



UNDERSTAND
AND TREAT

HIV infection



GILEAD

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UNDERSTAND
AND TREAT

HIV infection

Introduction

The information in this publication is provided for information purposes only. It cannot be used to diagnose or treat any condition or disease. This information is intended to improve rather than replace the direct relationship between the reader and the healthcare professional; it neither constitutes nor is a substitute for any medical consultation or examination. A medical consultation or personalised medical examination by a doctor is required for every health problem in order to determine the diagnosis and appropriate treatment.

2020 edition

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A ViVio production, www.vivio.com

You have HIV (or someone close to you has it). Perhaps you have known for a long time. Or maybe you were not sure. It may have come as a shock. In many cases the diagnosis can still be very difficult and worrying, even though we have known about the disease for 30 years now. About 37 million people worldwide are carriers of the virus. There are more than 18,000 people infected in Belgium.

In the vast majority of cases, as long as treatment is started early, it is no longer a fatal disease.



This is a disease that will not go away; you will probably have it your entire life. It is what is now called a chronic infection. Unlike other chronic diseases, however, this one is still a taboo. It can often be difficult to talk about, even though that is exactly what is needed to deal with the challenge.

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"THIS PUBLICATION IS
DESIGNED TO BE A PRACTICAL,
INFORMATIVE GUIDE"

HELP FOR YOU

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01

HIV infection: what is it?

- // When a person is infected with HIV they become seropositive.
- // Progression to AIDS happens when the immune system is weakened due to a reduced number of CD4 cells.

THE HIV VIRUS

The virus

The human immunodeficiency virus (HIV) was first identified in human beings during the last century. Originally the virus was found in primates but later on it adapted itself to humans and can now only be transmitted from human to human.

HIV has a strategy that allows it to **hide in the body**: viral DNA is integrated in human DNA. This allows the virus to survive for a long time without being eliminated by the immune system or eradicated by medication independent from the duration of the treatment. The exact mechanisms involved in this are being carefully studied, because this will be the key to a cure. **The virus is very variable and adapts easily to changing conditions.** That is also how it seeks to evade the effects of the immune system which tries to eliminate it, and medications to which it can become resistant.

A RETROVIRUS

The HIV virus is referred to as a “retrovirus” because it processes genetic information in a different way: the genetic material in the virus is not DNA. Instead it contains RNA, which is only converted to DNA once it is inside the human body. HIV replicates rapidly in an infected individual and can cause direct and indirect harm.

The HIV test

HIV infection is diagnosed using an HIV test. Most tests are carried out on blood serum: tests on saliva, which are available on the internet and carried out at home, must always be confirmed by a blood test. If the blood serum is positive for HIV, this is referred to as being “seropositive” or described as seropositivity. Modern HIV tests look for the presence of antibodies made by the patient after infection and also for components of the virus itself. If either of these is detected, the test is positive.

“IF THE BLOOD SERUM IS POSITIVE FOR HIV, THIS IS REFERRED TO AS BEING “SEROPOSITIVE” OR DESCRIBED AS SEROPOSITIVITY”

This test is always confirmed by another type of test, which is specific for HIV infection. After confirmation by the second test, the HIV infection can be certified. Only AIDS Reference Laboratories (ARLs) carry out these tests, and obtaining the results can take a few days. The HIV test remains positive even if treatment has been given and has completely neutralized the virus. The antibodies that have been made do not usually disappear. The test may be negative at a very early stage after infection, before antibodies have been made or before enough viral components have been produced. If you have been exposed to HIV, you should therefore wait a few weeks or even months to be certain that you have not been infected.



THE IMMUNE SYSTEM

The immune system is a complex set of substances and cells that are responsible for defending the body against bacteria, viruses, micro-organisms etc. It also plays a role in rapid detection and elimination of cells that are likely to evolve into cancer cells. The immune system is partly made up of cells called “lymphocytes”, which are one type of white blood cells. One group of these cells, known as CD4+ cells (also called CD4 cells or T4 lymphocytes) have an essential role.

Although HIV also infects other cells, infection of CD4 cells is central to the way HIV affects human beings. **As the infection progresses**, the number of CD4 cells steadily falls and **the immune system works less and less effectively**. Measuring the number of CD4 cells is therefore important to assess the damage caused by the virus.

Viral load

HIV infection is evaluated and followed up by your doctor by testing for the “viral load”. This specialised test, which is only carried out in ARLs, counts the number of copies of the viral genetic material (viral RNA). In other words, it measures the amount of virus that is present.

This is completely different from the HIV test, which mainly looks for the presence of antibodies. The viral load test is almost always positive

in an infected person who is not yet being treated. **The higher the viral load, the more active the infection.** If the treatment succeeds in stopping the virus from multiplying, the viral load becomes undetectable. The infection has then been halted and the body can recover to a large extent. **An undetectable viral load is the main measure of treatment success.** That does not, however, mean that the virus has disappeared.

“IF THE TREATMENT SUCCEEDS IN STOPPING THE VIRUS FROM MULTIPLYING, THE VIRAL LOAD BECOMES UNDETECTABLE”

EFFECTS ON THE IMMUNE SYSTEM

CD4 and the risk of infections

It is easy to imagine the effect of reducing the number of CD4 cells: increased susceptibility to certain infections and even some tumours. As the numbers continue to fall, abnormal infections may occur, caused by this disturbance in the immune system, which is called “immunodeficiency”. This situation is referred to as AIDS, or acquired immunodeficiency syndrome. **If it is not treated early enough, HIV infection can therefore progress to AIDS.**

Preventing progression to AIDS

Fortunately, there are treatments available that can prevent this progression. Most people infected with HIV do not have AIDS. Progression can be avoided by starting treatment early. **Once the person starts receiving treatment, the immune system recovers** to a large extent and the number of CD4 cells rises again, **significantly reducing the risk of AIDS.** Even if progression to AIDS does take place, this does not necessarily mean that the immune system cannot recover. The CD4 cell count can rise again following treatment, significantly reducing the risk of new infections and often restoring the immune system almost to a normal level.

“PROGRESSION TO AIDS CAN BE AVOIDED BY STARTING TREATMENT EARLY”



TESTS: CD4 AND VIRAL LOAD

These two tests are important and they should be carried out regularly if you are HIV positive.

1/ Measuring the viral load

Viral load tests are carried out for patients who are receiving treatment. The viral load falls during treatment, finally becoming undetectable (< 20, 40 or 50 depending on the sensitivity of the test). The viral load should remain undetectable during treatment, although sometimes it may be slightly detectable.

If it rises significantly, additional tests are needed.

2/ Measuring T4 lymphocytes or CD4 cells

CD4 cell counts are carried out regularly for people who have not yet received treatment, initially to see whether the immune system is recovering well, and later on to ensure the CD4-cell counts remain well.

OTHER EFFECTS ON THE BODY

As a result of the disturbance in the immune system and the possible infections caused by HIV, various forms of inflammation may occur in the body. This is referred to as immunoactivation and inflammation.



The visible signs may include tiredness and skin problems, but in most cases there are **no symptoms**. This situation of chronic inflammation may, however, have a negative impact on many organs, particularly blood vessels and other organs that are highly sensitive to blood flow, such as the heart. This means that HIV infection can indirectly increase the risks of cardiovascular disease, high cholesterol, hypertension, diabetes and other conditions. These diseases, which are already common in the general population, affect people with HIV more commonly or at a younger age. Due to this observation, treatment for HIV-infection is now started immediately at the time of diagnosis.

STAYING HEALTHY

What you need to do to stay healthy when you are infected with HIV

How much you will need to do is really a matter of perspective. A healthy lifestyle is important for everyone, whether you have HIV or not. Nevertheless, HIV can cause additional problems. Healthy living is perhaps even more important for you than for other people. There are a number of different factors involved in a healthy lifestyle.

« **One aspect is good nutrition and maintaining a normal weight.**

Taking vitamins and supplements is rarely necessarily as long as you eat a healthy, balanced diet. The dietician at the reference centre can help you.

« **A healthy lifestyle also includes physical exercise.** Getting as much exercise as you can is healthy for both your mind and body.



⚡ **Alcohol and tobacco harm your health**, whether you have HIV or not, but their harmful effects are slightly worse if you are seropositive. The same applies to most other stimulants or narcotics. Talk to your doctor about this and try to take action.

⚡ **Co-infections can pose a risk to your health**. Some infections, such as hepatitis A, hepatitis B, pneumonia and influenza, can be prevented by vaccines. Others, such as hepatitis C, can be cured. Talk to your healthcare provider.

⚡ **Look after your sexual health**. A sexologist may be able to help. To stay healthy, it is best to avoid sexually transmitted infections (STIs).

⚡ **A healthy mind in a healthy body is very important**. If you do have any psychological problems, talk to someone at the HIV reference centre.

