THE ALBION CENTRE
PARTNERSHIPS IN HEALTH

HIV/AIDS INFORMATION LINE
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Answers to Frequently Asked Questions about HIV/AIDS.

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Based on the experience of staff working on the

NSW HIV/AIDS Information Lines

and at The Albion Centre.

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1. INTRODUCTION.

The questions and answers in this booklet derive from phone calls to the HIV Information Line and the HIV Post Exposure Prophylaxis (PEP) Hotline at The Albion Centre. The information is correct at time of last review.

Callers accessing the HIV/AIDS Information Line include members of the public in domestic or workplace settings; health workers such as doctors, nurses, social workers, students and researchers; students researching HIV/AIDS projects; people with HIV and their partners, relatives and friends.

The Albion Centre publishes these general questions and answers as a contribution to public education. Please contact (02) 9332 9700 or NSW-toll free (from a landline) 1800 451 600 or email albhivinfo@sesiahs.health.nsw.gov.au if you require further information. Information Line staff are happy to help you directly, or by referral to specialist staff.

Information Line staff do not give information about HIV/AIDS over the telephone to students for assignments or projects however they may give information on where to access resources for assignments.

2. GENERAL QUESTIONS.

What is HIV?

HIV is a virus which can cause an incurable and life threatening medical condition called AIDS. HIV stands for the Human Immunodeficiency Virus. Over time, this virus attacks the body's natural defence against diseases (the immune system), which makes a person vulnerable to certain infections and malignancies.

What are HIV Types and Subtypes

So far 12 subtypes of HIV have been discovered. HIV-1 is the main form found around the world. It has subtypes called Groups M, O, N and P. HIV-1 group M is the most widespread form of HIV found today, being responsible for over 99% of all HIV infections worldwide (and is the form usually intended when this document refers to HIV). HIV-1, Group M has further subtypes or clades and also 48 recognised recombinant forms (which is where 2 clades of HIV have combined within a person and then been transmitted forward). HIV-2 is found mainly in parts of West Africa and has 8 subtypes. The two common subtypes are called Groups A and B, and the 6 additional subtypes, are galled Groups C-H, which so far have only been found in one person each.

What is AIDS?

AIDS is a medical diagnosis caused by long term HIV infection. AIDS stands for Acquired Immune Deficiency Syndrome. Someone has AIDS when their immune system has been damaged so badly by HIV that they are unable to fight off a wide range of illnesses that people without an immune related illness, such as HIV, would normally be able to cope with.

It may take years for signs and symptoms of AIDS to occur. Most AIDS defining illnesses can be treated or prevented with medication. With current medications, many people with HIV remain well for many years and do not need hospitalisation.

How does HIV cause illness?

HIV causes illness by damaging the immune system through infecting the immune system's helper cells. The immune system is the body's natural defence mechanism against infection. An important part of this system is a group of white blood cells called lymphocytes. Lymphocytes can be further divided into various subgroups which each perform specific tasks. CD4 lymphocytes, also called T4 or CD4 cells, are a type of lymphocyte that recognise anything foreign and activate the immune system to protect the body.

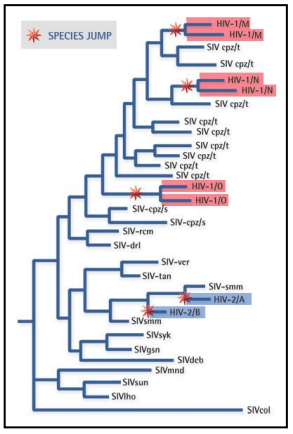
When HIV enters the bloodstream, it infects and destroys these CD4 cells. By doing this, it causes a gradual destruction of parts of the immune system. Eventually, the body becomes vulnerable to other infections.

What type of virus is HIV?

HIV is a retrovirus. Most viruses infect cells and reproduce in the main body of the cell simply by inserting their genetic material (DNA) into the cell's reproductive machinery. However, a retrovirus has a different type of genetic material (RNA), which needs an enzyme called reverse transcriptase to change the RNA to DNA before taking over the cell's reproductive machinery. This turns the cell into a virus factory, reproducing copies of HIV rather than new, healthy cells.

HIV is also different from most viruses as it specialises in attacking the very cells that are the body's defence against viruses – the immune system.

Where did HIV originate?



It is generally agreed that Simian Immunodeficiency Virus (SIV) found in African chimpanzees, and monkeys became both forms of Human Immunodeficiency Virus (HIV-1 and HIV-2) in humans, but exactly how and when this occurred is disputed, although the leading theory is that SIV was transferred to hunters who were infected while butchering monkeys for food.

What are the symptoms of becoming infected with HIV?

It can be difficult to diagnose early HIV infection, as your body's response to HIV infection is the same as for any other viral infection. There are no specific symptoms that will tell you that you have been infected with HIV and not everyone who is infected with HIV experiences symptoms; some experience only mild symptoms and only a small number experience severe symptoms.

However, a few weeks following infection with HIV, some people experience a "flu-like" illness which may include symptoms like a fever, rash or swollen lymph nodes. This is called the "seroconversion illness" and is during the time the virus is spreading rapidly through the body. An HIV test performed at this time may give a false negative result. It can take several weeks or months for the test to become positive – this is called "the window period".

Unfortunately, these symptoms are also common to a large number of other causes, such as colds, flu and other viral infections. It is important to note that anxiety and stress can also cause similar symptoms.

This means that the only way to know if you have become infected with HIV or not, is to have a specific blood test after allowing for the window period (see 'Testing for HIV' section).

If you have been involved in any high risk activities, such as unsafe sex, and have concerns about possible recent HIV infection, you should consult a GP or a sexual health clinic and consider being tested for all sexually transmissible infections (STIs) too.

What is the incubation period of the virus? (This is not the same as the window period – see the section on 'Testing for HIV').

This is the period of time it takes from becoming infected with HIV to developing symptoms of disease or illness. This period varies from person to person, but without treatment, the average time period in Australia is considered to be around 7-10 years. This period may also vary due to interventions with antiretroviral therapy (ART). During this time there may be no outward evidence of illness, but the virus remains active (replicating and mutating) in the body, and can still be detected by a blood test. The person also remains infectious and able to pass HIV on.

3. TRANSMISSION AND PREVENTION.

Who is at risk of HIV infection?

HIV does not discriminate against race, social groups, sexuality or sexual preference. The virus can infect anyone. It is behaviour that puts a person at risk, not the type of person one is or has sex with.

However, because many factors contribute to health, in some countries, some people from minority populations have been disproportionately affected.

How do you become infected?

As previously stated, HIV is the virus, which is transmitted, and AIDS is a later stage condition, which may result from HIV infection.

Transfer of blood or sexual fluids from an infected person into another person's body (usually by injection or sexual intercourse) is the principal mode of transmission. Once outside the body, HIV is fragile and dies quickly in normal circumstances.

HIV is transmitted by three major means:

a. Blood to Blood Transmission

By sharing injection equipment, e.g. syringes, water, filters etc, which may contain blood from an infected person. Remember the blood may not be visible.

By having a tattoo or piercing done where the tattoo/piercing equipment is not sterilised.

By receiving infected blood via a blood transfusion or blood products. It should be noted that in Australia, the blood supply has been tested for HIV antibodies since 1985, however, if a donation occurred during the window period, the test may not have detected HIV. To help cover this, all blood donors have to sign a declaration, which states that they haven't put themselves at risk of acquiring HIV. Today with more sensitive testing and newer tests, the risk of acquiring HIV from blood or blood products in Australia is extremely small. However, a person may be at higher risk if they received a blood transfusion or blood products overseas.

b. Sexual Transmission

Unprotected sexual intercourse is considered a high risk activity for both partners.

Having vaginal or anal sexual intercourse without a condom, or any other sexual activity where blood, semen, pre-seminal fluid, vaginal fluids or mucus from the lining of the anus/bowel from an infected person may pass into the bloodstream of another person, can lead to infection. Breaks in the skin caused by eczema, sores, or ulcers, could increase risks by allowing infected semen, blood or vaginal fluid to enter the bloodstream. Absorption can also occur through the mucous membranes lining of the female cervical canal, the rectum, the male urethra and under the foreskin (if present).

c. Parent to Child Transmission

HIV can be transmitted to an unborn child through the placenta during pregnancy, during a natural delivery as the baby comes into contact with infected blood and vaginal secretions in the birth canal, and through milk if breast-feeding.

