

C'KS: Patient information leaflet - HIV and AIDS: whole view

**Patient information leaflet**

*NHS*  
**Direct**

## HIV and AIDS

### Introduction

Acquired Immunodeficiency Syndrome (AIDS) was first recognised as a new condition in 1981.

The Human Immunodeficiency Virus (HIV) is an infection which can sometimes develop into AIDS. It is most commonly passed on by sexual contact. The virus attacks the infection fighting cells of the immune system which, over time, weakens and becomes unable to defend the body against bacteria, viruses and germs.

Since the condition was first recognised, it is thought that around 40 million people worldwide have been infected with HIV, and that about 12 million have died. In the UK, since 1982, over 60,000 people have been infected with HIV. However, the majority of cases are in developing countries, such as Africa, where more than half of all adult deaths are caused by the HIV infection.

Since the mid-nineties, developments in treating HIV have dramatically improved, along with the life expectancy of those who are diagnosed with the virus in the UK.

### Symptoms

When you are first infected with HIV, the initial stage is sometimes known as the latent phase or primary infection. During this phase, you may not have any symptoms. However, many people experience flu-like symptoms in the first couple of months which may include:

- a high temperature and fever
- a sore throat
- fatigue
- a skin rash
- muscle aches and pains
- headaches
- nausea
- vomiting and
- Diarrhea

These symptoms may be an initial reaction to being infected with HIV, but they may also be associated with less threatening conditions, such as influenza (flu).

Following the initial infection stage (which can last for a few months), you may not experience any symptoms for a number of years, and the HIV may go undetected. However, during this time, the virus will continue to multiply and can still be passed on to others. Some people with HIV develop swollen lymph glands and/or night sweats,

If the virus is allowed to spread, your immune system will eventually become severely weakened, and you will develop AIDS. The number of infection fighting cells in your body will have been drastically reduced, opening you up are to a wide variety of serious illnesses and infections, including:

- infections of the mouth e.g. thrush (oral candidiasis),
- recurring mouth ulcers,
- herpes or shingles infections
- unusual types of pneumonia
- tuberculosis (TB)
- infections of the brain and eyes,

- unusual skin problems, and
- Infections of the gastrointestinal tract.

Most people with an advanced HIV infection will also experience severe body wasting and weight loss.

## Causes

HIV can be passed on to others in a number of different ways, including:

**Sexual contact:** if you have sex (vaginal, anal or oral) with someone who is infected with the virus, it can enter your body through the lining of your vagina, vulva, penis, rectum, or mouth. Sex toys used by an infected person can also spread the virus if they have not been washed properly.

**Sharing needles:** drug users who share needles or syringes that are contaminated with infected blood can pass on HIV, as well as other viruses, such as hepatitis B and C.

**Infected blood:** in the past, people have been infected with HIV after having blood transfusions. However, now in the UK, all blood products are checked for HIV before they are used. But infected blood supplies are still a big problem in developing countries, such as Africa.

**Other possible causes:** it is possible to be infected with HIV by accidentally piercing your skin with a contaminated needle. However, cases like this are extremely rare.

Mothers can pass HIV on to their unborn babies. However, treatment with anti-HIV drugs, during pregnancy, greatly reduces the risk of transmission. Having a Caesarean section will reduce the risk further. A mother's breast milk can also contain the HIV virus and be passed on to her child through breastfeeding. Therefore, using formula milk is strongly recommended.

There have also been a few cases where HIV has been transmitted by contaminated medical or dental equipment which has not been sterilised properly.

## How HIV spreads

When the HIV virus enters the body, it seeks out specific types of white blood cells known as helper T-lymphocytes. These cells usually defend the body against infection.

However, the HIV virus takes over the T-lymphocytes and uses the DNA (genetic code inside the cells) to replicate (make copies of itself). The virus kills the T-lymphocyte cells and releases millions of copies of the virus back into the blood. As new T-lymphocyte cells are created, the virus attaches itself to them, spreading the infection.

For a while (during the latent phase), the body manages to keep producing enough T-lymphocytes to keep the immune system working properly. However, after some time (usually

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several years, and sometimes as long as fifteen) and without effective treatment, the body reaches a stage where it is unable to keep up with the virus.