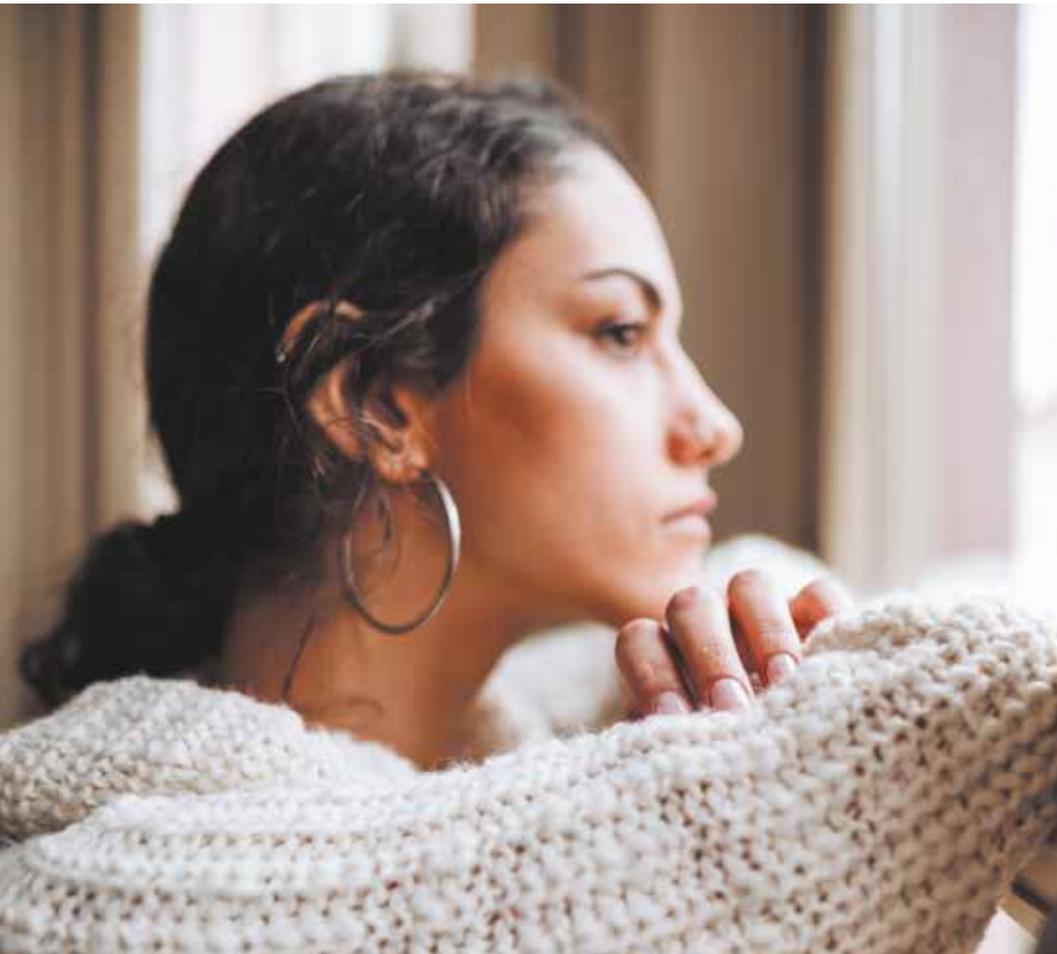


The doctor at the reference centre and your GP will be monitoring your health and can tell you about any preventive measures that are necessary. They will regularly check a number of factors that can pose risks to your general health.

THINGS TO REMEMBER

- / **HIV infection is diagnosed using an HIV test.** This detects antibodies against the virus in the blood.
- / **The viral load is the amount of HIV in the blood.** The higher the viral load, the more active the infection.
- / **Most people who are infected with HIV do not have AIDS.** If treatment is started immediately after diagnosis, this hinders progression to AIDS.
- / **An undetectable viral load is the most important measure of treatment success.**
- / **Without treatment**, the infection will progress and the number of CD4 cells will fall. As a result, **the immune system will gradually work less and less well.** That is when AIDS appears.

UNDERSTAND



02

HIV infection: the symptoms

// HIV infection can develop over a number of years without anyone noticing anything. If the CD4 cell count falls, the risk of opportunistic infections rises.

GENERAL SYMPTOMS

No symptoms for a long time

People who do not have advanced HIV infection often have **no problems and no symptoms**. The infection may well develop over a number of years without anyone noticing. You do not know you have it, **but you are infected and as such also contagious**.

Fatigue, diarrhoea, weight loss, etc.

General symptoms may occur, especially as the number of CD4 cells falls. **Tiredness** is quite common. **Skin problems** – dryness, eczema and certain types of spots – may occur. **Diarrhoea** may become a little more frequent or may even become regular. **Weight loss** may be noticeable. Glands may swell up and then go down again.

AT THE TIME OF INFECTION

When you have just recently been infected, and above all when the tests become positive because the first antibodies are appearing (seroconversion), symptoms such as feeling generally unwell, fever, a sore throat, swollen glands and a skin rash are common. These are very characteristic of what is called the primary infection. Ideally you should have a screening test at this time. Sometimes the symptoms disappear spontaneously. But if no test was done, one will not know whether he/she is definitely infected.



“OPPORTUNISTIC” INFECTIONS

If the disease is not detected and therefore not treated, the immune problems will become more severe, particularly if the number of CD4 cells falls below 200 cells per microlitre of blood. At that point there is a real risk of having unusual infections, known as “opportunistic”, or certain tumours that are characteristic of AIDS.

There are many different possible infections:

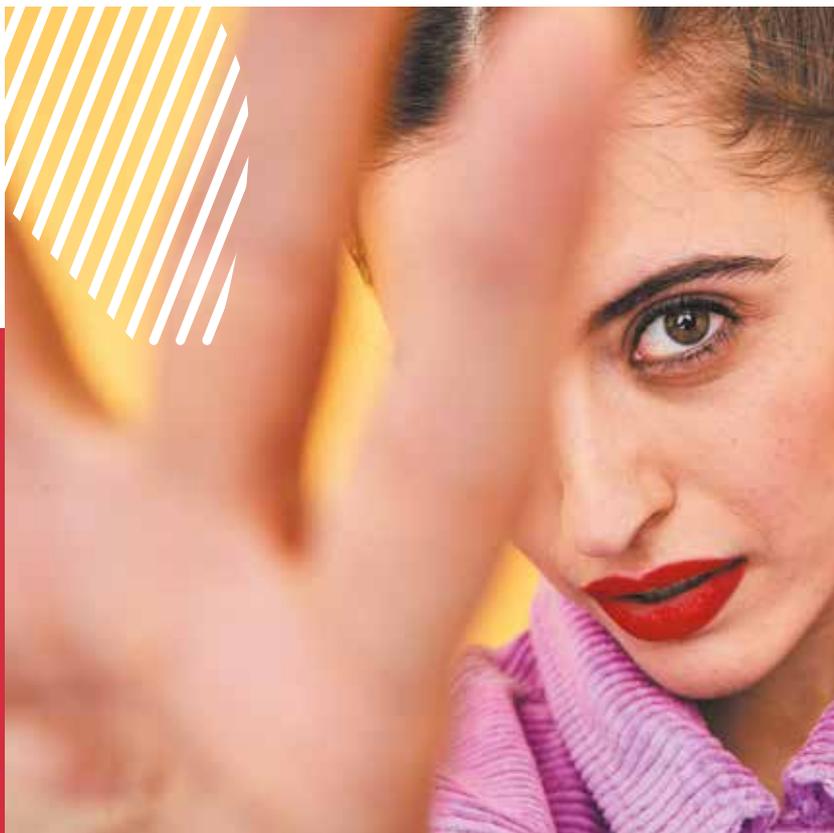
⚡ In this country, **pneumonia** caused by Pneumocystis (also known as pneumocystosis) is common.

- ⚡ In Africa, **tuberculosis** is often the first opportunistic infection.
- ⚡ **Fungal infections of the small intestine and chronic diarrhoea** resulting in weight loss are common both here and in other countries.
- ⚡ **Infections affecting the brain** are the most feared.
- ⚡ **Certain types of tumours** may also occur, such as lymph node tumours – also called lymphomas – **or particular types of cancer** which mainly affect the skin, known as Kaposi sarcomas.

The doctors at the reference centre where you are being treated are specialists in this field and they are best placed to make the diagnosis. There are more or less effective treatments for all these infections, but the top priority is to prevent them by starting antiretroviral therapy.

PREVENTION IS BEST

The best form of prevention is to diagnose the HIV infection early and start treatment immediately before the development of AIDS or the occurrence of any opportunistic infections. At the beginning of antiviral treatment, a temporary course of antibiotics may sometimes be necessary to prevent some of these infections, until the number of CD4 cells has recovered to an adequate level.



