

CDC Provides Information to Male Patients and Parents Regarding Male Circumcision and the Prevention of HIV Infection, Sexually Transmitted Infections, and Other Health Outcomes

CDC has released new information for providers to share with male patients and parents of patients about voluntary medically performed male circumcision for the prevention of HIV, sexually transmitted infections (STIs), and other health outcomes in the U.S. These documents are designed to assist clinicians in providing accurate information to help men and parents make informed decisions about circumcision.

Personal decisions about circumcision are influenced by information on the preventive health benefits, safety and risk of the procedures as well as ethical, religious, cultural, familial, and economic considerations.

Background

In 2014, CDC published draft recommendations and made them available online for public comment. Following completion of the public comment period, CDC began a systematic review process to finalize the document. This included a thorough review and written responses for more than 3,000 public comments and an assessment of the proposed information by an independent panel of public health experts. Feedback from the peer review and public comment process, as well as additional data from an updated literature review informed the final documents.

The information states that the health benefits and risks of voluntary neonatal, adolescent, or adult medically performed male circumcision should be considered in consultation with health care providers. Information varies for each population based on the risk of HIV and STI acquisition, availability of evidence on effectiveness by population, and other key issues to consider.

Summary of Document

Heterosexually active adolescent and adult males (including bisexual males): Health care providers should inform all uncircumcised adolescent and adult males that male circumcision reduces, but does not eliminate, the risk of acquiring HIV and other STIs during heterosexual sex. Additionally, they should be informed of the potential risks associated with the procedure. Health care providers should assess the sexual risk behaviors of their male patients, and those at increased risk of HIV infection should be counseled about voluntary male circumcision as another potential strategy for HIV risk reduction. Those who choose to be circumcised should be offered medically performed circumcision services and HIV risk-reduction information. Heterosexual men at increased risk for HIV include:

- Men who are in sexual relationships with HIV-infected female partners
- Men with multiple female partners
- Those in relationships with women who are at high risk for HIV (e.g., commercial sex workers, females who inject drugs, and females in defined populations with HIV prevalence of one percent or higher)

Men who have sex with men (MSM): Providers should inform uncircumcised MSM that data from several observational studies indicate that male circumcision provides partial protection from HIV acquisition for MSM who practice mainly or exclusively insertive anal sex. However, no clinical trials have included large enough numbers of MSM to make a definitive conclusion regarding the usefulness of male circumcision in reducing the risk of HIV acquisition among MSM. Additionally, there is no evidence that male circumcision reduces the risk of acquiring HIV through receptive anal sex.

Parents and guardians of male newborns, children, and adolescents: Parents should be informed of the medical benefits – including reduced risk of future HIV infection – and the risks of male circumcision and should

make decisions in consultation with a health care provider. When providing information to parents about male circumcision for an adolescent minor, the adolescent should be included in the decision-making process.

Key Considerations

The information provided notes a number of key issues that should be considered during the decision-making process:

Health benefits: Male circumcision can reduce a man's risk of acquiring HIV infection by 50 to 60 percent during sex with HIV-infected female partners, according to data from three clinical trials. Circumcised men compared with uncircumcised men have also been shown in clinical trials to be less likely to acquire new infections with syphilis (by 42 percent), genital ulcer disease (by 48 percent), genital herpes (by 28 - 45 percent), and high-risk strains of human papillomavirus (HPV) associated with cancer (by 24 - 47 percent).

While male circumcision has not been shown to reduce the risk of HIV transmission to female partners, it does reduce the risk that a female partner will acquire a new syphilis infection by 59 percent. In observational studies, circumcision has been shown to lower the risk of penile cancer, cervical cancer in female sexual partners, and infant urinary tract infections in male infants.

Health risks: The overall risk of adverse events associated with male circumcision is low, with minor bleeding and inflammation cited as the most common complications. A CDC analysis found that the rate of adverse events for medically attended male circumcision is 0.4 percent for infants aged less than one year, about nine percent for children aged one – nine years, and about five percent for males 10 years and older. More severe complications can occur but are exceedingly rare. Adult men who undergo circumcision generally report minimal or no change in sexual satisfaction or function.

Stage of life: Circumcision is simpler, safer and less expensive for newborns and infants than for adult males. Delaying circumcision until adolescence or adulthood enables the male to participate in -- or make -- the decision, but could diminish the potential benefits related to sexual health and increases the risks.

Informed Choice: Male circumcision is a voluntary procedure. The decision regarding circumcision should be made in consultation with a health care provider, taking into account personal, cultural, religious and ethical beliefs.

Implications for HIV Prevention in the United States

Given the urgency of the HIV epidemic in the U.S., CDC believes it is essential to maximize the impact of all available prevention options and is working to provide clinicians the best possible information on the full range of proven approaches. Male circumcision is one strategy that may help reduce the continued spread of HIV in the U.S. Ultimately, the degree to which male circumcision affects overall HIV transmission in the U.S. in the future will depend on a number of factors whose impact is not yet known. Those factors include the future contribution of heterosexual transmission to the number of HIV infections that occur each year; future rates of infant male circumcision; the percentage of heterosexual men at high risk who elect to be circumcised; and whether the approach can be effectively integrated with other proven HIV prevention strategies. Data on the cost-effectiveness of male circumcision to prevent HIV in the United States are limited, but suggest that newborn circumcision would offer long-term cost-savings by reducing the lifetime risk of HIV infection.

At an individual level, male circumcision may help reduce the risk of HIV acquisition among men, and may be combined with other proven risk reduction strategies to provide even greater protection. While the benefits of

circumcision for uninfected men at risk for HIV infection can be high, the overall public health benefit in the entire U.S. population may be limited due to the lack of definitively proven benefit among people who are infected through the major routes of transmission at a national level (i.e., male-to-male and male-to-female HIV transmission). The greatest benefit will be among uncircumcised heterosexual men living in geographic areas with a high prevalence of HIV.

CDC is committed to ensuring that health care providers have the information they need to make informed decisions about circumcision and other approaches that may reduce the risk of HIV and STIs.

For more information, please visit www.cdc.gov/hiv.

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