To reduce the possibilities the baby being infected, HIV positive mothers should be treated in the later stages of pregnancy with HIV ART medications to ensure undetectable or very low levels of the HIV virus present in their blood. Delivery should be by a caesarean section. To prevent infection to the baby after birth, the baby should not be breast fed.

The risk of transmission from the mother to the baby increases if the mother is in the later stages of HIV or if a woman is infected during pregnancy.

Can HIV be transmitted through oral sex?

Oral sex is considered to be a low risk for the transmission of HIV. HIV is not transmitted by saliva (see below *"Can you become infected by kissing?").* However having cuts, ulcers, or damage to the mouth and gums may allow infected blood, semen, or vaginal fluid into the bloodstream via the mouth.

There is virtually no risk of acquiring HIV from receiving oral sex, as the exposure is only to saliva. However, you should remember that other STIs may be transmitted this way.

How infectious is pre-seminal fluid (pre-cum)?

Pre-seminal fluid has been found to contain HIV in infected persons.

For this reason any penetrative sex without a condom must be considered unsafe. This includes 'coitus interruptus' (withdrawing the penis before ejaculation). Any pre-seminal fluid involved in oral sex would also pose a theoretical risk of infection, however the actual risk would seem to be low. Studies are presently being conducted to measure the levels of HIV virus in semen.

Can you become infected by kissing?

Although HIV has been detected in saliva in some people with HIV, it is in much lower concentrations than in semen, blood or vaginal fluid and therefore is not considered a risk for transmission of HIV. It is also believed that some of the proteins and enzymes in saliva may help to inactivate HIV.

Can you become infected with HIV through mutual masturbation?

The skin is a very effective barrier that keeps things like blood and sexual fluid, and therefore HIV, out of the bloodstream. It is not possible for HIV to enter the bloodstream via intact skin.

Theoretically, infection with HIV through masturbation could only happen if there are open (meaning bleeding or fresh) cuts or abrasions on the fingers, hands or on the body that come into contact with sexual fluid or blood. There are no documented cases of HIV transmission in which mutual masturbation was the only risk factor.

Can a person become infected with HIV from receiving or giving a massage?

As stated in the previous question, there is no entry point to the bloodstream through intact skin. Blood, sexual fluid or vaginal secretions would need to get into the bloodstream. Blood or sexual fluid would need to get into a significant area of skin loss (such as a bleeding wound), which is extremely unlikely from massaging or being massaged.

I have seen a sex worker and am now worried that I may have been exposed to HIV. Can I catch the virus by having sex with a sex worker?

As mentioned, it is not the "type" of person who you have sex with but the behaviour that puts a person at risk. The principles of HIV transmission apply to everyone who you have sex with and the type of sexual behaviour that has occurred.

If safe sex is practised (see "What is safe sex?" below), you will not be at risk.

Can other sexually transmitted infections make you more susceptible to HIV?

The presence of other STIs can make it easier for HIV to enter the bloodstream during unprotected sex (or in/on the mouth of a person performing oral sex). Having an STI makes it easier to both infect another and become infected with HIV.

Does being circumcised reduce the risk of HIV infection?

Although circumcision has been shown to reduce, but not eliminate, female to male vaginal transmission of HIV in some short-term studies carried out in Africa, we do not know if this translates to first world countries such as Australia, as the types and subtypes of HIV and primary contributing transmission factors can be different. Preliminary data from some studies suggest female partners of HIV positive circumcised men may be at greater risk of contracting HIV.

At this stage it seems there may be no role for circumcision in HIV prevention in gay men, as some data from a well-conducted study amongst gay men in Sydney (the HIM study) and also a recent US study both showed that circumcised and uncircumcised gay men were equally likely to have HIV, and that even among men who were more likely to acquire HIV through insertive sex, there seemed to be no relationship between circumcision status and HIV seroconversion.

Can you get infected at the doctor's, dentist's or by ear piercing, electrolysis, acupuncture or tattooing?

Not if professional infection control guidelines are followed. If you have any procedure, which pierces the skin, ask how equipment is sterilised between clients. All professional service providers are required to follow strict infection control guidelines set by the NSW Health Department. If you have any doubts, check that your practitioners use either disposable or sterile equipment for each client, and that they follow infection control procedures.

Can you become infected by pricking yourself on a hypodermic needle, or by standing on it or otherwise piercing the skin?

This question usually relates to a fear of needles discarded in public places by injecting drug users. The risk of acquiring HIV from a discarded needle and syringe is extremely low. To date we have not been able to discover any documented cases of this happening anywhere in the world. The reasons for this low risk of transmission are:

- There may be no blood in the syringe.
- If there is blood in the syringe, the amount is usually very small.
- After a short amount of time, any blood in the syringe will congeal, meaning the blood cannot be injected out of the needle.
- It may be some time since the needle was used, allowing enough time for any virus present to have died.
- The injury from the needle may not be deep and almost certainly will not be directly into a vein or artery.
- In Australia, only a small percentage of people who inject drugs are infected with HIV.

Other blood borne viruses, such as hepatitis B and C, are much easier to transmit via blood when compared to HIV, but even then the risk of getting these from a discarded needle stick injury is considered to be very low. There are only four documented cases of transmission of either of these viruses (one hepatitis B and three hepatitis C) occurring from discarded needles. Because of the extremely low risk of HIV transmission, HIV PEP treatment is not usually indicated for a needle stick injury from a discarded needle. We currently suggest that people who experience a needle stick injury ensure their tetanus immunisation is current and that they be baseline tested and followed up for hepatitis B & C.

Can you get infected by blood transfusion or by blood products?

Since 1 May 1985, the Red Cross Blood Bank has screened all blood in Australia for HIV antibodies. Any infected blood found is destroyed. In addition, donors must sign a declaration that they are not at risk of infection, and anyone not prepared to sign the declaration cannot donate. This makes the risk of infection from a blood transfusion in Australia extremely low. To date this has occurred only once, in Victoria, since screening began and this was related to the donor being in the window period. Blood or blood products in any other country may not be as safe.

When blood products (such as plasma or Factor 8) are manufactured in Australia, they are heat treated to ensure that, in the unlikely event that there is a virus present, it is sterilised. This means, there is no possibility that HIV could be transmitted from blood products manufactured since late 1984.

Anyone who had a transfusion or received blood products before 1 May 1985, or in an overseas country where safety may not be ensured, may want to consider having a HIV test if they have not done so already.

If infected blood is spilt, how can the area be disinfected?

Even though skin is a good barrier to HIV infection, it is recommended that you wear gloves to clean up the spill. Use paper towels if possible. Then wash the area with detergent, clean the cloth in the normal way and put gloves and paper towels into a plastic bag for disposal.

Can you get infected by household contact such as kissing or hugging, coughing or sneezing, or by sharing toilet seats, glasses, cutlery, towels, books or other implements?

You cannot become infected with HIV through general social contact, such as described above.

Although the risk is very low, the only thing we advise people not to do is share razor blades or toothbrushes, as fresh blood might be present and in vary rare circumstances, this may be able to pass through cuts or breaks in your skin.

Can you get infected in swimming pools, spas, hot tubs or saunas?

Chlorine or salt water will destroy the virus. In water, the virus would also be diluted which means there will be no risk of transmission.

How do children get HIV?

If the parents are infected, infants can become infected during pregnancy or at birth. Also, the virus can be transmitted through breast milk. Children are not at risk during normal home, school, or playground activities even when HIV infected children are present. Children should be made aware of the risks of contact with blood and should be instructed not to touch or play with discarded needles or syringes. Games such as “blood brothers” are not advised.

In the past (before 1985) children have become infected during transfusions of blood products (such as Factor 8 to treat haemophilia). This is unlikely to occur today as blood banks test all blood donations and heat process blood products such as Factor 8 to inactivate the virus.

What is “safe sex”?

Safe sex is any sexual practice that does not allow blood, semen, pre-seminal fluid, vaginal fluids or mucus from the lining of the anus/bowel to pass from one person into the bloodstream of another person.

Wearing a condom during sexual intercourse is the most effective protection. Condom breakage can occur if not used properly. Remember to squeeze the air out of the tip of the condom to leave room for the ejaculate. Always use water-based lubricants (e.g. wet stuff, KY). NEVER use oil based lubricants, (such as moisturisers, baby oil, or Vaseline), since these lubricants weaken the condom's latex and increase risk of breakage. If a condom does break, douching (flushing the area with water) is not advised as this may increase the risk of

infection by weakening the lining of the rectum or vagina. Condoms should be stored as recommended and used before the expiry date, which is printed on the wrapper. Store condoms away from direct sunlight, preferably in a cool place.

