



### HIV AND AIDS

#### What is HIV?

HIV means "human immunodeficiency virus". As with all other kinds of virus, HIV does not have an individual metabolism and, therefore, has to attack other living cells and use their metabolism to make copies of itself.

Unfortunately, HIV attacks some of the cells that are vital to a healthy immune system, including the white blood cells known as T-helper cells or CD4 cells.

At the start of HIV infection, the primary HIV infection, there are 2 possible outcomes.

You can either have a short, flu-like illness that occurs 1 to 6 weeks after infection, or so called "dumb" infection with no symptoms at all. However, even if you do not have any symptoms you can still infect other people.

6 to 12 weeks after the infection, the white blood cells have produced so many antibodies against HIV that they can be measured in the blood.

If you have HIV antibodies in your blood, you are HIV positive.

The infected person will feel well for a long time, but the infection is still active inside the body and the virus, which can infect and destroy new blood cells, is constantly being produced.

The number of T-helpers in the blood will slowly be reduced and when, after a number of years, the immune system has been weakened, the infected person will start showing symptoms of AIDS.

Without treatment, it takes an average of 9 years for AIDS to develop after initial infection with the HIV virus.

#### What is AIDS?

AIDS means "acquired immune deficiency syndrome". It is a condition that sets in when the HIV virus has killed so many T-helper cells that the immune system is no longer able to recognise and react to attacks from everyday infections.

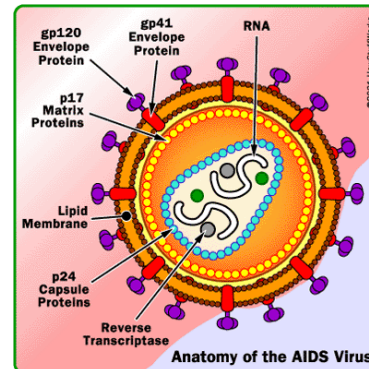
HIV may also attack the nervous system.

#### A number of different symptoms can be observed:

- fatigue;
- inexplicable weight loss;
- repeated bronchial and skin infections that do not react to normal treatment;
- fever;
- swollen nodes;
- diarrhoea;
- small, deep ulcers often preceded by small blisters;
- night sweats;
- outbreak of previous infections that have remained dormant (herpes, toxoplasmosis, shingles and other conditions) so called "opportunistic infections", serious infections by micro organisms of the type normally prevented by immune system. These in turn could lead to a number of related illnesses such as cancer or dementia;

#### How do you get infected?

- Unprotected sex, that is, sex without a condom;
- Blood to blood infection when using a contaminated needle or through transfusions of contaminated blood;
- Mother infecting her child. The child can be infected during the pregnancy, during labour or after the delivery, through the breast milk;



### Ordinary social interaction with HIV positive people is not contagious.

#### Who is at risk?

- People who do not practise safe sex, especially if their partners originate from areas of the world where HIV is widespread, Africa, (south of Sahara desert), Asia and the Caribbean islands;
- Homosexual and bisexual men who not practise safe sex and have many different partners;
- Women who have unprotected sex with many different partners, especially if these include bisexual men;
- Men who have unprotected sex with many different partners;
- Prostitutes who do not practise safe sex. Also at risk are their customers and these customers other sexual partners;
- Drug addicts who share needles;
- Children with an HIV infected mother;
- People who have had many blood transfusions or who were treated with blood products



#### How do you avoid infection?

- **Use a condom.**, using a condom reduces the risk considerably;
- Avoid using drugs that are injected with syringe. Do not share syringes or needles with others;
- Avoid blood transfusions in certain countries where they may not test the blood for HIV;
- People who have already been infected with HIV or belong to high risk groups should not donate blood, sperm or organs;
- Even if you have tested negative you could still be infected with the HIV virus. You may not have produced enough antibodies to indicate infection or were infected after the blood sample for the test was taken;

#### I might be infected, what should I do?

**If you have been exposed to infection, or if you know or suspect that your partner is HIV positive you should contact your doctor as soon as possible for advice, testing and treatment.**

In most cases, the doctor will advise you to be tested approximately 3 months after the possible time of infection.

If you have recently been exposed to infection or have any of the symptoms connected with primary HIV infection, you will be offered a test that checks both antibodies and the HIV virus itself.

In some instances of early HIV infection, the treatment is started at this very early stage.

#### What does the treatment involve and what medication is used?

New and more efficient treatments to fight HIV and reduce the content of virus in the blood are being developed all the time. Unfortunately, HIV is a very efficient virus that can change some of its own characteristics, mutate and create new HIV variants, which are resistant to the medicines used in treatment.

#### Possible deterioration

Eventually, serious illnesses may develop as a result of HIV infection.

Commonly, these include infections of the kind normally prevented by the immune system:

- tuberculosis; pneumonia ;
- toxoplasmosis in the brain;
- reactivation of Cytomegalovirus;
- infections involving the fungus Candida Albicans;
- cancer, especially skin cancer and cancer in the lymph nodes;
- meningitis and encephalopathy, a brain disease which causes dementia;
- death may occur as a result of illness

