

General Knowledge

Question 1

- b** *HIV attacks the immune system. The immune system's job is to protect and fight off any germs and diseases. HIV not only attacks the immune system, it takes it over so that the immune system starts to make more copies of the virus.*

HIV and the Immune system

The immune system is a network of cells, tissues, and organs that work together to defend the body against attacks by foreign invaders. The invaders are usually germs, (otherwise called microbes,) which include bacteria and viruses. It is the immune system's job to keep the germs out, or failing that, to seek out and destroy them. If the immune system becomes crippled then it is open to a torrent of diseases.

One of the important groups of immune cells are the T-cells. The T-cells co-ordinate the body's response to germs and diseases, and tell the rest of the immune system to get into action and fight off the invaders.

HIV is so devastating because it hijacks the T-cells and turns them into mini-factories to make more copies of HIV. Each new virus then takes over another T-cell and so on. T-cells are destroyed in the process. The more T-cells you take away the less able the body is to fight disease and so the person falls prey to unusual and life threatening infections and rare cancers. At this stage a person has AIDS.

Adapted from: *Understanding the Immune system: How It Works*, US Department of Health and Human Services, National institutes of Health, September 2003, available at www.niaid.nih.gov

Question 2

- a** *Worldwide, most people get HIV through heterosexual sex (sex between a woman and a man). In some Western countries the virus has affected mostly gay men, leading people to wrongly assume it is only spread man to man.*

Vaginal sex and HIV

Women and men can become infected with HIV through vaginal sex (intercourse). Vaginal sex is the most common way the virus is transmitted in much of the world. In women, the lining of the vagina can sometimes tear and possibly allow HIV to enter the body. HIV can also be directly absorbed through the mucous membranes that line the vagina and cervix.

In men, HIV can enter the body through the urethra (the opening at the tip of the penis) or through small cuts or open sores on the penis.

Risk for HIV infection increases if you or a partner has a sexually transmitted disease (STD).

Not having (abstaining from) sex is the most effective way to avoid HIV. If you choose to have vaginal sex, use a condom to help protect both you and your partner from HIV and other STDs.

Adapted from: <http://www.thebody.com/cdc/faq/transmissionFAQ.html#sex>



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Question 3

- b** *Women are twice as likely as men to get HIV from one act of unprotected sex. In sub Saharan Africa teenage girls are 6 times more likely than boys to have HIV. In some parts of Africa, one-third of girls have HIV. Part of the reason is that most men, no matter how poor can still choose when, with whom and with what protection, to have sex. Most women cannot.*

Women and HIV in the Western World

In the US, since 1985, the proportion of all AIDS cases reported among adult and teenage women has tripled, from 7% in 1985 to 25% in 1999. The epidemic has increased most dramatically among women of colour. African American and Hispanic women represent less than one-fourth of all U.S. women, yet they account for more than three-fourths (78%) of AIDS cases.

Heterosexual contact now is greatest risk for women and sex with drug users plays a large role. In 2000, 38% of women reported with AIDS were infected through heterosexual exposure to HIV; injection drug use accounted for 25% of cases. A significant proportion of women infected heterosexually were infected through sex with an injection drug user. Women are at risk of acquiring HIV sexually from a partner who injects drugs and from sharing needles themselves.

Question 4

- e** *Saliva cannot transmit HIV. To get HIV from saliva you would need to get a lot (cups and cups full) of saliva into your blood through bleeding gums or a cut.*

Can we kiss?

Because of the very small amounts of HIV are found in the saliva of an infected person, very large amounts of saliva would need to get into the bloodstream for infection to occur. Therefore, deep kissing is not an "at risk" behaviour for transmission of HIV. Remember the virus that causes HIV can only be found in human bodily fluids such as blood, sperm and vaginal fluids. Transmission can only occur when the body fluids of an infected person enter your body through an opening, e.g. sharing needles, unsafe sex.

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Question 5

- a** *HIV is the name of the virus that can cause a group of diseases known as AIDS. Someone who has the virus HIV may not have developed AIDS. Without medical treatment it can take 5, 10, even 15 years to get to the AIDS stage. With treatment, it can take twice as long. Small numbers of people have not got AIDS even after ten years.*

The difference between HIV and AIDS

HIV/AIDS is often written and referred to as one word with one meaning. But HIV and AIDS have two different meanings.

HIV stands for Human Immunodeficiency Virus. This is the virus that can cause AIDS. If you have been infected with HIV you are said to be HIV-positive. At the moment, there is no cure for HIV and the virus will always remain in your blood. However, it is important to remember that many people who are HIV-positive look and feel healthy.

AIDS stands for Acquired Immune Deficiency Syndrome.