Some websites with more information on safe sex can be found on the websites listed at the end of the section below on sexually transmissible infections.

How long does HIV stay active outside the body?

We know from scientific testing, that HIV is very fragile and does not survive for long outside the human body in normal conditions. This is because HIV is very sensitive to changes in temperature, dilution and acidity.

Unfortunately, it is not possible to give an exact time for when HIV will die when outside the body, as it depends on the exact environmental conditions, such as the type and amount of fluid, temperature, acidity, humidity, airflow, sunlight etc.

Can I be infected by a person who has HIV?

Yes, but by specific means only, such as unprotected sexual intercourse or sharing needles with them (see 'Transmission and Prevention' section). You **cannot** become infected by casual social contact, such as: kissing, hugging, sharing food or cutlery/crockery, toilet seats, swimming pools, coughing or sneezing.

Is transmission of HIV by people with HIV automatic?

There are recorded cases of one partner remaining uninfected despite regular sexual contact. However, the risk of transmission is high without appropriate precautions and avoidance of contact with blood, semen, vaginal or anal secretions is strongly recommended. It is not always clear why sometimes an infection occurs when on other occasions it has not.

Can you tell when a person has HIV?

Most people with HIV are healthy. The only way to tell someone has HIV is by a specific blood test. Therefore, if you do not know the status of your sexual partner, it is wise to take precautions and always use condoms.

I cannot seem to stop worrying about HIV, what can I do?

Many people call us, or call us a number of times, constantly checking information, reporting that they are feeling very worried about a particular incident, or saying they are always worried about HIV and it is one of the most difficult things for a hotline counsellor to try to address.

These callers can also be suffering with symptoms they believe are related to HIV transmission (seroconversion) or long-term infection. In fact almost certainly these people are suffering from severe anxiety. In addition to feeling worried, anxiety can also cause physical symptoms, including many that people can easily mistake for symptoms of HIV. When this happens, anxiety can also result in a difficulty to accept negative HIV test results.

> In 1988, a psychologist, Larry Harmon, described a new kind of hypochondria that he said had been spawned by the AIDS epidemic: people who are convinced they have HIV despite medical evidence to the contrary. He called this problem "AFRAIDS," which stands for Acute Fear Regarding AIDS. Symptoms of anxiety and depression, such as weight loss, fatigue, muscle aches or reduced resistance to disease, are interpreted by AFRAIDS afflicted people as signs of infection. Even monthly blood tests for as long as a year fails to ease the fear in some of these patients, who are so terrified they can often avoid sex with their partners, lose concentration at work and literally worry themselves sick. Harmon reported that the problem was often, but not always, related to guilt such as an extramarital affair, a visit to a sex worker, or a homosexual experience.

Unfortunately, unless the underlying issues causing the anxiety are dealt with, these fears and symptoms can be severe and long lasting. They are almost certainly not caused by HIV. It's a

vicious circle of worry that will not break itself, and this usually requires assistance in the form of one-on-one counselling.

The following are indications that you may be suffering from severe anxiety:

- Calling hotlines many times to try to ease your mind.
- Having to rely upon someone else, usually a professional, to tell you you're ok, despite having the information that answers the question for you.
- Asking the same questions over and over, such as "Can I rely on the 6/12/24 week test?"
- Doubting and fearing the accuracy of information given to you by a professional when an untrained person says something about HIV transmission that is contradictory. Such as, "The guy on the bus told me HIV can hide."
- Compulsively spending lots of time reading large amounts of information about HIV, especially on the internet.
- Checking, and cross checking information and obsessing over inconsistencies you see.
- Being unable to accept negative test results or information that suggests you are at low or no risk.
- Testing multiple times well beyond the commonly suggested window periods of 6 weeks - 3 months, perhaps with the ability to spout off the exact number of days you waited for each test and coming up with reasons as to why the test may have given a false negative result.
- Being preoccupied with overly technical information regarding testing that is not generally openly discussed as part of testing. A good example of this is if you know all about the types and generation of HIV tests.

If you are experiencing one or more of the above, we strongly suggest that you try to stop reading material about, and discussing, HIV. Taking more tests, reading more information and asking more questions will in fact only make things worse. We strongly suggest you visit your GP and discuss the fact that you are anxious or overly concerned about HIV and get a referral to see a counsellor, psychologist or psychiatrist as appropriate. Your GP may also prescribe medication to help reduce your anxiety.

Are people with HIV a danger in the workplace?

The virus is mainly transmitted by sexual contact or sharing needles. People with HIV can work in most professions and do not need to inform their employer. It is unlawful in Australia for an employer to ask an employee their HIV status.

Some people are required to know their status and change their practices if they are HIV positive. This is only for people who, in the course of their job, perform “exposure prone procedures”, such as specific types of surgery or dentistry. It does not relate to all health care workers. Standard infection control precautions should be in place to prevent contact with blood or body fluids in every workplace regardless of whether employees are known to have HIV or not.

Do I report people with HIV?

Doctors have the responsibility to make such legal notifications as necessary while maintaining patients' confidentiality. Australian health departments maintain data on the number of people infected in order to plan health services. These records are coded without names.

People with HIV have the same right to confidentiality as anyone.

Should I report people with HIV who I know are deliberately placing others at risk?

This is a very difficult question. In recent years, there have been a very small number of cases highlighted in the media, of people with HIV deliberately infecting others or placing others at risk. These cases amount to very small numbers and have usually concerned people who have mental health issues which reduce their capacity to make reasonable decisions.

It must be noted that the vast majority of people with HIV are very careful about taking precautions to ensure that they do not pass HIV on to others.

Also, it is everyone's responsibility to ensure that HIV is not passed from one person to another, so in most cases where an infection occurs, the person with HIV cannot be solely to blame.

With this in mind, there are national guidelines for the 'Management of People with HIV who Place Others at Risk', and in NSW, there are laws which make it possible for the Health Department to contact and monitor people who are repeatedly reported as deliberately placing other people at risk. If you need information about this, please contact the HIV Information Line **1800 451 600**.

Is there a vaccine for HIV?

Despite many years of research, a vaccine has not been successfully developed.

4. HIV PEP - An Emergency Treatment for High Risk Exposures.

What is HIV PEP?

Post Exposure Prophylaxis or PEP is the immediate treatment of a person, with ART medications, who has had a high risk of exposure to HIV. It is thought that PEP may reduce the chances of HIV infection from occurring by stopping HIV reproducing while its numbers in the body are small. PEP is a 4 week course of a combination of two or more medications taken once or twice a day. For treatment to be effective PEP should be started as soon as possible following exposure and the entire course of medications taken.

How does a person "qualify" for the PEP program?

To be eligible for PEP, a person must have an incident where exposure to HIV is assessed as being a statistically high-risk exposure and treatment must be assessed as having a possible benefit which outweighs the risks and costs of taking the medications. Also a person must be able to seek medical assistance and begin taking the treatment within a **seventy-two (72) hour period**. Risks and benefits are assessed against the National Guidelines for PEP treatment (which can be found on the website of the Australasian Society for HIV Medicine www.ashm.org.au).

A high-risk incident is usually where there is unprotected penetrative sexual intercourse with either a person who engages in high risk behaviours or a person known to have HIV, or where there is sharing of injecting equipment. Other significant risks may be identified through the assessment process in which a full sexual history and risk assessment is taken.

Oral sex is not usually considered high risk (see 'Transmission and Prevention' section). A Needle-stick injury, from a needle found in a park, beach or on the street is also not usually considered a high risk exposure (also see 'Transmission and Prevention' section).

People can call the PEP hotline on **1800 737 669** for assessment and referral if they think they have had a high risk exposure.

Are there side effects from taking these drugs?

There can be some side effects, most of which are mild and are usually experienced in the first week of treatment. In some circumstances following discussion with their doctor some people discontinue PEP because the side effects are unpleasant.

Symptoms can vary from person to person but may commonly include feeling tired, nausea, diarrhoea, rash and/or headache(s). Symptoms such as these may be able to be controlled or alleviated by other medication. It is necessary to consult a HIV clinician if side effects occur. Some medications interact with PEP, so the doctor should be informed of all other medications, including over the counter preparations, which you may be taking at the time.

Where can I go to get PEP?

People in NSW can call the PEP hotline on **1800 737 669** for referral to their closest treatment centre if they think they have had a high risk exposure.