If this stage is reached, your immune system will start to fail and you will become susceptible to a variety of other infections that normally would not make you ill. This stage is known as AIDS.

## Diagnosis

Before treatment for HIV was available, many people felt that there was little advantage in knowing whether they had the virus. However, testing has now made it possible to

monitor health and treatments can be given as and when they are needed (usually not for several years after infection).

### **Blood test**

HIV is diagnosed with a blood test (hence the term HIV positive). However, the test used in most UK hospitals will only show the presence of the virus once it has become established (three months or so after infection).

Blood tests for HIV are very accurate but, if there is any doubt about the result, you will be asked to take another test. A positive result (showing HIV infection) can have wide-ranging consequences for your life and relationships. Therefore, anyone who takes an HIV test should be informed about the implications, and have the opportunity to talk things through if they want to.

Testing can be done either by a GP (family doctor) or in a specialist GUM (genito-urinary medicine) clinic. GPs may be asked to disclose details of test results to insurance companies and others making health checks on an individual. However, tests conducted at GUM clinics are subject to stronger legal confidentiality rules. You do not need to be referred by your GP to have a test at a GUM clinic.

### **Pregnant women**

All pregnant women in England should be offered an HIV test as part of their routine antenatal care. If infection is diagnosed, there are a number of measures that can be taken to reduce the likelihood of the mother passing the infection on to their baby. These include; using antiretroviral drugs for the mother and her newborn baby, giving birth by Caesarean section and avoiding breastfeeding.

### **Diagnosing AIDS**

AIDS is usually only diagnosed on the basis of an AIDS-related condition (such as an infection normally only contracted by those with a damaged immune system) combined with a positive HIV result. Sometimes, people only become aware of the fact that they have HIV when they develop an AIDS-related illness and then have the HIV test.

Treatment can still be effective at this stage but, in the UK, some people die every year because they were unaware that they had HIV until it was too late.

## **Treatment**

The treatment of HIV and AIDS is a specialised area that includes using drugs to suppress the virus, treating the conditions that result from the virus, and providing emotional and psychological support for the individual and his or her family. Most treatment is done by specialists in HIV or GUM (genito-urinary medicine) clinics, although increasingly, GPs are involved in the care of people with HIV.

### **Combination therapy**

Medicines for HIV fall into two main categories. The first is known as combination therapy. Combination therapy is usually started when there are clear signs that a person's immune system is reaching dangerously low levels. Its aim is to suppress the virus and preserve the immune system for as long as possible.

There are now a number of antiretroviral drugs that are given in combination and dramatically improve the life expectancy of someone who is diagnosed with HIV. However, the treatments are complex, usually need to be taken for the rest of your life, and they can have serious side effects. Which drugs need to be taken and when to start taking them will vary according to an individual's circumstances. It is therefore best to discuss this with a specialist.

## **AIDS-related illnesses**

The second type of treatment involves those required for any AIDS-related illnesses that arise. They will vary according to the condition diagnosed. For many people, testing and appropriate combination therapy will mean that this kind of treatment is unnecessary.

Other support available for those affected by HIV and AIDS include; dieticians, physiotherapists, counsellors, plus a wide range of social care and peer support services provided by voluntary organisations.

## **Prevention**

If there is a possibility that you or your partner could have HIV, using condoms is the best way to stop the virus being passed on during vaginal or anal sex.

It can take only a single episode of unprotected sexual intercourse (i.e. not using a condom) with an infected partner for HIV to be transmitted. However, HIV is not always passed on the first time, so it is never too late to start practising safer sex.

Other preventative measures include not sharing needles if you are injecting a blood transfusion in any country that does not screen blood for HIV. drugs, and avoiding

## **Selected links**

[AVERT \(AVERT\)](#)

[Screening for HIV in the antenatal clinic \(Women's Health UK\)](#) [Find your nearest sexual health clinic \(Condom essential wear\)](#) [CD4 count test \(Lab Tests Online UK\)](#)

[p24 test \(Lab Tests UK Online\)](#) [Viral load \(Lab Tests Online\)](#)

[HIV Antibody \(Lab Tests Online UK\)](#) [HIV Resistance \(Lab Tests Online UK\)](#) [Terrence Higgins](#)

[Trust \(THT\)](#) [Information on HIV/AIDS \(Aidsmap\)](#)

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