HIV and heterosexual intercourse

Dear Alice,

How does a man get infected with HIV through heterosexual vaginal intercourse?

Just wanna know

Answer

Dear Just wanna know,

Nobody — gay, straight, male, female, etc. — is completely invincible when it comes to HIV transmission. As your question suggests, it’s true that a male having vaginal sex with an HIV positive female can indeed become infected with the virus. You may have also heard through the grapevine that it’s actually less common for a man to become infected by a woman in this manner. In fact, a male having vaginal sex with an HIV positive female is actually half as likely to become infected with HIV than a female when she has vaginal sex with a HIV positive male. How is this possible? The reality is that HIV can only get into someone’s system through a mucous membrane or an open wound, and a penis is simply harder to infect than a vagina. Whereas a vagina is almost entirely a mucous membrane (that’s vulnerable to HIV exposure from infected semen), only the urethra or an open sore on a penis can be a route for infection.

Keep in mind that there are many different ways HIV can be transmitted, each depending on the type of contact and which mucous membranes of Person A are exposed to the bodily fluids of Person B (and vice versa). Although vaginal sex and anal sex are more common ways to transmit HIV, oral sex and fingering do pose a risk of transmission, too. Because you ask specifically about sex between a male and a female, here’s a breakdown of the possible ways transmission could occur:

A male is at risk of contracting HIV if his urethra, open sores on his genitals, or open cuts around his mouth come into contact with:

- Infected vaginal fluid (through vaginal or oral sex)
- Infected menstrual blood (through vaginal or oral sex)
- Infected rectal secretions from a woman’s anus (through anal sex or oral/anal contact)
Researchers have found that only the heartiest versions of HIV infect males who have penile/vaginal sex with HIV positive females. To catch you up to speed on how this is possible, here’s a bit of HIV 101: when a person is infected with HIV, the virus begins mutating as it reproduces itself inside their body. This leads every person with the virus to have a variety of versions of it in their system. Because it has such a hard time reaching and infecting the vulnerable tissues of a penis, only the versions of the virus that are the most “fit” actually end up infecting males who engage in vaginal sex. For this same reason, males who have anal sex with other males (MSM) are actually far more likely to become infected (about 20 times more likely) than a male who’s having vaginal sex with a female. This is because the mucous membranes of the anus are very vulnerable to infection.

The good news is that there are effective methods of prevention available. Practicing safer sex, such as using condoms during sex, can reduce the risk of contracting or spreading HIV — no matter who you are or who you prefer to join you in the sack. Although the chances of a male contracting HIV via vaginal sex may be lower than for females or MSM, the risk is certainly still there. The Go Ask Alice! HIV/AIDS [5] and the Safer Sex [6] archives contain lots of information on ways to reduce the risk of HIV transmission and to help you become a safer sex savant!

Alice!
Category:
Sexual & Reproductive Health [7]
Sexually Transmitted Infections (STIs) [8]
HIV/AIDS [9]

Related questions
HIV prevention with PEP, PrEP, and ART medications [10]
Relationship with HIV positive man — Can I have kids? [11]
Safer sex with someone who is HIV positive [12]
What is AIDS? [13]
No penetration — What are my chances of getting HIV? [14]

Resources
Alice! Health Promotion (Morningside) [15]
Safer Sex Map (Morningside/ Barnard) [16]
Center for Student Wellness (CUIMC) [17]
Published date:
Nov 30, 1994
Last reviewed on:
May 14, 2015
Go Ask Alice! is not an emergency or instant response service.

If you are in an urgent situation, please visit our Emergency page to view a list of 24 hour support services and hotlines.

Source URL: https://goaskalice.columbia.edu/answered-questions/hiv-and-heterosexual-intercourse

Links