In NSW, PEP can only be accessed via Accident and Emergency departments at Public Hospitals, Sexual Health Clinics and some General Practitioners (GPs) that have the special training required to prescribe HIV ART medications. With Sexual Health Clinics and GPs it is always best to call ahead to ensure you can be seen. With Accident and Emergency departments, it is important you tell the Triage nurse you are there for HIV PEP, so you can be seen as soon as possible.

What will happen on my first visit to get PEP?

This can vary because different health facilities have different procedures.

Initially a clinician will do an assessment by asking questions regarding the incident to establish the level of risk. Depending on the level of assessed risk you may or may not qualify for the PEP treatment. You may be referred to an alternative service if this is necessary.

If the risk is significant, medications will be prescribed on the day and should be taken immediately.

What if an individual has been sexually assaulted?

There are special considerations for individuals who have been sexually assaulted, and this is reflected in the National PEP guidelines. Additional specialist care is always needed. Usually a medical examination by a doctor is performed to gauge what trauma has occurred to the person's body. Individuals who have been sexually assaulted should be referred to a sexual assault service at a hospital or referred to an organisation such as the Rape Crisis Centre. Ongoing counselling and support is encouraged for sexual assault situations.

Is there any cost for the PEP medication?

While the drugs are very expensive, for those with a Medicare card, PEP medication is significantly subsidised by the Federal and State governments. The cost to the person who is accessing the drugs may be the same as other drugs on the Pharmaceutical Benefits Scheme (PBS) – currently around $32 per drug, for 4 weeks supply. If the individual has an Australian Health Benefits card, the cost may be further reduced.

Overseas visitors from countries with reciprocal health agreements (i.e. UK, Malta, Finland, Sweden, Italy, New Zealand, the Netherlands and Ireland) will pay the same as Australians with a Medicare card.

Persons from other counties may be required to pay the full cost of the drugs and an emergency room consultation fee if the client is seen in a hospital. The cost of this may be prohibitive.

How effective are these drugs in preventing HIV infection from occurring?

There have not been randomised, placebo-controlled trials to assess the effectiveness of PEP for HIV exposure, so most advice about it, particularly in cases of potential sexual exposure to HIV, comes from observational studies or experiments on monkeys.

Studies have found that health care workers, who took PEP for 4 weeks immediately following a known exposure to HIV in a health care setting, were 70% to 80% less likely to become infected than those who did not take PEP. Animal testing has shown that using PEP reduces transmission rates in animals.

Studies on the success rates for humans using PEP following sexual or injecting drug use transmission risks are difficult to carry out due to ethical considerations. It can also be difficult to know whether an actual transmission risk has taken place, when the HIV status of the partner is not known. We do know that PEP is not 100% effective in preventing HIV infection, as HIV infection has occurred in a few people despite taking PEP as recommended.

What help is available to cope with the stress of being on the PEP program?

The experience of being assessed, taking medications, being tested and waiting for results can be very stressful. As such, most organisations providing PEP should be able to provide the necessary support and/or follow up referrals as needed. However it may be a good idea to ask, at the place where you are getting PEP, what the PEP program involves. Most services can organise counselling, Social Workers and/or Psychologists. If nothing is available at the treatment site, the PEP Hotline (1800 737 663) may be able to provide telephone support and referral.

What happens after an individual finishes the course of PEP?

The PEP process may vary between organisations, but most will require a series of follow up appointments for further review and testing over a six month period. This not only provides good support, but is necessary as taking PEP may delay seroconversion. This means that, after taking PEP, an accurate negative HIV test result may take up to 6 months, rather than the usual 3 month window period. Additional testing for hepatitis C exposure may also be necessary as the window period for which a conclusive negative result for hepatitis C can be received is six months. After completing the PEP program, individuals should not require any further follow up. Education and strategies for the continuation of safe sex will be given.

Is there anything else I should know about PEP?

All individuals who inquire about PEP after a sexual risk (whether their risk is high or low) are encouraged to have a full sexual health screen.

5. TESTING FOR HIV.

What is the HIV antibody test?

Specific blood tests are used to determine whether there are antibodies to HIV in the blood or not. Detection of HIV antibodies would mean you have been infected with the HIV virus. More than one test may be used to confirm a positive result.

The first test usually done is known as an ELISA test (Enzyme-Linked Immuno-Sorbent Assay.) This test is extremely sensitive, and while it gives very accurate results, it can occasionally give a false positive result. This is why a positive ELISA result will always need to be confirmed by a second test, called a Western Blot.

When both of these tests are done, a result is considered extremely reliable. A positive ELISA and positive Western Blot test together mean that a person is infected with HIV. A negative result on the Western Blot test means that a person does not have HIV, even if the result has come back positive on an ELISA test.

What are antibodies?

Antibodies are special proteins found in the blood, which are produced by the immune system in response to the presence of a foreign substance, such as an infection. With many infections, the antibodies help the body to recover and fight off infections. With some viruses such as measles, hepatitis A and chicken pox, the antibodies can protect a person from future infection. This is not the case with HIV.

What is the window period? (Or why do I have to wait 12 weeks to test?)

This is the time it takes, following a possible risk of infection with HIV, until a HIV antibody test can give a conclusive result. With the tests that are used for HIV screening in Australia this “window period” is considered to be 12 weeks.

Most tests commonly conducted to screen for HIV in Australia look for antibodies to HIV, not for the actual virus. It can take up to 12 weeks for your body to produce these antibodies if you have been infected, so testing will be usually be done 12 weeks following the risk . During the window period it is still possible to be infected and to infect others with HIV. It is therefore strongly suggested that condoms be used at all times or that a person abstains from activities that may put them or their partner/s at further risk.

It is possible for a test to detect HIV before the 12 week window period passes. However, it is recommended that you test at no less than 12 weeks for a 100% accurate negative result.

How accurate is a test at 2 weeks, 4 weeks, 6 weeks, 9 weeks, 11 weeks 2 days etc?

There have not been scientific studies that verify how accurate a test will be for everyone at various points during the window period. In Australia, we consider that an antibody test performed at 12 weeks is 100% accurate. We do not advise testing before 6 weeks. Evidence suggests that a test taken 6 weeks after your last risk is accurate for more than 90% of the population. Although testing after 6 weeks but before 12 weeks may give you a good indication as to your HIV status, we still recommend that you retest at 12 weeks for a 100% accurate negative test result.

If you are someone who experiences high levels of anxiety, it may be counterproductive for you to test repeatedly. In this case we would recommend that you wait the entire 12 weeks and be tested only once.

Are there other tests for HIV?

The **p24 antigen test** looks for the presence of a specific protein HIV produces. This protein can usually be found before the appearance of HIV antibodies in a recently infected person. It is now common for a p24 antigen test to be carried out at the same time as an ELISA test (called a combination test). Testing for p24 antigen may be useful in helping to identify acute HIV infection when antibody tests may be negative and the person is still within the 'sero-conversion' or 'window period', but the test does have limitations and should never be used alone for HIV screening. While a positive p24 antigen test result may mean HIV infection, it will still need to be confirmed. Further, due to the test's limitations, a person who tests negative to p24 antigen may still have HIV - so it should not be used to verify non-infection. The degree to which the antigen test can detect p24 antigen from all subtypes and clades of HIV-1 and HIV-2 is also unknown.

HIV Viral Load or DNA testing is not approved for use in Australia as a diagnostic test for HIV infection. It is also sometimes called Nucleic Acid testing (NAT) or PCR testing and it is able to look for the presence of HIV in blood. In Australia, the test is approved for monitoring virus levels in the blood of people with HIV and is usually called viral load testing.

What about CD4 testing or a full blood count?

T-cells or CD4 cells are one of the immune system cells destroyed by HIV. CD4 testing is a common test to look at the strength of the immune system. Although having a low CD4 cell count may indicate immune system issues, this would not necessarily mean that a person has HIV. A HIV test should be taken if there is any concern about HIV. More information on CD4 testing for people with HIV can be found in the 'Treatments and Tests' section below.

What about Rapid HIV Tests?

Rapid tests using blood or saliva can give a result in less than an hour, but are not currently approved for general use in Australia, although individuals at high risk may be able to access rapid testing at some sexual health clinics carrying out clinical trials. The best rapid test available is a combination HIV1/2 antibody and p24 antigen blood based test. When this test shows a negative result it is very accurate if the window period has been properly observed, but it may be less accurate than sending blood to a pathology lab if the test is being carried out before the end of a 12 week window period.