“It all started with a mild sore throat”

ELODIE (AGE 25) TELLS HER STORY

You might think it is nothing unusual, but I started feeling more and more tired with no apparent reason – my mother said I was just lazy – and when I started having constant diarrhoea, I made an appointment to see my GP.

After a series of questions, especially about my sex life, he decided it was necessary to do a blood test. That showed that my body was producing antibodies to HIV, so I was seropositive. So I asked myself when I might have become infected. I went through all my boyfriends during the past few months. I called some of them – I didn't have mobile numbers for them all – and very soon found out that Dimitri had been taking medication for HIV for several months.

Although I know that a condom provides protection not only against HIV but also against STIs, we didn't use one. My relationship with Dimitri was passionate but short-lived ... it did not last very long, perhaps because he had “forgotten” to tell me that he had started treatment for HIV.

UNDERSTAND



03

HIV infection: how is the virus transmitted?

// Sexual contact is by far the most common route of infection. Infection can also occur through infected blood (needles, razors, etc.).

SEXUAL TRANSMISSION

A variable risk

Sexual contact is the most common route of transmission for HIV.

Of course you want to have a sex life, but you don't want to infect your partner. **Transmission can occur through all forms of sex**, but the risk varies from one form to another. For example, the risk is lower with oral sex than vaginal sex, and highest with anal sex.

Virus undetectable, virus untransmittable U=U

Wearing condoms, however, can significantly lower this risk. The risk of transmission becomes negligible once the **viral load** has become **undetectable** due to treatment. **If your treatment is monitored carefully, the virus will stay undetectable.**



“OF COURSE YOU WANT TO HAVE A SEX LIFE, BUT YOU DON'T WANT TO INFECT YOUR PARTNER.”

Accidental exposure

In case of accidental high-risk exposure (for example, if your partner informs you after having sexual contact that he is seropositive and his viral load is not yet undetectable, and the condom has torn), **the risk of infection for the seronegative partner can be reduced by taking “post-exposure prophylaxis”**

Safe sex – talk to your sexual partner(s) about STIs

Safe sex (sex without risks) is easier if your partner knows that you are seropositive. It is even “safer” if you don't take extra risks due to the influence of alcohol or other substances. Safe sex protects you also from other STIs.

(PEP) which involves taking antiretrovirals for four weeks. The partner is therefore strongly encouraged to contact an HIV reference centre to find out whether he or she should take PEP. The doctor will assess the risk of the sexual contact that has occurred. PEP is available in all HIV reference centres.

Preventing HIV transmission

PrEP or “pre-exposure prophylaxis” is a treatment for people without HIV who are at high risk of becoming infected. Partners of people who are HIV seropositive who are being treated and have an undetectable viral load do not have to take PrEP because the risk of transmission is negligible for them, as long as the relationship is exclusive. Using treatment as a method of prevention in this way is known as TasP (this stands

for “Treatment as Prevention”). The situation is different when you have sex with someone and you are not aware of the possibility of HIV infection. It is important to know that PrEP only protect against HIV, not against other types of STIs. Someone who is on PrEP should therefore have regular medical follow-up in an HIV treatment centre. Almost full reimbursement is available for PrEP, subject to certain conditions.



TRANSMISSION THROUGH BLOOD AND NEEDLES

No blood donation

The virus is present in the blood. This means it can be transmitted in blood and liquid blood products. If you are HIV positive, this means you can no longer donate blood, plasma or other blood derivatives. This exclusion, which is linked to the screening of all blood products, has made it possible to achieve **very high levels of safety in blood transfusions** in Western countries.

Medical and paramedical staff

Your blood could be a danger to others, particularly to healthcare providers. You should therefore inform them if there is a risk of exposure to your blood, so that they can take the necessary measures to protect themselves and others.

Your dentist,
your GP,
the nurse who draws
your blood,
the surgeon who operates
on you... should all be
informed.

Needles

Contact with blood may also take place outside the healthcare context, via a needle. **If you have used a needle**, whether for injection into a vein, under the skin or into a muscle, **it may contain the virus and must be disposed of in a needle container**. Do not leave it lying around and above all, do not allow anyone to use it after you. **You also should not share your razor**. If you bleed, clean the wound yourself or ask help from someone who is aware that you have HIV and will make every effort to avoid contact with your blood.



“IN BELGIUM, SCREENING AND TARGETED TREATMENT FOR PREGNANT WOMEN HAVE RESULTED IN A VIRTUALLY ZERO RATE OF MOTHER TO BABY TRANSMISSION”

TRANSMISSION FROM MOTHER TO BABY

The virus is mainly transmitted during childbirth, when breastfeeding and sometimes even in utero (in the womb). It is now known that early administration of antiretroviral treatment or ARV to a pregnant woman can considerably reduce this risk. **If the viral load is undetectable before childbirth, the risk of transmission is less than 0.5%, as long as the mother does not breastfeed.** If you are already taking antiretrovirals and want to have a child, you should talk to your doctor to make sure that your treatment will not cause risks during pregnancy. If it does cause risks, your treatment will need to be changed before you become pregnant.

In Belgium, screening and targeted treatment for pregnant women have resulted in a virtually zero rate of mother to baby transmission.

OTHER METHODS OF TRANSMISSION

Only blood and sex

Many people have questions about other possible methods of transmission too. These may even be a worry for you, your family, your friends or acquaintances who know that you are seropositive. You may not always know what poses a risk and what does not. It is essential to have the right information. You can find out yourself, or ask the team at the HIV reference centre to do this. HIV is only transmitted **through blood and by sexual contact.**

Misunderstandings

HIV is not transmitted through saliva, sweat and tears either.

You cannot catch it from a toilet seat. Although basic hygiene recommendations should always be followed with faeces and urine. Mosquitoes and other insects do not transmit HIV. Someone can give you a kiss or have a drink from your glass with no risk at all.

HIV is not transmitted through social contact.

Your children, your parents, your friends and colleagues are not at any risk in everyday life and they do not have to take any specific measures.



“SOMEONE CAN GIVE YOU A KISS OR HAVE A DRINK FROM YOUR GLASS WITH NO RISK AT ALL”

THINGS TO REMEMBER

- There is no longer any risk of transmission once the viral load has become undetectable.
- HIV is only transmitted via sexual contact and blood.
- In case of accidental transmission, the risk of infection can be reduced by taking antiretroviral medication for four weeks (post-exposure prophylaxis or PEP).
- On the other hand, pre-exposure prophylaxis is a treatment for people without HIV who are at high risk of infection.

TREAT



01

Treatment of HIV infection

// Treatment for HIV is now initiated immediately after diagnosis.

// The treatment involves a combination of two or three active ingredients, taken in one or sometimes several tablets daily.



Increasingly well tolerated

ARV treatment is becoming simpler and increasingly well tolerated.

In the past the regimen were quite complicated, but these days it nearly always involves taking one tablet or sometimes a few tablets, just once a day.

... without curing the disease

This treatment cannot, however, eradicate the virus. The viral DNA that is integrated in human cells lives as long as the cells. And it seems that many of these cells, when they are at rest, live as long as the person. So the same is true for the latent virus inside the cells.

Regular medication for life

If the treatment is stopped, viral replication begins again, starting from those cells. **ARV treatment therefore has to be taken lifelong**, or at least until a treatment has been developed that can eradicate the virus (which is not expected in the near future). **It is strongly recommended not to stop taking ARV treatment.** Viral replication restarts quickly, and leads to serious harmful consequences, including the risk of developing resistance that makes the medication less effective.

HOW DOES THE TREATMENT WORK?

Stopping viral replication

Antiretroviral treatment consists of a combination of antiviral medications which together prevent the virus from replicating any further. How do they work? **They interfere with various stages in the viral replication cycle. The medication therefore stops the virus from replicating.** As a result, the quantity of virus falls rapidly, both in the blood and in the organs.

MEDICATIONS FOR HIV INFECTION

A combination of medications

Research into HIV infection has been continuing in recent decades, and this has already resulted in the development of more than 20 medications, which are usually administered in the form of **triple therapy** (a combination of three medications). **This form of treatment to combat the retrovirus is called "antiretroviral treatment" or ART.**

Blocking viral replication

In the late 1980s and early 1990s, this treatment was only able to slow the disease. It was not until the mid 1990s that an **effective ART** became available which could, in principle, **block viral replication.** This effective ARV therapy has continued to evolve since that time, and is becoming both more effective and safer.

Recovery of the immune system

Once viral multiplication has stopped, the immune system can recover to a large extent. Recovery is always possible if the damage done is not excessive, which is why it is best to initiate treatment as quickly as possible. In many cases, however, the prospects are good even if the CD4 cell count was very low. In that case a full recovery will of course be more difficult and the cell count that is reached during treatment will be lower on average.

