusive. In fact, the ability of latex condoms to prevent transmission of HIV has been scientifically established in "real life" studies of sexually active couples as well as in laboratory studies.

Theoretical Basis for Protection: Latex condoms cover the penis and provide an effective barrier to exposure from genital secretions such as semen and vaginal fluids, blocking the pathway of sexual transmission of HIV infection.

Laboratory Studies that determine whether or not organisms can penetrate latex condoms under conditions more stringent than those during intercourse demonstrate that latex condoms provide an impermeable barrier to viruses even smaller than HIV.

Epidemiological Studies that are conducted in real-life settings, where one partner is infected with HIV and the other partner is not, demonstrate conclusively that the consistent use of latex condoms provides a high degree of protection.

Prevention message for sexually transmitted diseases, including HIV

Latex condoms, when used consistently and correctly, are highly effective in preventing transmission of HIV, the virus that causes AIDS. In addition, correct and consistent use of latex condoms can reduce the risk of other sexually transmitted diseases.

Condoms can be expected to provide different levels of risk reduction for different sexually transmitted diseases. There is no one definitive study about condom effectiveness for all STDs. Several studies have demonstrated that condoms can protect against the transmission of chlamydia, gonorrhea and trichomoniasis, and may protect against genital herpes and syphilis. However, because not all studies have demonstrated protective effects, the body of evidence is considered inconclusive. In addition, definitive data are lacking regarding the degree of risk reduction that latex condoms provide in preventing transmission of chancroid and genital human papillomavirus. It is important to note that the lack of data about the level of condom effectiveness indicates that more research is needed – not that latex condoms do not work. The following includes specific information for sexually transmitted discharge diseases, genital ulcer diseases and human papillomavirus.

Discharge Diseases

Prevention message for discharge diseases, other than HIV

Latex condoms, when used consistently and correctly, can reduce the risk of transmission of gonorrhea, chlamydia, and trichomoniasis.

Gonorrhea, chlamydia, and trichomoniasis are termed discharge diseases because they are sexually transmitted by genital secretions, such as semen or vaginal fluids. HIV is also a discharge disease.

Theoretical Basis for Protection: As with HIV, the physical properties of latex condoms protect against other discharge diseases such as gonorrhea, chlamydia, and trichomoniasis by providing a barrier to the genital secretions that transmit STD-causing organisms.

Laboratory Studies that determine whether or not organisms can penetrate latex condoms under conditions more stringent than those during intercourse, demonstrate that latex condoms provide an impermeable barrier to organisms considerably smaller than those that cause discharge diseases.

Epidemiological Studies that compare infection rates among condom users and nonusers provide evidence that latex condoms can protect against the transmission of chlamydia, gonorrhea and trichomoniasis. However, because some epidemiological studies show little or no protection, the body of evidence is considered inconclusive. Many of the studies are also inconclusive regarding the level of protection because of limitations in design. In general, these limitations would lead to an underestimation of the protective effect. More research is needed to assess the degree of protection latex condoms provide for most discharge diseases, other than HIV.

Genital Ulcer Diseases and Human Papillomavirus

Prevention message for genital ulcer diseases and HPV infections
Genital ulcer diseases and HPV infections can occur in genital areas that are covered or protected by a latex condom. They can also occur in areas that are not covered or protected. Latex condoms, when used consistently and correctly, can reduce the risk of genital herpes, syphilis, chancroid, and HPV infection, only when the infected areas are covered or protected by the condom. In addition, the use of latex condoms has been associated with a reduction in risk of HPV-associated diseases, such as cervical cancer.

Genital ulcer diseases include genital herpes, syphilis, and chancroid. These diseases are transmitted primarily through "skin-to-skin" contact from sores/ulcers or infected skin that looks normal. HPV infections, like genital ulcer diseases, are transmitted through contact with infected genital skin or mucosal surfaces/fluids. Although these infections can occur in genital areas that are covered or protected by the condom, they can also occur in areas that are not.

Theoretical Basis for Protection: Protection against genital ulcer diseases and HPV depends on the site of the sore/ulcer or infection. Latex condoms can only protect against transmission when the ulcers or infections are in genital areas that are covered or protected by the condom. Thus, consistent and correct use of latex condoms would be expected to protect against transmission of genital ulcer diseases and HPV in some, but not all, instances.

Laboratory Studies that determine whether or not organisms can penetrate latex condoms under conditions more stringent than those during intercourse, demonstrate that latex condoms provide an impermeable barrier to organisms considerably smaller than those that cause genital ulcer diseases and HPV infections.

Epidemiological Studies that compare infection rates among condom users and nonusers provide evidence that latex condoms can protect against the transmission of syphilis and genital herpes. However, because some epidemiological studies show little or no protection, the body of evidence is considered inconclusive. Many of the studies are also inconclusive regarding the level of protection because of limitations in design. In general, these limitations would lead to an underestimation of the protective effect. No conclusive studies have specifically addressed the transmission of chancroid and condom use.

Epidemiological studies have generally not demonstrated an association between condom use and the risk of HPV infection, but these studies are inconclusive because of limitations in how they were designed. Again, these limitations would generally lead to an underestimation of the protective effect. Study results do, however, show an association between condom use and risk reduction of HPV-associated diseases, including genital warts, cervical dysplasia and cervical cancer.

For bibliography on condom effectiveness, contact
CDC's National Prevention Information Network
at **(800) 458-5231** or **www.cdcnpin.org**