Condoms

Key Points

- Condoms are a highly effective strategy to reduce the risk of the sexual transmission of HIV.
- Condoms work by reducing a person’s risk of being exposure to bodily fluids that may contain HIV.
- Condoms are the only HIV prevention option that also reduces the risk of other sexually transmitted infections (STIs).

The consistent and correct use of internal (sometimes referred to as female) or external (sometimes referred to as male) condoms are highly effective strategies to reduce the risk of the sexual transmission of HIV. When condoms are used consistently and correctly, the risk for HIV transmission is very low.

Condoms are a physical barrier method, which provide protection against HIV, sexually transmitted infections (STIs) and pregnancy. Condoms are the only highly effective HIV prevention option that also reduces the risk of STIs.

The external condom, made of latex, polyurethane or polyisoprene, is put onto the penis. The internal condom, made of polyurethane or nitrile, is inserted into the vagina or rectum.

Lambskin external condoms, which are made from sheep’s intestines, do not provide protection from HIV.

Condoms provide a barrier that can prevent the vagina, penis, rectum and mouth from being exposed to bodily fluids (such as semen, vaginal fluid and rectal fluid) that can contain HIV.

Condoms can fail to prevent an exposure to HIV if they break, slip or leak during use. A break, slip or leak during condom use is known as condom failure and these factors can reduce the ability of condoms to prevent HIV transmission.

Research (among mostly heterosexual couples) has found that rates of condom failure are relatively low. External condoms were found to break, slip or leak between 0.4% and 6.5% of the time. Internal condoms were found to break or slip between 0.1% and 5.6% of the time. These studies included people who may not have been using condoms correctly.

Research shows that rates of condom failure decrease with more frequent condom use, suggesting that over time people learn to use condoms correctly and this reduces failure rates. However, condom failure can happen even when condoms are used correctly.

Correct use of condoms means they are used with sufficient (and appropriate) lubricant, as this can decrease friction that can cause condom failure. Water- and silicone-based lubricants are safe to use with all condoms. Oil-based lubricants such as Vaseline or baby oil should not be used as they can degrade condoms and increase the risk of condom breakage.

Observational studies of external condoms have been conducted among serodiscordant couples (in which one partner is HIV positive and the other is HIV negative). These studies looked at the rates of HIV transmission among heterosexual and gay male couples who reported always using condoms compared to couples who said they never use condoms. From these studies, it is estimated that the effectiveness of consistent condom at preventing HIV transmission ranges between 69% and 94%. No estimate exists for the effectiveness of internal condoms in preventing HIV transmission during vaginal or anal sex.

However, these observational studies don’t accurately tell us how effective condoms are when used consistently and correctly. There are three key factors that limit our ability to know how effective condoms are when used consistently and correctly:
Although couples reported using condoms consistently, the studies did not measure whether condoms were used correctly. The available studies relied on self-reported condom use to determine if participants were consistent condom users. We know that participant self-reports can be an unreliable way of measuring certain types of behaviours, particularly those that are considered socially undesirable such as sex without a condom. All of these studies were observational, which means that people were not randomized to use condoms or not. Without randomization, the two groups (those that used condoms consistently and those that did not) may be different on important factors, other than condom use, that might better account for the low level of effectiveness found in these studies.

Condoms are a highly effective strategy for reducing the risk of the sexual transmission of HIV when used consistently and correctly. However, observational studies suggest that a high level of effectiveness may be difficult to achieve for some people.

Resources

CATIE statement on the use of condoms as a highly effective strategy to prevent the sexual transmission of HIV

Condoms for the prevention of HIV and STI transmission - CATIE fact sheet

Condoms and Other Physical Barriers

Sources

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV- and hepatitis C-related illness and the treatments in question.

CATIE provides information resources to help people living with HIV and/or hepatitis C who wish to manage their own health care in partnership with their care providers. Information accessed through or published or provided by CATIE, however, is not to be considered medical advice. We do not recommend or advocate particular treatments and we urge users to consult as broad a range of sources as possible. We strongly urge users to consult with a qualified medical practitioner prior to undertaking any decision, use or action of a medical nature.

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