Symptoms associated with restoration of immunity

Already during the first weeks after ART start, the risk of opportunistic infections decreases significantly. Paradoxically, some pre-existing symptoms may become worse at the beginning of ARV treatment. New symptoms may even occur due to the restoration of the immune system.

This “immune reconstitution syndrome” must be distinguished from adverse effects of the medication and from new infections. Your doctor will know what is happening and decide on the best action to take. This is a temporary phenomenon.



PATIENTS WHO HAVE BEEN CURED?

Only a few people who have definitely been diagnosed as HIV positive have subsequently been declared to be “truly cured”. These are very exceptional circumstances, which may provide opportunities for research. At present, however, there is no prospect of applying this information in practice. In the years to come, uninterrupted treatment will therefore continue to be the only option that is justifiable in practice.

Regular specialist follow-up

Once treatment has been started, it is reviewed regularly at the reference centre. This is initially to see whether the treatment is working. As you know, the effectiveness of the treatment is measured based on the viral load, which is checked at almost every visit, and also by occasional CD4 counts, particularly if the count was low before starting treatment. The viral load indicates the quantity of virus detected in the blood. Other blood tests and sometimes urine tests are necessary to detect possible side effects. Initially these monitoring tests are scheduled after a few weeks, then after a few months, and finally a few times a year.

ANTIRETROVIRALS

The antiretrovirals that are currently in use belong to a number of different classes. A class is a group of different medications that all act in the same way and affect the same process, usually binding to a specific protein of the virus to block its function.

The aim is to block the essential steps in the virus replication. This replication then slows down or, ideally, stops altogether.



“THE ANTIRETROVIRALS THAT ARE CURRENTLY IN USE BELONG TO A NUMBER OF DIFFERENT CLASSES.”

1/ Reverse transcriptase inhibitors

A first group of medications is that of the reverse transcriptase inhibitors.

Reverse transcriptase is used by the virus to convert viral RNA to DNA, which can then be integrated into human DNA (using integrase, see below).

Reverse transcriptase inhibitors were the first medications to become available, and some members of this class are still considered to be the treatment of first choice.

This class is subdivided into two groups: nucleosides and non-nucleosides.

These are therefore referred to as nucleoside reverse transcriptase inhibitors (NRTIs) and non-nucleoside reverse transcriptase inhibitors (NNRTIs). The NRTIs that are often used include emtricitabine, lamivudine, tenofovir and abacavir, which are available separately or in combined preparations. Doravirine and rilpivirine are examples of NNRTIs.

2/ Integrase inhibitors

Integrase inhibitors (INIs) inhibit the action of an enzyme called integrase that integrates viral DNA into human DNA. We currently have raltegravir, elvitegravir, dolutegravir and bictegravir.

3/ Protease inhibitors

Protease inhibitors are another class of medications. These inhibit the action of a viral protease, which is important at a later stage in viral replication to produce an active, intact virus.

Commonly used protease inhibitors (PIs) include darunavir. To be effective, these PIs need help from another medication, known as a “booster”, which amplifies their activity. Cobicistat and sometimes also ritonavir are boosters that are widely used. Protease inhibitors are always given together with a booster.

4/ Other medications

Other types of medication that interfere with the earliest stages in viral binding and entry are less commonly used.

REIMBURSEMENT FOR ANTIRETROVIRALS

The National Institute for Health and Disability Insurance (NIHDI) determines the criteria used to set the level of reimbursement for various antiretrovirals by your mutual insurance company. Your doctor can submit a request for reimbursement on the basis of these criteria. If you meet the criteria, reimbursement will be provided and the medication will be free of charge.

Receiving reimbursement is very important, because these medicines are expensive. Other forms of insurance usually apply the same criteria.

If you do not have an insurance, the reference centre will look for a solution, for example by contacting the CPAS (Public Welfare Centre) or Fedasil, depending on the circumstances.

WHEN SHOULD YOU START TREATMENT?

Starting treatment is an important decision. This is the **time when you take control of the virus and prevent it from replicating freely**. Starting treatment is therefore fundamentally a good thing, but it may also be associated with some disadvantages. This is why careful follow-up at your HIV reference centre is essential.

From a scientific perspective, **there is a consensus that treatment should be started as quickly as possible** because of the clear benefits for the person receiving it. Once the virus has been completely suppressed or the viral load is undetectable, the risk of transmission is negligible.

WHICH TREATMENT IS BEST?

The choice of treatment that will probably be best for you will be made in close consultation with the team at the reference centre. This varies from one person to another.

Combined treatments

Recommendations from scientific guidelines favour combined treatments, so these are most commonly chosen. According to the European Treatment Guidelines, the preferred treatment involves a combination of INI and one or two NRTIs. Other possible combinations include either two NRTIs and one NNRTI or one PI.

“WHEN YOU START TREATMENT,
YOU ACTIVELY TAKE CONTROL OF THE VIRUS AND
STOP IT FROM MULTIPLYING FREELY”



Treatment and lifestyle

There are a huge number of things to take into account, particularly and most importantly **your lifestyle, your habits and your schedules.**

What are your priorities: the number of tablets, possible adverse effects, taking your medicines at mealtimes or at any time? When are you at home with enough time to take your tablets without being in a rush? It is best to avoid taking your medication when other people are present who are not aware that you have HIV, or when you are very busy.

Do you have other health problems that must be taken into account, or are you taking other medications? Are you taking other substances that could possibly interact with your medication? Are there any adverse effects that you are especially concerned about?

You will be involved in the decision, based on your priorities. **This choice should suit you as much as possible and it will also be the one that is easiest to put into practice in your everyday life.**

If you have any problems, a new solution will be found, and again, you will be involved in the discussion with the team. Fortunately there are almost always several options available.



“THERE ARE A HUGE NUMBER OF THINGS TO TAKE INTO ACCOUNT, PARTICULARLY AND MOST IMPORTANTLY YOUR LIFESTYLE, YOUR HABITS AND YOUR SCHEDULES”

THE HIV REFERENCE CENTRE

HIV reference centres and their affiliated centres are approved by the government and selected on the basis of specific criteria and standards. They are accountable to the government and subject to regulation. These reference centres have an agreement (called a “convention”) with the NIHD, which means that some of their activities are funded for patients who comply with the convention.

The whole multidisciplinary team in these reference centres is there to help you. The team will include at least the following professionals:

- specialist doctors;
- nurses and specialist nurses;
- social workers or social nurses;
- psychologists and/or sexologists;
- dieticians.

Under the convention, the services provided by all these paramedical healthcare providers are paid for by the convention. This means that they are free of charge for patients.



ADVERSE EFFECTS

Reducing adverse effects

Concerns about adverse effects can sometimes be an obstacle to starting ARV treatment. No one can deny that the older antiretrovirals caused a lot of adverse effects, and there has been lingering concern about these in many cases. However, the **new medications** have been selected not only for their greater effectiveness, but also and above all because they have **fewer side effects**.

This means that side effects have become rare and milder, but it is still necessary to be aware of them. Since ARV treatment is taken for such a long time, even the mildest side effects could become significant in the longer term.



Adapting your treatment

An adverse effect may be something you feel, something you see, or something that happens in your body that is detected by a blood test before it causes any symptoms. **Some side effects may become obvious immediately, while others only emerge over time.** The doctor at the reference centre is aware of the possible side effects and will take these into account when you

discuss your treatment with him. As a result you will know about the risks you may be taking so that you can make your own decision. If an adverse effect occurs and it is not expected to go away in the near future, your treatment will be adapted to eliminate or reduce the adverse effect. Fortunately, not all medications have the same side effects.

Always talk to your doctor about it

If you are taking ARTs and you think you are suffering from an adverse effect, talk to your doctor or to a nurse about it. They will find out whether it is really a side effect or not. They can then give you instructions on what to do. **If a particular side effect is troubling you and does not go away, it may be necessary to adapt your treatment.**

“SINCE ARV TREATMENT IS TAKEN FOR SUCH A LONG TIME, EVEN THE MILDEST SIDE EFFECTS COULD BECOME SIGNIFICANT IN THE LONGER TERM”

Changing your treatment does not mean that the treatment has failed, and it usually has no negative consequences for the future. However, **that does not mean you can stop your treatment yourself.** You should always talk to the doctor at the reference centre. **Above all, do not stop taking any part of your treatment: doing this will increase the risk of developing viral resistance.**

In a few isolated cases, the treatment does have to be stopped completely for a short time. But any decision to stop your treatment must always be made in consultation with your doctor, to avoid limiting your future treatment options.

Overall, after possibly a few trials of different medications during the first few months of treatment, the vast majority of patients who take ARVs have no adverse effects at all.



VIRAL RESISTANCE

A highly adaptable virus

HIV is a rapidly changing virus and as soon as it begins to multiply, it is constantly adapting to different conditions in order to survive. One problem that can result from this is that the virus may develop a resistance to one or more antiretrovirals. **Once the virus has developed a resistance to a medication, the resistance becomes chronic** and the medication has (virtually) no effect. In many cases, other medications in the same class may also become less effective because of so-called “cross-resistance”.