AIDS is rarely one disease but rather a group or combination of illnesses that develop because the body can no longer fight disease as it normally would. Treatments now available cannot cure HIV but may delay the development of AIDS for many years.

Adapted from: <http://www.multiculturalhivhepc.net/English/hivaids/O2/content.html>

Question 6

- e** *No. HIV doesn't survive in insects. When an insect bites, it doesn't inject its own, or a previously bitten person's, blood. It injects its own saliva. And saliva does not contain enough HIV to infect anyone. Diseases such as malaria are transmitted through the saliva of some mosquitoes.*

Why can't mosquitoes transmit HIV?

Transmission of HIV is dependent on a number of conditions being fulfilled. They include:

- There must be a source of HIV infection. HIV lives in certain bodily fluids of persons infected with HIV. These include blood, semen, vaginal fluid, breast milk and pus. Saliva, sweat and tears contain no or extremely small amounts of HIV and pose a negligible risk for HIV transmission. Urine or faeces have not been shown to cause HIV infection. It is also important to note that HIV only survives for a limited time outside the body.
- There must be a way for HIV to be transmitted to the bloodstream of an uninfected person. Sexual contact, or sharing equipment for injecting drugs are the most common routes of HIV transmission.
- There must be a person susceptible for infection. HIV transmission only takes place between humans. Mosquitoes, for instance cannot become infected with HIV and pass it on to humans.

Adapted from:

http://www.aidsaction.org.au/content/hiv_sti_health/hivaidsfaq18082003.php#transmitted



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Question 7

- a** *Safe sex is where semen (or cum), vaginal secretions or blood are not passed between sexual partners. Using condoms during sex (both penis-in-anus sex, and penis-in-vagina sex) is good protection against HIV for both partners. Safe sex also includes touching, cuddling, and mutual masturbation (fingering and wanking).*

What is safe sex?

Safe sex means avoiding HIV infection. Research has found that the older a young person is, and the fewer sexual partners they have, the less likely they are to get HIV. Always wear a condom and use a water based lubricant when having vaginal or anal sex. The woman may prefer to wear a female condom that is inserted into the vagina.

Kissing, cuddling, masturbation, mutual masturbation, massage, and ejaculating or urinating on unbroken skin are safe activities.

Pre-ejaculate (pre-cum) of an HIV positive man may transmit the virus, so don't rely on the withdrawal method.

Oral sex with either a man or woman is considered a 'low risk' activity for transmission of HIV. The risk increases when people have cuts or sores in their mouth or on their lips, or have recently brushed their teeth and gums or flossed their teeth.

Adapted from:

http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Women_and_HIV_safe_sex?OpenDocument

Question 8

- a** *You have the right to change your mind and say no to anyone, anytime. No one has the right to force you to have sex.*

Women and HIV

Why are women more vulnerable to infection? Usually, because society's inequalities puts them at risk. There are many factors, including poverty, abuse and violence, lack of information, coercion by older men, and men having several partners. Where sexual violence is widespread, abstinence or insisting on condom use is not a realistic option for women and girls. Nor does marriage always provide the answer. In many parts of the developing world, the majority of women will be married by age 20, and have higher rates of HIV than their unmarried, sexually active peers - often because their husbands have several partners.

Adapted from: PlusNews Web Special on International Women's Day - Gender and HIV/AIDS
INTRODUCTION: A message from UN Secretary-General Kofi Annan

Available at: <http://www.plusnews.org/webspecials/womensday/default.asp>



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Question 9

- There is no cure for AIDS and there is no vaccine. Complex routines of taking medical drugs can help control the virus and make a person's life longer and healthier than it would have been without medication. But there is no a cure.*

Cure for AIDS

AIDS treatments are improving, but no cure is predicted in this decade. More likely developments are better and cheaper treatments with less side effects.

Several potential AIDS vaccines are under investigation. A vaccine is hard to find as the virus keeps changing (or mutating and HIV can "hide" for long periods in the immune system's memory cells. Hope is growing that an HIV vaccine that at least slows disease progression, if not one that prevents infection, is possible.

From: *No AIDS cure in the near future*, by Jack Lucentini

November 4, 2003

Available at: <http://www.biomedcentral.com/news/20031104/02>

Question 10

- False. We all come in different shapes and sizes, and so do condoms. For example, some are flared and some are narrow. There is not only a range of condoms for the penis, there is also a female condom which fits inside a woman's vagina.*

Condoms sizes

Britain's leading prophylactics maker, Durex, launched a new condom called Close Fit for the "adolescent" market. This is for people who are a bit smaller. The Close Fit condom has a width of 49 millimetres, compared with 52mm for standard prophylactics and 54mm for Durex's super-size Easy-on range.

