



# **GENERAL INFORMATION ABOUT HIV/AIDS**



## **1. Is there a cure for HIV/AIDS?**

No, there is no cure for HIV/AIDS. Progression of the disease can be slowed down but cannot be stopped completely. The right combination of antiretroviral drugs can slow down the damage that HIV causes to the immune system and delay the onset of AIDS.

## **2. What sort of care and treatment is available?**

Treatment and care consist of a number of elements, including:

- ◆ Voluntary counselling and testing [VCT]
- ◆ Support for the prevention of onward transmission of HIV
- ◆ Follow-up counselling
- ◆ Advice on food and nutrition
- ◆ Treatment of STIs
- ◆ Management of nutritional effects
- ◆ Prevention and treatment of opportunistic infections [OIs]

- ◆ The provision of antiretroviral drugs

### 3. What are antiretroviral drugs?

Antiretroviral drugs are used in the treatment of HIV infection. They work against HIV infection itself by slowing down the reproduction of HIV in the body.

### 4. How do antiretroviral drugs work?

Inside an infected cell, HIV produces new copies of itself, which can then go to infect other healthy cells within the body. The more cells HIV infects, the greater its impact on the immune system [immunodeficiency]. Antiretroviral drugs slow down the replication and, therefore, the spread of the virus within the body, by interfering with its replication process in different ways.

#### *Nucleoside Reverse Transcriptase Inhibitors:*

HIV needs an enzyme called reverse transcriptase to generate new copies of itself. This group of drugs inhibits reverse transcriptase by preventing the process that replicates the virus's genetic material.

#### *Non-Nucleoside Reverse Transcriptase Inhibitors:*

This group of drugs also interferes with the replication of HIV by binding to the reverse transcriptase enzyme itself. This prevents the enzyme from working and stops the production of new virus particles in the infected cells.

### *Protease Inhibitors:*

Protease is a digestive enzyme that is needed in the replication of HIV to generate new virus particles. It breaks down proteins and enzymes in the infected cells, which can then go on to infect other cells. The protease inhibitors prevent this breakdown of proteins and therefore slow down the production of new virus particles.

Other drugs that inhibit other stages in the virus's cycle [ such as entry of the virus and fusion with an uninfected cell] are currently being tested in clinical trials abroad.

### **5. Are antiretroviral drugs effective?**

The use of ARV's in combinations of three or more drugs has been shown to dramatically reduce AIDS related illness and death. While not a cure for AIDS, combination ARV therapy has enabled HIV-positive people to live longer, healthier, more productive lives by reducing viraemia [ the amount of HIV in the blood] and increasing the number of CD4+ cells [ white blood cells that are central to the effective functioning of the immune system].

For antiretroviral treatment to be effective for a long time, different antiretroviral drugs need to be combined. This is what is known as combination therapy. The term 'Highly Active Anti-Retroviral Therapy' [ HAART] is used to describe a combination of three or more anti-HIV drugs.

If one drug is taken on its own, it has been found that, over a period of time, changes in the virus enable it to build up resistance to the drug. The

drug is then no longer effective and the virus starts to reproduce to the same extent as before. If two or more antiretroviral drugs are taken together, the rate at which resistance develops can be reduced substantially. Usually, the combination consists of two drugs that inhibit the reverse transcriptase enzyme and one protease inhibitor.

Antiretroviral drugs should only be taken under medical supervision.

## 6. What is PEP?

Post-exposure preventive [PEP] treatment consists of medication, laboratory tests and counselling. PEP treatment must be initiated within hours of possible HIV exposure and must continue for a period of approximately four weeks. **PEP treatment has not been proven to prevent the transmission of HIV.**

## 7. What is an HIV test?

An HIV test is a test that reveals whether HIV is present in the body. Commonly used HIV tests detect the antibodies produced by the immune systems in response to HIV, as they are much easier [and cheaper] to detect than the virus itself. Antibodies are produced by the immune system in response to an infection.

For most people, it takes three months for these antibodies to develop. In rare cases, it can take up to six months.

## 8. How long after possible exposure should I wait to be tested for HIV?

Generally, it is recommended that you wait three months after possible exposure before being tested for HIV. Although HIV antibody tests are very sensitive, there is a **'window period' of 3-12 weeks**, which is the period between infection with HIV and the appearance of detectable antibodies to the virus. In the case of the most sensitive anti-HIV tests currently recommended, the window period is about three weeks. This period may be longer if less sensitive tests are used.

During the window period, people infected with HIV have no antibodies in their blood that can be detected by an HIV test. However, the person may already have high levels of HIV in their body fluids such as blood, semen, vaginal fluids and breast milk. **HIV can be passed on to another person during the window period even though an HIV test may not show that you are infected with HIV.**

## 9. Why should I get an HIV test?

Knowing your HIV status has two vital benefits. Firstly, if you are HIV-infected, you can take necessary steps before symptoms appear, thereby potentially prolonging your life for many years. Secondly, if you know you are infected, you can take all the necessary precautions to prevent the spread of HIV to others.

## 10. What do I do if I have HIV?

Thanks to new treatments, many people with HIV are living longer, healthier lives. It is very important to make sure you have a doctor who

knows how to treat HIV. A health-care professional or trained HIV Counsellor can provide counselling and help you find an appropriate doctor.

In addition, you can do the following to stay healthy:

- ◆ Follow your doctor's instructions. Keep your appointments. If your doctor prescribes medicine for you, take it exactly as prescribed.
- ◆ Get immunizations [ shots] to prevent infections such as pneumonia and flu [ after consultation with your physician].
- ◆ If you smoke or if you use drugs not prescribed by your doctor, quit.
- ◆ Eat healthy foods.
- ◆ Exercise regularly to stay strong and fit.
- ◆ Get enough sleep and rest.

### **11.What does it mean if I test negative for HIV?**

A negative test result means that no HIV antibodies were found in your blood at the time of testing. If you are negative, make sure you stay that way: learn the facts about HIV transmission and avoid engaging in unsafe behaviour.

However, there is still a possibility of being infected, since it can take up to three months for your immune systems to produce enough antibodies to show infection in a blood test. It is advisable to be retested at a later date, and to take appropriate precautions in the meantime. During the window period, a person is highly infectious, and should therefore take more measures to prevent any possible transmission.

**FOR MORE INFORMATION CONTACT YOUR EAP PROVIDER.**