Resistance test

The virus will only become resistant if it has the opportunity to multiply despite the presence of medications in the body. **Your doctor will choose a combination of medications that prevents the virus from replicating at all.**

To do this, a resistance test will have to be carried out at the reference laboratory before starting your treatment. **It is important to know that a resistant virus can be transmitted to others.**

Resistance may therefore be present even before starting treatment. If the doctor prescribes the right medication, however, viral replication will be stopped completely.

Taking your medication correctly

Viral multiplication will be stopped completely as long as you take your medication correctly and comply with all the instructions (therapeutic compliance), and as long as you do not take any other medications or substances that could destroy the antiretrovirals. Do not forget that you are also at risk of developing resistance even if you just stop taking (part of) your medication.



“ANTIRETROVIRALS CAN ALSO HAVE EFFECTS ON OTHER MEDICATIONS, AND REDUCE OR STRENGTHEN THEIR ACTIONS, SOMETIMES WITH SERIOUS CONSEQUENCES”

DRUG INTERACTIONS

Medications that you take are absorbed, broken down and eliminated by the body. The dose of a medication and the method of administration are determined to ensure that exactly the right amount is in the body at all times. This should be enough to block the virus but not too much, to avoid a higher risk of adverse effects.

Other medications and products may affect these absorption and breakdown mechanisms.

In the case of antiretrovirals, these interactions could result in an insufficient quantity of the medication being present, and as a result viral replication may not be properly blocked, leading to viral resistance. In rare cases, the result may be that too much medication is present, leading to more side effects.

Antiretrovirals can also have effects on other medications, and reduce their actions or increase their side effects, sometimes with serious consequences. **All combinations of different medications must therefore be reviewed very carefully.**

Your doctor will always take any possible interactions into account. Other prescribers, and your pharmacist, will also do this. They will consult specialist sites (such as www.hiv-druginteractions.org) and will also contact your GP if necessary.

Early detection of viral resistance

Viral resistance can be detected, and its progression can be avoided. In many cases **the first sign of viral resistance** is that virus is being detected again, therefore causing **a rise in the viral load.**

Tests should be carried out regularly to monitor your treatment. If this does happen, the reference centre will respond quickly and request a new viral load test and a new resistance test. **Prevention is absolutely essential.** This is because once resistance has become established, it will remain and will limit your treatment options. That will make treatment more difficult: medications may have to be taken more times each day, with more tablets to take and greater risks of side effects. This is absolutely a situation that must be avoided.

THERAPEUTIC COMPLIANCE: DIFFICULT BUT IMPORTANT

Taking your medication at exactly the right time

To be effective, a medication must be taken. That probably seems obvious. When it comes to antiretrovirals, it is even more important. **If you do not take your medications correctly, the virus can start replicating again and may become resistant.**

Your treatment will then become ineffective, even if you start taking the medication again and comply with all the instructions.

The problem with not taking your treatment correctly is that when you skip, stop or restart one or more medications, the amount of medication in your body is no longer enough to block the virus, so it starts replicating again.

On the other hand, there is still some medication left in your body, so the virus is able to adapt to this. This is the most important cause of viral resistance, and once it has developed that resistance never goes away.

“IF YOU DO NOT TAKE YOUR MEDICATIONS CORRECTLY, THE VIRUS CAN START REPLICATING AGAIN AND MAY BECOME RESISTANT”

This means that not taking your medication correctly can have long-term consequences and could result in some combinations of medications becoming ineffective – in many cases these are the easiest ones to take. Once they become ineffective, you will be required to go onto a more complex medication regime. You should therefore contact your reference centre as soon as possible if compliance with treatment becomes more difficult so that you can be supported in taking your medication correctly.



HOW TO AVOID FORGETTING YOUR MEDICATION TIPS TO HELP YOU REMEMBER

- ⌘ **Choose the right time:** when you are in a familiar environment and not in a rush
- ⌘ **Associate taking your medication with a regular activity:** having a meal, brushing your teeth, going to bed, etc.
- ⌘ **Use a reminder:** a watch or mobile phone alarm, etc.
- ⌘ **Get your partner involved,** if you wish to do so.
- ⌘ **Use a pill organiser**
- ⌘ **Always have a dose of your medication on you,** just in case.

Always keep a good stock: the pharmacist does not always have the medication in stock and sometimes your order could take a few days to arrive. If you are at risk of running out, contact the staff at the reference centre, who will help you to find a solution.

Keep an eye on the expiry dates of your reimbursement certificates and submit a new request to your doctor in time.



Preparing yourself psychologically

Taking your medication can sometimes be a challenge:

- ⌘ taking one or more tablets every day,
- ⌘ at more or less the same time,
- ⌘ possibly with a meal,
- ⌘ without forgetting the possibility of side effects.

How can I remember?
Do I want other people to see me taking my medication, or how can I avoid this? Do I really want to take these tablets?

Fortunately you are not alone.

The reference centres have specialist staff who work in this area, and whom can provide you with all the tools you need.

Taking your medication properly is your common goal and it is a shared responsibility between you and your healthcare providers. There is a greater chance of success if your treatment is adapted to suit your lifestyle, rather than adapting your lifestyle to suit your treatment. Talk to the team looking after you about your difficulties, so that the best solution can be found for your situation.

“THERE IS A GREATER CHANCE OF SUCCESS IF YOUR TREATMENT IS ADAPTED TO SUIT YOUR LIFESTYLE, RATHER THAN ADAPTING YOUR LIFESTYLE TO SUIT YOUR TREATMENT”



STOPPING TREATMENT?

As you have seen, you will need to take your treatment lifelong, possibly with a few changes.

Research has shown that stopping treatment is usually associated with more problems than benefits. Some people, however, do want to stop their treatment because they are experiencing too many side effects, can't cope with it anymore or think they are cured. Women who are pregnant may be afraid of the effects of their medications on the baby. Some patients who are going on holiday are concerned that their

medication will reveal that they are seropositive, possibly resulting in disapproval.

If you want to stop your treatment for any reason, either temporarily or permanently, **talk to the team at the reference centre** first.

They will listen to your concerns and see whether there are any other options rather than simply stopping the treatment. In a few very rare cases it may be that – after very careful assessment of the benefits and challenges – the best solution is to stop the treatment temporarily, with regular medical monitoring.

“IF YOU WANT TO STOP YOUR TREATMENT FOR ANY REASON, EITHER TEMPORARILY OR PERMANENTLY, TALK TO THE TEAM AT THE REFERENCE CENTRE FIRST”

Sometimes treatment is stopped simply due to running out of one or more of the medications. You should always try to avoid this situation: keep a good stock, order from the pharmacy several weeks before the box is finished and put a large enough stock in your hand luggage if you are travelling. If despite everything you do run out, contact the reference centre immediately because there is often a better solution than stopping your treatment.

THINGS TO REMEMBER

- Antiretroviral treatment stops HIV from replicating, allowing the immune system to recover to a large extent.
- The treatment has to be taken lifelong. Stopping your treatment is not an option.
- There are various types of medication, which are always given as a combination. Today it is possible to take a single tablet, or sometimes several tablets, daily.
- Regular follow-up in an HIV reference centre is necessary to check whether the treatment is working and for immediate detection of any adverse effects.
- It is absolutely essential to take your treatment carefully and regularly. This reduces the risk of the virus becoming resistant to the medications you are taking.



01

HIV and relationships with others

// You can do virtually any job,
and you do not have to inform
your employer.

HIV AND SEXUAL RELATIONSHIPS

Informing your regular partner

It is always **better to talk to your regular partner at a very early stage**. The diagnosis may have important repercussions for your relationship. You need to discuss it; this is essential. People who love you will still love you once they become aware of the diagnosis. Sometimes it is difficult to inform people immediately, because you are having difficulty coping with the news yourself. However, **the longer you delay, the more difficult it will be to talk about it**. If you hide it from your partner, particularly if you are having sex, the longer you wait, the higher the risk you will lose his or her trust. Some people find it easy to talk about it and other people find it very hard, but it is really important to do it.



Previous partners

Previous partners who you may have infected or who may have infected you, should be informed. If you do not want to do this, ask the HIV reference centre to do it anonymously.

High-risk sex

If you have engaged in high-risk sex, for example if the condom has torn, **you absolutely must tell them about it**. Your partner can then take the necessary action to avoid being infected. You cannot leave him or her unaware.

Other STIs

The STIs that you may be exposed to depend on your sex life. Some of these are common, such as chlamydia and human papillomavirus (HPV). Others are less common, except in certain situations, such as syphilis, hepatitis C and lymphogranuloma venereum. Vaccinations are available against some of these, such as HPV and hepatitis A and B. For others, you will need to be screened and receive treatment if this is necessary and possible.