Unfortunately, there is a chance that a rapid test may give a reactive result that is false. All positive rapid test results therefore require a second confirmatory lab based blood test to eliminate false positives. This can leave a person in a difficult emotional space while waiting for the second result which will confirm or disprove the initial positive result. Due to these and other reasons, the Therapeutic Goods Administration has not yet licensed such tests for use in Australia.

What about Home Test kits?

Home Testing Kits may sound convenient, but are not licensed for use in Australia. It usually involves taking a blood spot or saliva sample at home and then posting it to a laboratory for testing. However, this type of testing may mean that the individual may not receive adequate information about informed consent before testing, and may not have access to appropriate counselling and support following a test result. The current guidelines for HIV testing in Australia require that a number of issues are discussed before testing to enable the individual to make an informed decision about testing. Additionally, Australian postal guidelines do not allow blood to be posted by anyone other than a doctor.

What about Self Test Kits?

A self test kit is defined as one where an individual can administer the test and read the result themselves. Although at present there are self test kits available in some countries, they are not licensed for use in Australia. This type of test faces many of the same issues as Rapid and Home tests above. Further, in populations with low rates of HIV, the test may return a high rate of false positive tests, which require a blood test to confirm the result. As the person is not in a clinical setting, the person taking the test may be unaware of this and of other limitations of the test, such as false negative results during the 'window period' of infection. With there being less access to immediate follow-up and discussion of the result with a clinician, there is a real possibility of significant and harmful emotional distress.

Concerns have also been expressed that home-based testing may lead to the abandonment of safe sex practices, as individuals may use the test immediately before sex and adjust their behaviour according to the test result. A major flaw in this strategy is that false negatives may occur in individuals (especially those at high risk) in the window period of infection. There are also concerns that availability could lead to kit misuse – i.e. testing of people without their permission.

When should a HIV test be done?

In most cases, it is recommended to wait at least 12 weeks after the possible exposure. This is to allow enough time for HIV antibodies to appear which is what the most commonly run test for HIV infection detects. During this period it is recommended that a person practise safe sex and use condoms to ensure they do not pass HIV on to their partner(s). There may be circumstances when testing earlier than 12 weeks might be considered, e.g. due to the presence of specific symptoms, but a conclusive negative result may still take 12 weeks.

If you are considering testing for HIV, you should also consider testing for other sexually transmissible infections (STIs) at the same time.

How can I get a HIV test?

Tests are available from your GP, your nearest Sexual Health Clinic or at a Family Planning Clinic. Some drug and alcohol centres also offer testing. At a Sexual Health Clinic, testing for HIV and other STIs is free of charge and confidential.

HIV test results can take up to a week to come back from the laboratory. This is because HIV tests are often done in batches and may not be run every day.

HIV testing for insurance or immigration purposes must be undertaken privately as testing at public facilities is not permitted for immigration purposes.

Having a HIV test has many implications. Someone should discuss these implications with you as HIV testing should only be done with informed consent (see "What is informed consent?" below). For this reason we suggest going to a centre where discussions are held prior to testing to gain informed consent and there is time for further discussion and appropriate advice when the result is given.

What should be discussed before a test?

Before a HIV test is done, there must be discussions to inform and prepare individuals for HIV testing and obtain informed consent. The person providing the test should give appropriate

information about risk, points of referral if necessary, assurances about confidentiality and privacy, and assessment of the person's preparedness to be tested.

Accurate information about safe practices that are appropriate to the person's gender, culture, behaviour and language should be provided. The discussion should include:

- information on how HIV is transmitted (where appropriate);
- risk assessment and discussion about the reason the person is requesting testing;
- timing of the risk event and options for PEP;
- possible desirability of other STI testing;
- information about confidentiality and privacy;
- information about the testing process including how results are to be provided, the window period, and the difference between HIV and AIDS;
- information about what happens to test results;
- seeking informed consent for the test to be conducted;
- assessment of the person's preparedness to be tested and assurance that the person wishes to proceed with the test;
- information about what a negative or positive result means; and
- assessment of support mechanisms while waiting for the test result and/or if the result is positive.

What should be discussed when the test result is given?

Conveying a test result provides an opportunity to discuss health issues, referrals and prevention information appropriate to the test result.

All results must be given in person and should be conducted in a way that is appropriate to the person's level of education, HIV awareness and other circumstances including gender, sexuality, culture and language. A person giving a test result should also assess the level of support the person receiving the result has, and make appropriate referrals to a support agency if additional support is required.

If the result is negative, there should be discussion to reinforce safe behaviours and any difficulties or issues that the person may have in practising safe behaviours should be discussed. It should be emphasised that a negative test result following a risk event does not indicate that it is likely to be safe to repeat risky behaviour. The relief associated with receiving a negative test result may also impede the processing of information and advice at that time.

If the result is positive the discussion should include, at an appropriate time, issues such as:

- immediate needs and support;
- safe behaviours – education, information and support;
- whom the person should tell and how, including information around the person's rights regarding disclosure;
- managing or understanding strong emotions, feelings, reactions and changes; including ways to deal with loss and grief, depression, anger and anxiety;
- options in drug treatments and medical management;
- ongoing counselling or therapy if required;
- complementary/alternative management options;
- strategies for managing HIV that are flexible and appropriate to the person's needs; and
- legislative requirements (notification, contact tracing, storage and coding).

What is informed consent?

This means you should be able to understand what you are testing for and weigh up the advantages and disadvantages of having a HIV test and assess the potential implications of a

positive or negative result. Things to consider are - how you would cope with a positive result given your current life circumstances, what supports you would have, and how you have coped with a crisis in the past. Implications for insurance, superannuation, major loan applications as well as travel and immigration should be explained to you before a test is done. It is also necessary under law in New South Wales that a person diagnosed with HIV must inform current and future sexual partners of the diagnosis before engaging in sex, even if condoms or other methods of protection are used. These things should be discussed with you prior to having a test as well as information on how to prevent transmitting HIV.

Protection of your privacy.

In Australia, testing and reporting of a HIV result using a person's full name and address is unlawful except under specific circumstances, such as for insurance or immigration purposes, testing a hospital patient, or when the person being tested has consented to their name being recorded. It is a good idea to ask the centre where you wish to be tested if they use a coding system that does not identify people by personal details.

6. A NEGATIVE HIV TEST RESULT.

What does a negative result to the HIV antibody test mean?

An antibody negative result means that HIV antibodies have not been detected in your blood. This means that you are not infected with HIV provided that you have waited at least 12 weeks since any activity that may have put you at risk (the window period).

If you have received a negative result at least 12 weeks after the initial risk with no further risks occurring within the window period or after your blood was taken, you can consider yourself not to be infected with HIV. The exception to this may be if you have undertaken PEP treatment, where the window period may be extended from three to six months.

A HIV negative result does not mean you are immune to HIV infection.

How can I stay negative?

You can stay negative by always practising safe sex (see "What is safe sex?", above) and/or safe drug use (not sharing injecting equipment), which avoids the transmission of blood, semen or vaginal fluids from one person to the other.

It is unsafe to assume your sexual partner is the same HIV status as you based on their behaviour. Even when a person thinks they are HIV negative there is no guarantee of this if there have been risks since they last tested, or they might be in the window period and have been given a negative result. Remember that you are responsible for ensuring your own protection.

7. A POSITIVE DIAGNOSIS OR TEST RESULT.

What does a positive result to the HIV antibody test mean?

Receiving a confirmed HIV antibody positive test result means that you are infected with the virus. You must consider yourself as having been infectious (i.e. capable of passing the virus on to others) from the moment of infection, even though you may not have shown any symptoms.

At The Albion Centre, and most sexual health clinics, counselling and medical HIV management are available for free. Treatments are available by prescription to all people with HIV at a government subsidised cost.

How will I cope?

Coming to terms with having HIV may not be easy. It is important to know that many people with HIV are leading full and active lives.

The person who gives you the positive diagnosis should provide you with some initial support, or referral information on where to get support.

You may also want to make a follow-up appointment with your GP for a few days time. You may then want to write down all the questions that occur to you, so that you can remember what you want to know when you do see your GP.

There are many services in NSW that can provide you with support or counselling, or even put you in touch with other people who have HIV. You may want to contact the HIV Information Line for more information or support, contact details are on the front of this booklet.

