

ANTI-RETROVIRAL THERAPY

How HIV Makes the Body Sick

There are many different kinds of cells in our bodies. One is the **white cell**, also known as **CD4 cells**. White cells (CD4 cells) are found in our blood. Each person has many white blood cells. The cells are very small—one cell is much smaller than a grain of sand.

White blood cells protect our bodies. The white cells are like a fence around the body, protecting the body from diseases. They attack germs that get into the body so that we do not get sick. White blood cells keep our bodies healthy. They are part of our body's **immune system**—the system which protects us against sickness.

Once a person becomes infected with HIV, the virus begins to live and spread in the white blood cells. **HIV attacks and damages the white blood cells** so that the blood cells cannot do their work of keeping the body healthy. Germs then take advantage of the weakened immune system and attack the body.

This weakening of the immune system takes place over a period of time. People do not get HIV and die straight away. During part of this time a person often feels perfectly healthy and feels no sign of sickness. But over time the immune system gets weak. The body has to work harder to try to fight off other germs and diseases.

The body gets weaker and is attacked by different diseases, including TB, pneumonia, bowel infection, cancer, and meningitis. These diseases are known as “opportunistic infections” or AIDS related diseases. When the body is too weak to fight these diseases the person is said to have **AIDS**—a collection of diseases that attack a person after HIV has made the body weak. When the body becomes so weak the person can die.

What is Anti Retroviral Therapy (ARV)?

ARV therapy is a combination of medicines—usually two or more medications—that are taken by an HIV positive person to **slow down the growth of HIV in the body**. ARV helps to improve the immune system and this helps the body protect itself against AIDS related diseases. If the medicine is properly taken, it can help a person live a healthier, more productive, and longer life.

ARV is not a cure for HIV/AIDS. The medicines will reduce the amount of virus in the body and make people feel healthier, but HIV is still in the blood. So once people start to use ARV therapy, they should continue with it for the rest of their lives. **ARV therapy is lifelong.** If people stop taking treatment, HIV will continue to grow and they will become sick again.

People taking ARV therapy need to **take their medicines at the right time and in the right way each day**. If they stop or forget to take their medicines, HIV will become stronger—and may become resistant to the medication—meaning that the medication will no longer work. ARV therapy is given to people who are HIV positive but do not yet have AIDS and to people who have AIDS. **But not every HIV positive person needs ARV therapy.** Only those people whose immune systems have been seriously weakened by HIV need ARV therapy.

Once a person discovers that he or she is HIV positive, he or she will get tests from health staff:

Viral Load Test: This measures the amount of HIV in the blood.

CD4 Count Test: This blood test measures the amount of white blood (CD4) cells.

The tests help to see if a person needs ARV therapy (when the CD4 count is low) and once a person starts ARV therapy to see how well the medicines are working—to see if the immune system is getting stronger.

When people start taking ARV therapy, their bodies may react to the medicine. These **side effects** may include: painful stomach, nausea and vomiting, diarrhoea, skin rash, excessive tiredness, headaches, tingling feeling in fingers and toes, and sleep disturbances. People should not stop taking the medicine when they have these side effects, but they should report them to the health staff.

Is ARV therapy the only medication available for people with HIV/AIDS? No. People living with HIV/AIDS often receive other medications for opportunistic infections such as TB.

People taking ARV therapy should try to live **healthy and positive lives**—in order to help the ARV therapy fight the HIV in their bodies. Things they can do include:

- 1. Eating good food and plenty of liquids** to strengthen their bodies and keep up body weight. (PLHAs lose weight as a result of opportunistic infections or lose nutrients because of diarrhoea or vomiting.)
- 2. Being physically active.** PLHAs will be healthier if they keep themselves busy.
- 3. Getting enough sleep and rest** to allow their bodies to recover.
- 4. Keeping their bodies and homes clean**—to help reduce the germs which can bring unwanted diseases.
- 5. Practising safe sex (using a condom).** PLHAs taking ARV therapy are still HIV positive and can pass HIV to others. By practising safe sex they can also protect themselves from getting re-infected (increasing the amount of virus in the body).
- 6. Living with hope and getting emotional support from family and friends.** This helps PLHAs feel loved, accepted and better about themselves and this strengthens them to live longer and more productively