Some STIs will develop in the same way whether you have HIV or not. Others cause more difficulties due to co-infection. Some of them can be cured. Others are impossible or more difficult to cure. **Prevention is always best**.

For detailed information that is tailored to your sex life, **talk to the doctors and advisers at the reference centre** or contact a patient association.



FAMILY AND FRIENDS...

Another taboo

There are no rules – the response really varies from one person to another. Some people choose to tell everyone about it. If that is what they prefer, this is not a problem. At least it should not be a problem... but in reality HIV infection is often viewed differently from other diseases, and patients are still often stigmatised. It can still be difficult

to talk about it because people do not always react in the way you had hoped.

People usually decide to tell some people and not others. Carefully choose the context and the moment to talk about it. **Talk about it to someone you trust:** a friend, a member of the team at the reference centre, a colleague or a member of a patient association, etc.

Weigh up the pros and cons

When it comes to your parents, your children and your friends, you do need to weigh up the pros and cons. To what extent can you trust them? How much of a burden could it be for them to have this information? Ask them to keep your confidence so that you can maintain control of who knows and who doesn't. This decision depends very much on the individual situation and it may change over time. Prepare for your conversation and wait for the right time. Support and understanding from those close to you can help you to get things in perspective. So you need to wait until the moment is right for you and also for them.

“PREPARE FOR YOUR CONVERSATION AND
WAIT FOR THE RIGHT TIME”

Medical staff

Do not hide your situation from doctors and other healthcare providers: they have a duty to maintain professional confidentiality and they need to be aware of it in order to provide the right care for you. If they are exposed to your blood, you must tell them so that they can take

the necessary action. The members of the team at the reference centre of course need to be aware so that they can help you and provide the right care. They are all bound by professional confidentiality and they are forbidden by law to talk to anyone about it.

AT WORK

It is usually perfectly possible to work with HIV.

There is no problem if the HIV does not make you ill. If you are **on antiretrovirals** to avoid falling ill, **the risk of becoming sick is very similar to the risk for a person without HIV.**

If you do have an illness, it is usually a temporary problem. It will go away once you have recovered, as with other types of illness. If you are unfit for work this will be based on exactly the same factors as it is for everyone else. There are times when things may be difficult psychologically and this could mean that you are temporarily unable to work. Permanent work incapacity, however, is very rare.

“AT WORK, YOU DO NOT HAVE A DUTY TO INFORM ANYONE. IT IS UP TO YOU TO TALK TO YOUR COLLEAGUES OR YOUR BOSS, BUT ONLY IF YOU CONSIDER IT NECESSARY.”

In your private life

You can do almost any job with HIV and you do not have to inform your boss. It is your private information. You definitely should not mention it during the recruitment process, and you should be aware that **employers are forbidden by law from screening you.** You can talk about it later if you wish, and sometimes that can be helpful. If you do so, it is best to inform the occupational doctor rather than your employer or your colleagues. Do not make any hasty decisions. Talk to the social worker at the reference centre. Dismissal on the grounds of being seropositive is forbidden, discriminatory and punishable by law. Employers may, however, be able to use another, legitimate, reason as a pretext.

SHOULD YOU INFORM YOUR EMPLOYER?

At work, you have no obligation to inform anyone. It is up to you to talk to your colleagues or your boss, but only if you consider it necessary. All discrimination based on a person's serological status is strictly forbidden, but you could still suffer professionally, in subtle and less subtle ways. This kind of information can also lead to irrational reactions or lead to certain forms of bullying. It is therefore best to avoid talking

about it at work. In some cases it may be useful or necessary to inform your occupational doctor if this gives you an entitlement to working conditions that are better suited to your health. Nevertheless, we would still advise you to talk to your GP first.

If you think you have been subject to discrimination because of HIV, you can contact a confidential advice centre, Sensoa or Unia.



“My boss was understanding”

GERARD (AGE 55) TELLS HIS STORY



I work in the distribution centre for a major retail chain and I have no contact with customers. I still informed my boss that I was being treated for HIV and he was glad I had told him.

Next year I will have been working for the company for 30 years. I love my job and since that time I have become warehouse manager. I would have been sad to change jobs because of HIV. Nevertheless, I waited for some time before talking to my boss. I told a colleague who is also a friend first. Initially I was not tolerating my medication very well and I often needed to have time off sick. That does not happen on my current treatment, so I very rarely need to take any time off work.

When I need to go to the HIV reference centre for a check-up, I have the blood test early in the morning before work and I can usually attend the consultation in the evening after work, or else I take a day of annual leave. Since then I have informed a few other colleagues, but not all of them. Some people might view me differently and they could ask questions that I would prefer not to answer.

INSURANCE

People need all kinds of insurance. You will have no problems with most of them. When health and sickness are involved, however, **your HIV infection may be important**. For example, it does matter when you take out **an outstanding-balance insurance policy** to cover a mortgage or other loan, or a **life assurance** policy or get **supplementary health insurance**. As with other chronic diseases, these forms of insurance are usually still available, but you will have to pay a higher premium.

In some cases they may ask you for additional information, which you may decide to pass on via the reference centre. When taking out a new insurance, you should not lie, not even by omission. If you do lie it won't make any difference as long as you don't need the insurance policy. When you do need it, however, and it turns out that you have hidden your condition, there is a risk that you will receive no compensation at all, despite having paid your premiums. Talk to the social worker at the reference centre about this and get informed.

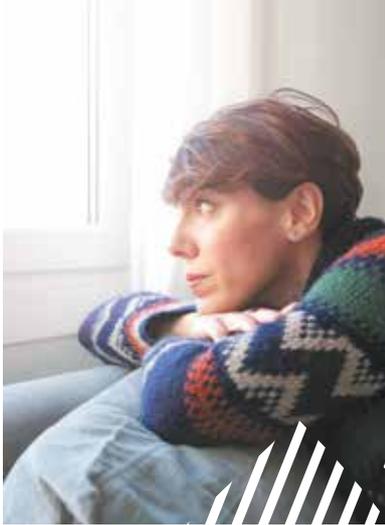


QUESTIONS / ANSWERS

Can I still have a relationship?

Of course you can. **You can continue in an existing relationship or start a new one.** The most important thing is to communicate openly and not to wait too long. If your partner finds out you are hiding a secret and not taking him (her) into your confidence, that will inevitably lead to tensions. The longer you wait before talking about it, the more you are putting the future of your relationship at risk. It still won't be easy, however, for you or your partner. Sometimes couples do break up. Sometimes the bond is even stronger once the crisis has passed.

The problem will also arise at the beginning of a new relationship, and then too it is important not to wait too long before informing your partner about it.



You won't be talking about it on your first date. If you wait too long, however, there is a risk that you will destroy the trust that has built up. That could be in the context of a long-term relationship.

HIV can make having sex more complicated, so talk to the doctor, the psychologist or the sexologist at the reference centre. Sometimes you will need certain tests. In some cases medications may help.

Can I still have children?

It may seem surprising at first, but it is possible. **You can become pregnant through normal sexual intercourse.** In fact the possibilities and conditions are exactly the same whether you have HIV or not.

It is important that you and/or your partner take your medication correctly at all times and that the virus has been suppressed or the viral load is undetectable. If you don't wish to have children, you should make sure you take a contraceptive.



Will I infect my baby?

If antiretrovirals have made a pregnant woman's viral load undetectable during her pregnancy and until childbirth, **the risk of transmission is below 0.5%, as long as the woman does not breastfeed and the baby receives treatment during the first 4 to 6 weeks of his or her life.** Your baby will then be monitored and screened for a few months, until it is possible to fully exclude the possibility of infection.



What should I do to have safe sexual relations?

Kissing, touching and masturbation are all safe. When your viral load or your partner's viral load are undetectable, the risk of transmission is negligible. However, if there is a risk that the virus is not completely under control, it is strongly recommended to **use**

a condom to prevent transmission of HIV. **A condom is also the best prevention against other STIs.** Use a water-based lubricant to avoid damaging the condom. Shared sex toys may also transmit HIV or other STIs.





02

In practice

// Talking about it to a healthcare professional at the HIV reference centre or another patient through a patient association may help.

// Who can help and where can you find them?



PATIENT ASSOCIATIONS

AIDE INFO SIDA ASBL (AIDS info help)

Rue Duquesnoy 45 | 1000 Brussels
Tel.: 02/514.29.65
(secretaries during working hours)
Tel.: 0800/20.120
E-mail: aide.info.sida@gmail.com
Website: www.aideinfosida.be

The non-profit association Aide Info SIDA (AIDS info help) provides a free, anonymous telephone listening service from Monday to Sunday between 18:00 and 21:00. You can obtain information and moral support from them.