ACON also have a *New Diagnosis Priority Service* – for priority access to counselling and support. Call 9206 2000 (Sydney), 1800 063 060 (outside Sydney) or 9283 2053 (for the deaf).

www.acon.org.au/mental-health/Counselling/HIV-Diagnosis-Priority-Service

Who should I tell?

Following a positive diagnosis, you may be in shock. For this reason, we suggest that you don't rush out and tell everyone you know straight away, but take some time to adjust to the news yourself, before you tell others. If you must tell someone, choose one or two close people who you are pretty sure will be supportive, or talk to a counsellor if that is not possible.

In NSW, you do not have to disclose your status to anyone, unless they are a sexual partner and you are intending to have sex with them, or you are working in specific occupations where there is a heightened risk of passing HIV on, such as surgeons.

When you are ready to tell someone, you may want to consider whether you can trust them to keep the information confidential, whether they will be supportive or whether they may judge you.

What are the Laws in NSW that relate to HIV disclosure?

The Public Health Act says that if you have a sexually transmissible medical condition you must not have sexual intercourse with anyone unless you have disclosed to that person the fact you have that condition and the other person voluntarily agrees to accept the risk of transmission. The maximum penalty for breaking this law is a fine of $5,500.

This law does not provide any defence of using a condom or taking any other precautions to prevent transmission. In other words, you commit this offence if you have HIV or any other STI and fail to disclose that to your sex partner, even if you use condoms for sex.

This law defines sexual intercourse as meaning the introduction into the vagina, anus or mouth of a person any part of the penis of another person, or cunnilingus. In other words, this law requires disclosure about HIV or STIs for oral, anal and vaginal sex.

This law does not say you have to disclose you have HIV or another STI if you use needles to inject drugs.

What are the Laws in NSW that relate to HIV transmission?

Under the Crimes Act, if you infect someone with a serious disease like HIV infection and if you do it intentionally or recklessly then you commit a serious offence ("Malicious Infliction of Grievous Bodily Harm"). You can be sentenced to many years in prison.

What does "recklessly" mean? You do something "recklessly" if you do it believing there is a risk of something happening as a result and go ahead anyway.

This means that people take a very big risk if –

(a) they know they have HIV

(b) they have sex without taking precautions – like using a condom – and

(c) they don't disclose they have HIV to their partner first.

If their partner gets HIV as a result, they can be prosecuted for Malicious Infliction of Grievous Bodily Harm.

The same applies to a person who has reason to think they might have HIV. They are taking a risk that they might transmit HIV to the person they have sex with.

The Crimes Act does not say that it is OK to take this risk if you disclose you are HIV positive to your partner. There are cases in England where the courts have said that if your partner knows you have HIV and consents to the risk of contracting HIV by having sex then the HIV positive person has a defence. While there is a good chance that those cases would be applied in Australia, there is also a chance that a jury may decide that any such consent is not real consent if alcohol or drugs were involved or if the person with HIV was in a more powerful position than the person who became infected. This becomes much more likely if the acceptance of risk is disputed between the people involved. Where HIV status is unknown or there is a possibility the people having sex have different HIV status, the only safe course is to use a condom.

What if you use a condom and it breaks? Condoms have proven to be the most effective way of preventing sexual transmission of HIV (although not all other STIs). If you believe that by using a condom you are preventing the risk of transmission then it is unlikely you are being reckless.

Finally, the courts impose the maximum gaol penalty on anyone who –

(a) deliberately infects another person, or

(b) lies to their sex (or needle sharing) partner about having HIV if their partner then gets HIV from that person.

Will I be able to have children?

In most cases, having HIV will not stop you from being able to have children. With the correct treatments and advice, it is possible to conceive and to deliver a baby, without the baby or your partner becoming HIV positive. There are also techniques available to assist HIV positive men get their partners pregnant without risk or with reduced risk. Pregnancy should be discussed with a GP with experience in HIV management.

Can people with HIV have sex?

People with HIV can have normal sex lives, however care should always be taken not to pass HIV on to others and this is the responsibility of both sexual partners. Using a condom for penetrative sex is the most effective means of preventing semen or vaginal fluid entering another's body where there is high risk of these fluids entering the bloodstream and causing infection. (See elsewhere in this document for more detailed information on safe sex).

It should be noted that it is a requirement of law in NSW that if you have been diagnosed as HIV positive, whether you practise safe sex or not, you have a legal obligation to inform all sexual partners of your status.

People with HIV should take care not to come into contact with other STIs as these may act as co-factors in the progression of HIV illness. It should be noted that although condoms reduce the risk of transmission of STIs; syphilis, gonorrhoea, chlamydia, hepatitis A, hepatitis B and herpes; STIs can also be passed on by contact other than sexual intercourse (e.g. oral sex, sex toys).

Can a person with HIV have unprotected sex with other people who have HIV?

Choosing to have unprotected sex with people of the same HIV status is sometimes referred to as "sero-sorting". While some people with HIV may choose to have unprotected sex with other people who have HIV, it is important to consider that:

- Unless both partners have disclosed their HIV positive status, it is unsafe to assume your sexual partner is also positive based on their behaviour.
- Research has indicated that re-infection (sometimes called super-infection) with HIV may further weaken the immune system.
- It is possible to be reinfected with a different strain of HIV which may be more virulent and may damage the immune system more quickly.

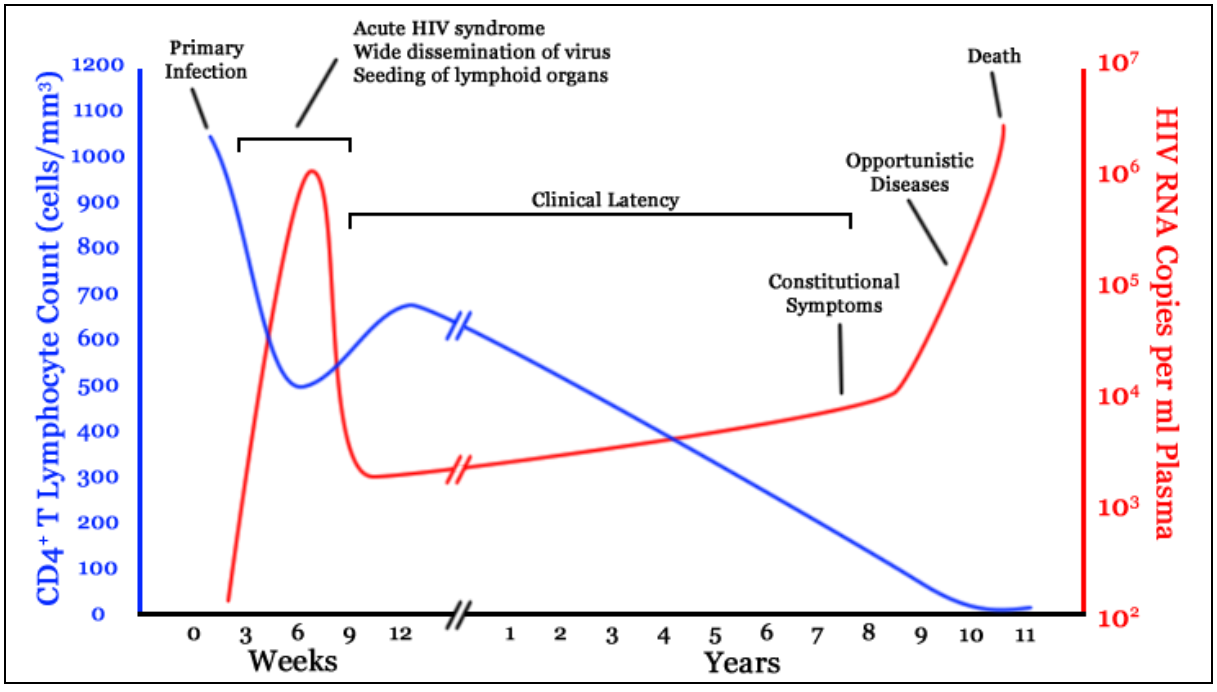
- Re-infection may occur with a strain that is resistant to ART, either currently being taken or which may be used in the future.
- Having HIV can increase the risk of contracting STIs which may be more detrimental to the immune system.
- Recent research shows that hepatitis C, which is not normally sexually transmitted, can be transmitted from a person who has both HIV and hepatitis C to another person with HIV.

What are the categories (stages) of HIV infection?