EX ÆQUO

Rue des Pierres 29 | 1000 Brussels
Tel.: 02/736.28.61
Monday to Friday, 09:30 to 12:30 and
14:00 to 17:00 (also some evenings)
E-mail: info@exaequo.be
Website: www.exaequo.be

Health promotion, prevention and screening for men who have sex with men.

PLATEFORME PRÉVENTION SIDA (AIDS PREVENTION PLATFORM)

Place de la Vieille Halle aux Blés 29 |
1000 Brussels
Tel.: 02/733.72.99
E-mail: info@preventionsida.org
Website: www.preventionsida.org

Plateforme prévention Sida offers information and answers questions about HIV and STIs. The association also provides activities for people living with HIV: cooking workshops, cultural outings, residential weekends, walks, sharing and reflection workshops, etc.

UTOPIA_BXL

Rue du marché au Charbon 42 |
1000 Brussels
Postal address:
Avenue Emile Duray 68 |
1000 Brussels
Tel.: 0474/40.85.03
E-mail: utopia.brussels@gmail.com
Website: http://rainbowhouse.be/fr/association/utopia_bxl/

Association to support lesbian, gay, bisexual and transsexual (LGBT)

seniors (50+) who have HIV and defend their rights. Utopia_BXL offers cultural activities, surveys and round table discussions with seniors around key problems, a housing initiative for LGBT seniors or educational tools around health and well-being, for example concerning HIV and ageing.

Lhiving asbl

Rue pôle 2 | 1210 Saint Joost ten Node
Tel: 02/201.14.19
E-mail: info@lhiving.be
Website: www.lhiving.be

NYAMPINGA (LE COLLECTIF DES FEMMES) (THE WOMEN'S COLLECTIVE)

Rue de la Citronnelle 71 |
1348 Ottignies-Louvain-la-Neuve
Tel: 010/47.47.69 (via Collectif des femmes asbl).
E-mail: infocollectifdesfemmes.be
Website: www.collectifdesfemmes.be

A place where women affected by HIV can meet so that they feel less alone.

**SERVICE DE SANTÉ AFFECTIVE,
SEXUELLE ET RÉDUCTION DES
RISQUES (EMOTIONAL, SEXUAL
AND RISK REDUCTION HEALTH
SERVICE = S.A.S.E.R.)**

Rue Docteur Haibe 4 | 5000 Namur
Tel.: 081/77.68.20
E-mail: saser@province.namur.be
Website: https://www.province.namur.be/sante_affective_sexuelle_et_reduction_des_risques

AIDS screening and actions to prevent AIDS and STIs (sexually transmitted infections).

SIDA SOL

Rue des Fontaines-Roland 29 |
4000 Liège
Tel.: 04/287.67.00
Fax: 04/266.54.32
E-mail: info@sidasol.be
Website: <https://sidasol.be>

The aim of the association is to engage in primary, secondary and tertiary prevention of AIDS and STIs, conduct research-action, combat discrimination, provide training and develop solidarity actions for vulnerable groups.

**SIDA-IST CHARLEROI-MONS
– POLYCLINIQUE DU CHU DE
CHARLEROI**

Boulevard Zoé Drion 1 |
6000 Charleroi
Tel.: 071/92.54.10
E-mail: sidamst@chu-charleroi.be or
sidamons@skynet.be
Website: www.sida-charleroimons.be

Welcome, listening, information, screening and psycho-medico-social follow-up for patients with HIV.

SENSOA POSITIEF

Franklin Rooseveltplaats 12 box 7
(5th floor) | 2060 Antwerp
Tel.: 078/15.11.00
Monday: 13:00 to 16:00
Thursday evening: 18:00
to 21:00
E-mail: positief@sensoa.be
Website: www.levenmethiv.be

Flemish expert centre for sexual health. Sensoa Positief provides services for people who are seropositive and those close to them.

The service is free, confidential and anonymous if you wish. Also in English and French.

HIV-SAM Project

Nationalestraat 155 | 2000 Antwerp
Tel.: 03/247.07.18

E-mail: hivsam@itg.be
Website: www.hivsam.be

The HIV-SAM project supports HIV prevention and promotes sexual health among Sub-Saharan African Migrants (SAM) in Flanders.

MUUNGANO VZW

Charles de Costerlaan 21, box G11 |
2050 Antwerp
E-mail: nduomer@yahoo.fr

Charity organisation that provides support and advice to people originally from Sub-Saharan Africa who have HIV.

HIV REFERENCE CENTRES

The twelve HIV Reference Centres in Belgium provide specialist medical follow-up for patients who are seropositive. These centres also offer various forms of follow-up: nursing, psychological support, advice from a dietician, etc.

ULB, CETIM/ CHU SAINT-PIERRE REFERENCE CENTRE

Rue Haute 322 | 1000 Brussels
Tel.: 02/535.31.77 (Monday to Friday: 09:00 to 12:00 and 13:30 to 17:00. Contact the emergency department outside these times.)
Website: www.stpierre-bru.be

Centre Élisabeth – CHU Saint Pierre – Site César De Paepe

Rue des Alexiens 11 | 1000 Brussels
Tel.: 02/535.30.03

Anonymous, free screening for HIV (subject to NIHDI conditions) / Free screening for other STIs subject to certain conditions (low income or age 15-19 years) / Free consultations and blood tests / Psychologist / No appointment needed.
General public: Monday 08:00 to 13:00 and Thursday 15:30 to 19:00.
Persons aged 15 to 29 years only:
Wednesday 12:15 to 15:00.

S Clinic – CHU Saint Pierre – Site César De Paepe

Rue des Alexiens 11/13 | 1000 Brussels
Tel.: 02/535.37.32

STI clinics / Screening, follow-up and treatment for STIs / Initiation and follow-up for NONOPEP / Consultations with and without appointments / Tuesday 13:30 to 16:00 and Friday 08:30 to 11:00.



HÔPITAL ÉRASME (CLINIQUES UNIVERSITAIRES DE BRUXELLES)

Unité de Traitement des Immunodéficiences (Immunodeficiency Treatment Unit)

Route de Lennik 808 | 1070 Brussels
Tel.: 02/555.45.36 (secretaries) and 02/555.46.88 (appointments)

Emergency telephone line:

Tel.: 02/5557484
(Monday to Friday, 09:00 to 17:00)

Website: <https://www.erasme.ulb.ac.be/fr/services-de-soins/services-multidisciplinaires/centre-de-reference-sida>

E-mail: CRSida@erasme.ulb.ac.be
Centre de référence SIDA: 02/555.74.84

CLINIQUES UNIVERSITAIRES SAINT-LUC (UCL)

Service de Médecine Interne Générale (General Internal Medicine Department)

Avenue Hippocrate 10 | 1200 Brussels
Tel.: 02/764.19.02 and 02/764.21.22
Monday to Friday: 09:00 to 17:00
Website: <https://www.saintluc.be/services/medicaux/vih/depistage.php>

UNIVERSITAIR ZIEKENHUIS BRUSSEL

Centre de référence SIDA

Avenue du Laerbeek 101 | 1090 Brussels
Tel.: 02/477.60.01 (appointment needed)
Website: www.uzbrussel.be/fr/web/infectiologie/centre-de-reference-sida

**CENTRE HOSPITALIER
UNIVERSITAIRE DE CHARLEROI –
HÔPITAL CIVIL MARIE CURIE**

**Clinique des Maladies Infectieuses
(Infectious Diseases Clinic)**

Chaussée de Bruxelles 140 |
6042 Lodelinsart

Tel.: 071/92.23.07 (specialist nurse)
and 071/92.25.11 (secretaries)

E-mail: maladies.infectieuses@chu-charleroi.be

Website: www.chu-charleroi.be

CHU DE LIÈGE

**Domaine universitaire du Sart-Tilman
(Sart-Tilman University Campus)**

Building B35 | 4000 Liège

Tel.: 04/270.31.90 (secretaries)

E-mail: crs@chu.ulg.ac.be

Website: https://www.chuliege.be/jcms/c2_17345654/fr/centre-de-referance-sida/accueil

Polyclinique Lucien Brull

Quai Godefroid Kurth 45, 5th floor |
4020 Liège

Tel.: 04/242.52.00

CHU UCL NAMUR – GODINNE SITE

**Infectiologie – Centre de référence
VIH (Infectious Diseases – HIV
Reference Centre)**

Avenue Dr Gaston Therasse 1 |
5530 Yvoir

Tel.: 081/42.20.81
(Wednesday 08:30-16:30 and
Thursday 08:30-12:00)

Website:

<http://www.uclmontgodinne.be/gorganimedical/hp?action=servicedetail&serviceid=82>

**UNIVERSITAIRE ZIEKENHUIZEN
LEUVEN / GASTHUISBERG CAMPUS**

**Dienst voor Algemene Interne
Geneeskunde (General Internal
Medicine Department)**

Herestraat 49 | 3000 Leuven

Tel.: 016/34.44.88

E-mail: conventie.ial@uzleuven.be

Website: <https://www.uzleuven.be/nl/raadplegingen/hiv-en-aids-raadpleging>



**HIV REFERENCE CENTRE
ANTWERP**

**Institute for Tropical Medicine/
HIV and STD clinic**

Kronenburgstraat 43/3 |
2000 Antwerp

Tel.: 03/247.66.66 (outside office
hours and at weekends, please
contact UZA (Universitair
Ziekenhuis Antwerpen))

E-mail: medsec@itg.be

Website: <https://www.itg.be/E/hiv-reference-centre>

**Universitair Ziekenhuis Antwerpen /
afdeling D1 (Ward D1)**

Wilrijkstraat 10 | 2650 Edegem

Tel.: 03/821.30.00

for admission or urgent medical
assistance outside office hours

Website: <https://www.uza.be/over-tropische-geneeskunde>

Helpcenter

Kronenburgstraat 43/3 | 2000 Antwerp

Tel.: 03/216.02.88

E-mail: helpcenter@itg.be
Screening, no appointment needed,
Monday/Thursday/Friday 14:00 to
16:00 By appointment on Tuesday and
Wednesday 09:00 to 12:00.

Website: <https://www.itg.be/E/helpcenter>

UNIVERSITAIR ZIEKENHUIS GENT

**Dienst voor Algemene Inwendige
Ziekten, Infectieziekten (General
Internal Diseases, Infectious
Diseases Department)**

Corneel Heymanslaan 10 | 9000 Ghent

Tel.: 09/332.23.50

E-mail: algemene.inwendige@uzgent.be

Website: www.uzgent.be/HIV-referentiecentrum



AZ SINT-JAN BRUGGE-OOSTENDE AV – CAMPUS SINT-JAN

Ruddershove 10 | 8000 Bruges

Tel. 050/45.23.12 (during the day)
and 050/45.20.22 (at night,
during weekends and on public
holidays)

E-mail: HIV.brugge@azsintjan.be

Website: www.azsintjan.be

JESSA ZIEKENHUIS – CAMPUS VIRGA JESSE

**Hiv-centrum – Infectieziekten en
immunitet (HIV centre – Infectious
diseases and immunity)**

Stadsomvaart 11 | 3500 Hasselt

Tel.: 011/33.76.50

E-mail: infectieziekten@jessazh.be

Website: [https://www.jessazh.be/
deelwebsites/infectieziekten-en-
immuniteit/hiv-centrum](https://www.jessazh.be/deelwebsites/infectieziekten-en-immuniteit/hiv-centrum)

OTHER CENTRES

CHUPMB – SITE AMBROISE PARÉ

Boulevard Kennedy 2 | 7000 Mons

Tel.: 065/41.41.41 or 065/41.41.85

CLINIQUE CHC MONTLÉGIA

Boulevard de Patience et Beaujonc 2 |
4000 Liège

Tel.: 04/355.50.05

GRAND HÔPITAL DE CHARLEROI SITE NOTRE-DAME

Grand'Rue 3 | 6000 Charleroi

Tel.: 071/10.38.00

SERVICE DE SANTÉ AFFECTIVE, SEXUELLE ET RÉDUCTION DES RISQUES (EMOTIONAL, SEXUAL AND RISK REDUCTION HEALTH SERVICE)

Rue Docteur Haïbe 4 |

5002 Saint-Servais

Tel.: 081/77.68.20

SIDA-IST CHARLEROI-MONS C/O CENTRE DE RÉFÉRENCE SIDA DU CHU DE CHARLEROI (CHU DE CHARLEROI AIDS REFERENCE CENTRE)

Boulevard Zoé Drion 1 |

6000 Charleroi

Tel.: 071/92.54.10

ZNA

CAMPUS STUIVENBERG

Lange Beeldekensstraat 267 |
2060 Antwerp

Tel.: 03/217.72.02

Website: [https://www.zna.be/nl/zna-
stuivenberg/algemeen-inwendige-
geneeskunde-en-infectiologie](https://www.zna.be/nl/zna-stuivenberg/algemeen-inwendige-geneeskunde-en-infectiologie)

CAMPUS MIDDELHEIM

Lindendreef 1 | 2020 Antwerp

Tel.: 03/280.35.11

Website: <https://www.zna.be/nl/zna-middelheim/algemeen-inwendige-geneeskunde-en-infectiologie>

ZIEKENHUIS OOST-LIMBURG

CAMPUS SINT-JAN

Schiepse Bos 6 | 3600 Genk

Tel.: 089/32.50.50 or 089/32.51.51

Website: <https://www.zol.be/raadplegingen/algemeen-inwendige-geneeskunde-infectieziekten-geriatrie-ouderenpsychiatrie>

JAN YPERMAN ZIEKENHUIS

Briekestraat 12 | 8900 leper

Tel.: 057/35.71.80

E-mail: nefrologie@yperman.net

Website: www.yperman.net

ASZ CAMPUS AALST

Merestraat 80 | 9300 Aalst

Tel.: 053/76 41 17

E-mail: erica.sermijn@asz.be

Website: <https://asz.be/deelwebsites/infectieziekten/overinfectieziekten>

You can find a full list of centres or associations that offer screening on the website: <https://depistage.be>



OTHER WEBSITES

www.hivtravel.org

A website where you can find the restrictions on people who are sero-positive entering or staying in certain countries.

www.unaids.org

UNAIDS, the Joint United Nations Programme on HIV/AIDS (French, English, Spanish, Russian).

www.zanzu.be

Zanzu was set up by sensoa, the Vlaams Expertisecentrum voor Seksuele Gezondheid (Flemish Sexual Health Expertise Centre), and BZgA (Bundeszentrale für gesundheitliche Aufklärung), the German federal health promotion agency. The content provided is about sexual and reproductive health and has been validated by an international consultative committee of European experts, including representatives from the WHO. The site is currently available in 14 languages.

GLOSSARY

AIDS (Acquired Immune Deficiency Syndrome): advanced form of HIV infection, characterised by the occurrence of opportunistic infections.

Antibodies: proteins found in blood which are produced by certain types of white blood cells and used by the immune system to defend itself when under attack.

CD4+ cells: HIV mainly infects CD4+ cells, a type of white blood cell that plays an important role in immune defences. CD4+ cells are also known as CD4 cells or T4 lymphocytes.

DNA (deoxyribonucleic acid): the medium containing the genetic information that is necessary for the development and functioning of the body. DNA is present in every cell in our body.

HIV: Human Immunodeficiency Virus, which causes AIDS.

Immune reconstitution syndrome: worsening of symptoms due to the re-establishment of immunity, which can occur at the beginning of antiretroviral (ARV) treatment.

Immune system: complex set of substances and cells responsible for defending the body against attacks from outside such as bacteria, viruses and other micro-organisms. The immune system also has a role in rapid detection and elimination of cells that are likely to evolve into cancer cells.

Immunodeficiency: weakening of the body's immune system.

Opportunistic infections or co-infections: infections that "exploit" the weakening of the immune system due to HIV to develop.

Post-exposure prophylaxis (PEP): taking antiretroviral medication for 4 weeks, in case of accidental high-risk exposure (for example a torn condom) to avoid infection.

Pre-exposure prophylaxis (PrEP): a treatment for people who do not have HIV but who are at high risk of becoming infected.

Primary infection: the phase when infection by the virus takes place, accompanied by symptoms such as

feeling generally unwell, fever, sore throat, swollen glands, skin rashes, etc. and corresponding to seroconversion: the time when HIV tests become positive.

Retrovirus: retroviruses are RNA viruses, which use an enzyme called reverse transcriptase to convert their RNA to DNA so that they can multiply within cells. HIV is a retrovirus.

Seropositive: a person is referred to as seropositive when they are carrying the HIV virus.

Therapeutic compliance: taking your medication properly: dose and frequency of taking medication, attending medical follow-up, etc.



Triple therapy: combination of three medications intended to block the replication of HIV.

Undetectable viral load U=U:
Undetectable = Untransmittable
When the viral load cannot be measured because no virus can be detected in the blood, there is no longer a risk of transmission. This is the main measure of the success of treatment.

Viral load: measurement of the number of copies of the genetic material of the HIV virus (viral RNA). In other words, it measures the amount of virus present in the body.

Viral resistance: HIV is a virus that can adapt to survive. In some cases it can therefore develop a resistance to one or more antiretroviral medications.

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HIV infection

- ⌘ **What is HIV?**
- ⌘ **What are the consequences of HIV infection?**
- ⌘ **What does it mean to be seropositive and have AIDS?**
- ⌘ **What are the treatments?**
- ⌘ **What should I expect?**
- ⌘ **What are the side effects of treatment?**
- ⌘ **How to manage your treatment?**

This publication is designed to be a practical, informative guide. It offers answers to all the questions that patients may have about HIV infection.