CURRENT AUSTRALIAN CATEGORISATION OF HIV INFECTION	
CATEGORY/STAGES	**DESCRIPTION** (In Plain English)
Category A	Includes one or more of the following: • Asymptomatic HIV infection • Persistent generalised lymphadenopathy • Acute primary infection
Category B – HIV Symptomatic	• Symptomatic conditions, not included in Category C
Category C – AIDS	• Diagnosis with an AIDS-defining condition • (US definition also includes <200 CD4 Cells)

What are the long term prospects for people with HIV?

While a positive result to the antibody test means that you have been infected with the virus known as HIV, it does not mean that you have AIDS or an AIDS related condition. The average time to develop AIDS is 10-11 years but it can be at little as 12 months or even more than 20 years.



This is a generalised graph of the relationship between HIV copies (viral load) and CD4 counts over the average course of untreated HIV infection (Natural History). Please note that any particular individual's disease course may vary considerably.

There is currently no cure for HIV. People who are infected with HIV remain infectious for the rest of their lives and are able to transmit the virus to others. However, since the development of ART, HIV can be managed as a chronic, long term disease.

ART therapy has successfully slowed the progress of disease amongst many people with HIV, as it slows down the viral replication process. This has resulted in a lower incidence of people progressing from HIV to AIDS and a reduction in AIDS related deaths. However, some people with HIV may not benefit from ART therapy due to side effects, rejection, or drug resistance. The complete long-term effects and benefits of ART therapy have yet to be fully established.

For advice or referrals it is recommended that people with HIV see a health practitioner or a clinic experienced in dealing with HIV infection for health and lifestyle advice and to have regular health monitoring.

One recent study showed that a person diagnosed as HIV positive at 20 years old might reasonably expect to live for another 49 years and another suggests a normal lifespan for people on treatment is now possible.

What can people with HIV do to look after their health?

Generally, a healthy balanced diet, regular exercise, enough sleep and avoiding smoking, excessive alcohol, or use of non-prescription drugs are all recommended. Some recreational drugs may adversely interact with HIV ART, or other medications. It is important to seek information about the use of any non-prescribed substances in relation to HIV treatments.

Regular medical check-ups are important. There are various treatments available that may help people stay well, and there are often clinical trials of new drugs and treatments that people may choose to take part in. Many people benefit from psychological support and counselling, as well as, relaxation, meditation, massage etc.

Can you develop immunity to the virus?

There is no conclusive evidence that anyone has developed immunity against the HIV virus.

Can people with HIV donate blood, semen or organs safely?

HIV can be passed on this way, so blood, semen and organs cannot be donated when they are to be used for others. However, people with HIV may be asked to participate in clinical trials and research in which some of these samples are collected.

What are some of the organisations / services available for people with HIV in NSW?

The Albion Centre – Medical, nutritional support, psychology and pharmacy services available.

www.sesiahs.nsw.gov.au/albionstcentre/index.asp

ACON promotes health & wellbeing for people with HIV as well as for the diverse gay, lesbian, bisexual and transgender communities in NSW.

www.acon.org.au

Positive Life NSW works to promote a positive image of people living with and affected by HIV with the aim of eliminating prejudice, isolation, stigmatisation and discrimination.

www.positivelife.org.au

Bobby Goldsmith Foundation assists people with HIV by providing practical, emotional and financial support in a professional and non-judgemental way.

www.bgf.org.au

Any Sexual Health Service – you can see all the NSW locations at this website or look in the white pages.

www.health.nsw.gov.au/PublicHealth/sexualhealth/sexual_phus.asp

Where can I find a doctor who can prescribe HIV medications?

The Australasian Society for HIV Medicine (ASHM) has a booklet listing all General Practitioners and services that can prescribe HIV medications in Australia. You can download or read the booklet at:

www.ashm.org.au/images/prescriber/ashmprescribers.pdf

The Albion Centre, sexual health services and major hospitals in NSW provide HIV treatment services. Doctors working in emergency departments of public hospitals can also prescribe HIV medications in emergencies (such as if you accidently run out of medication or require PEP).

Where can I find a list of all support services for people with HIV in NSW?

Positive Life maintains an online HIV Services Directory which you can search for support organisations in NSW.

www.positivelife.org.au/contacts

Some Groups for People with HIV

Genesis – A once off weekend retreat/workshop for recently diagnosed gay men run by Positive Life and ACON. Call ACON on 9206 2000 for information or bookings.

www.positivelife.org.au/peersupport/genesis

Nexus is a monthly peer facilitated discussion group for newly diagnosed gay men providing an opportunity to talk about a wide range of issues in a supportive environment with others who may be experiencing similar issues.

www.acon.org.au/hiv/groups-and-workshops/Nexus

7-2-9 is a monthly social support group for gay men living longer with HIV which allows a space to share and discuss experiences of living with HIV, exchange information and develop friendships and social networks. The group meets from 7.00pm to 9.00pm on the last Thursday of every month. More information, dates and venues on the website.

www.positivelife.org.au/peersupport/seventonine

Planet Positive is a quarterly social night for people with HIV and their friends. It's a night full of music + laughter and an opportunity to socialise, catch-up and have some fun. More information, dates and venues on the website.

www.positivelife.org.au/peersupport/planetpositive

PozHet run a social club for heterosexual people with HIV on the last Friday of the month. They also hold additional semi-regular and one-off events. More information, dates and venues on their website.

www.pozhet.org.au

ACON's Women's and Families Affected by HIV Project, provides various opportunities for women with HIV to connect with other positive women in a safe, supportive and confidential environment.

www.acon.org.au/hiv/groups-and-workshops/Peer-Support

8. TREATMENT AND TESTS FOR PEOPLE WITH HIV.

What is ART Therapy?

ART (antiretroviral therapy), previously combination therapy, has been available in Australia since 1996 and is the standard treatment available today used to prevent the progression of HIV. This therapy consists of 3 or more different HIV ART medications from at least 2 different classes of medication being given to a person in combination.

Additional medications may also be prescribed to boost the immune system and/or to prevent infections that a weakened immune system could be vulnerable to.

How does ART therapy work?

ART works by reducing the amount of HIV virus produced in the body. It does this by using actions that impair HIV's ability to reproduce. When there is less HIV virus in the system the weakened immune system's CD4 cells have time to reproduce and build up levels and give the person more immune ability to fight off other infections.

What do I do if I run out of medications at night or on the weekend?

The best thing to do is go to your local public hospital accident and emergency department where you can almost always be provided with enough medications to cover you until you can see your regular HIV medication prescriber.

What treatment(s) are available?

There are a number of different classes of HIV ART medications either currently approved for use in Australia, or which may be available on trials or via compassionate access schemes or are in development which include:

- Nucleoside or Nucleotide Reverse Transcriptase Inhibitors (NRTI & NtRTI),
- Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI),
- Protease Inhibitors (PI),
- Fusion or Entry Inhibitors,
- Intergrase Inhibitors, and
- Maturation Inhibitors.

Research is also continuing on other treatment concepts, such as preventative and therapeutic vaccines and gene therapy.

Each of the above classes target and block specific mechanisms used by HIV to reproduce itself. These medications are usually used together in combination in what we call ART.

In simple terms:

- NRTI introduce defective materials so that as HIV tries to build new HIV it produces defective DNA.
- NNRTIs work by interfering with building instructions so that new HIV DNA is not put together correctly.
- Protease Inhibitors stop HIV assembling properly into new infectious particles.
- Fusion, Entry and Intergrase Inhibitors act like locks on various doors that prevent HIV from getting past.
- Maturation Inhibitors interfere with the development of new virus particles.

What are CD4 or T-cells?

CD4 or T-cells are one of the immune system cells and are destroyed by HIV. The CD4 cell count gives a rough guide to the health of a person's immune system. A reading of:

- **more than 500** is considered to show **no or little immune system damage.**
- **between 200 and 500** is considered to show **moderate immune system damage.**
- **less than 200** is considered to show **severe immune system damage** and indicates a susceptibility to serious opportunistic infections.

In addition to looking at the CD4 count, your doctor may also consider your CD4 count as a percentage of Complete or Total Blood Count. The CD4% can give a more stable indication of immune damages as there may be less fluctuation from test to test than total CD4 cell count.

What is viral load / viral load testing?

The viral load test is a blood test which is used to measure the amount of HIV virus present in the blood of someone with HIV. The monitoring of a person's viral load is used for HIV

management, as the level of HIV can be an indicator of a person's health status, disease progression and effectiveness of treatments.

Generally, people with HIV who have high viral loads are more likely to be susceptible to or experience infections/disease than those with a low or non-detectable viral load. A non-detectable viral load means that HIV has fallen below levels detectable by the test used but a person is still infected with HIV and is still infectious.

- The lower the count the less active HIV is in the body.
- 50,000 or more viral copies is considered high.
- 10,000 - 50,000 copies - moderate.
- Less than 10,000 copies - low.
- Below 50 copies is called 'undetectable'.

The aim of treatments is to get to “undetectable” and maintain that reading for as long as possible.

What is HIV drug resistance testing?

When treatment is less then optimal (such as when a prescribed dose is missed) HIV virus can mutate and become resistant to that medication. The presence of drug resistance can be detected in the blood.

It is also possible that a person can be infected, or be reinfected if they already have HIV, with a strain of HIV that has resistance to some ART medications.

Specific testing for any genetic changes enables the clinician to choose the most effective drug combination to which the mutant or dominant strain of HIV virus is most sensitive to. This potentially increases the chances of achieving maximum benefit from ART.

What is Tropism and Tropism Testing?

One of the newest HIV ART drugs, Maraviroc, is the first of a new class of drug called entry inhibitors. It works by binding to a co-receptor that HIV can use to gain entry into the CD4 or T-cell, called ‘CCR5’ or (R5). Unfortunately, some HIV, often the more advanced and seemingly more virulent strains, use a different receptor called ‘CXCR4’ or (X4).

In order to see if Maraviroc will be a useful treatment, you have to have a test called a tropism assay to see which co-receptor the HIV you have uses. When a tropism assay is conducted, the result can come back as 1 of 4 answers. These are: CCR5-tropic (uses R5 only), CXCR4-tropic (uses X4 only), mixed tropic (you have two strains of virus, with one using R5 and the other using X4) or dual tropic (meaning your virus can use both R5 and X4). Maraviroc works best if you have CCR5-tropic virus, and will not work at all if you have CXCR4-tropic virus.

What is Salvage Therapy?

Salvage therapy usually means that a person has HIV that is resistant to most available HIV ART medications and it is not possible to find a new treatment regimen which contains 3 new drugs from at least 2 classes to which there is little or no resistance.

Salvage therapy can involve recycling (trying again) drugs which the person has already used or using similar drugs to which resistance testing shows only partial resistance.

There is some evidence that continuing with treatments, even when there is resistance, can still be partially beneficial. This is because while resistance mutations may allow the virus to multiply in the presence of drug, the virus still pays a price by multiplying at a lower rate than that of virus that is not being treated.

I do not have a Medicare card and cannot afford medication to treat HIV and opportunistic infections. Can I import generic medication?

It is possible to import cheaper generic medication to Australia, but the process can be complicated and the range of drugs that can be accessed may not be as wide as those available in Australia.

One of the biggest problems experienced by people using offshore pharmaceutical suppliers relates to their reliability. As the suppliers are offshore (and normally internet-based) there is no guarantee that medication will be delivered. Sometimes, previously reliable services become unreliable. People who import medication run the risk of losing their money or being left without their medication for periods of time.

Some websites that sell medications may state that no prescription is required or that their website doctor will prescribe for an order – but this is not true for Australia. A person importing medication into Australia will still need an Australian authority prescription to support the importation of any HIV or other medications – it is a legal requirement.

If a package containing medications is stopped by customs or quarantine for inspection, then the importer may be asked if they have the necessary Australian script to support the importation. A foreign doctor's prescriptions will not be recognised by Australian customs and therefore the goods are likely to be confiscated. Fees may also be charged for the inspection.

If you need more information on this issue, contact the HIV Information Line and we can send you up to date information on this issue.

Treatments Information on the Internet

Australian Federation of AIDS Organisations has information and a downloadable booklet on treatments at www.afao.org.au/living-with-hiv/hiv-treatments.

The Australasian Society for HIV Medicine www.ashm.org.au has a number of resources dealing with HIV and hepatitis B & C that can be downloaded or ordered via fax (order form on website).

A US site, www.thebody.com is one of the best sites for information about treatments, but you should be aware that not all treatments available in the US are available in Australia.

A UK site www.i-base.info has a number of regularly updated booklets on treatment issues.

POZ (magazine) www.poz.com offers cutting-edge information and can be a useful guide to some of the questions you might have.

9. SEXUALLY TRANSMISSIBLE INFECTIONS.

In the past sexually transmissible infections (STIs) have been called sexually transmissible diseases (STDs) or venereal disease (VD). These terms are now less commonly used.

An STI is any infection which is passed from one person to another person during sexual activity. Sexual activity can include oral, vaginal and anal sex.

Some STIs can also be passed on through non-sexual contact. For example, scabies can be passed on during sex but a housemate who might share a towel, bed or clothing of a person who has scabies can also catch them.

STIs can cause a variety of physical symptoms, from itching and sores, to discharge and pain when urinating. If you have any symptoms it is important that you see a doctor.

You can have an STI and not know it. Even if you don't notice any physical symptoms it can still cause damage to your health. Even if there are no symptoms you can still pass the infection to your partners.

If you are a person with HIV, STIs can look different or cause more extreme symptoms and additional complications. Having an STI can also increase the chance of passing HIV on to others.

If you are HIV negative and have an STI, it may increase the risk of HIV being passed to you if you are exposed to HIV.

If you have or think you have an STI don't have sex until you have spoken to your doctor. Your doctor can talk to you about options for treatments and preventing its spread to other people.

What is normal?

Sometimes 'normal' genital function can get mistaken for an STI. If you are unsure it is always better to get it checked out by your doctor.

Signs and symptoms of sexually transmissible infections

Remember you can have an STI and not know it. Even if you don't notice any physical symptoms it can still cause damage to your health. Talk to your doctor if you are concerned.

If you have one of the symptoms listed below you might have an STI. If you think you have an STI please seek professional advice. Most STIs can be very easily and effectively treated.

If you have a symptom listed below it may not necessarily be an STI. It could be caused by something other than an STI or it may be 'normal' genital function. For example, itchy rashes in the groin can be quite common but are often due to a fungal infection rather than an STI.

Discharge from the penis

Except for urine and semen, there are no other normal discharges from the penis. If you are experiencing a discharge you need to get it checked as it is normally a sign of infection. You may have:

- Chlamydia
- Gonorrhoea
- Non Specific Urethritis

Discharge from the vagina

It is normal for women to experience some discharge from the vagina. The amount will vary from woman to woman and can increase at certain stages such as just before or after the period, or midway between periods. Pregnancy can also cause an increase in discharge.

Normal discharge is often white-yellow and should have little odour and cause no irritation. Otherwise you may have:

- Bacterial vaginosis
- Chlamydia
- Gonorrhoea
- Thrush
- Trichomoniasis

Sores, Rashes, Bumps, lumps and blisters

Often men and women can experience sores and rashes in the genital region. This is normally because of recent trauma and often trauma caused during sex (for example, excessive rubbing or pulling). Such sores and rashes normally heal within a couple of days.

Often small white coloured bumps on the penis are mistaken for genital warts. They are called "pearly penile papules" and are not sexually transmitted. They are normal growths in many men. However, if you are uncertain get it checked out by your doctor.

Things that are not normal may be:

- Herpes
- Scabies
- Warts (Human Papilloma Virus)
- Molluscum contagiosum
- Syphilis

If you have an itch it could be:

- Crabs/Pubic lice
- Herpes
- Scabies
- Thrush
- Trichomoniasis

If you have pain passing urine it could be:

- Chlamydia
- Gonorrhoea
- Non Specific Urethritis

Abnormal Bleeding

Periods can vary a lot from woman to woman. Bleeding can last between one to seven days and occur between every 22 to 35 days.

Signs of abnormal bleeding can include irregular or unpredictable bleeding, bleeding between periods and bleeding after sex.

Safe Sex and Sexual Health Information on the web.

NSW Health Sexual Health Website: www.health.nsw.gov.au/publichealth/sexualhealth

Sydney Sexual Health Centre www.sshc.org.au provides a confidential service that can help put you in control of your sexual health. There are also fact sheets about STIs on their website.

ACON Safe Sex information: www.acon.org.au/hiv/hiv-basics/Safe-Sex

Information for Heterosexual couples where one partner has HIV: www.pozhet.org.au

Information on sexually transmissible infections and safe sex for Australian gay men:

www.thedramadownunder.info

Booklet on Safe Sex etc for positive gay men:

www.afao.org.au/library_docs/resources/hiv_gaysex.pdf

Booklet on Safe Sex etc for negative male partners of positive men:

www.acon.org.au/sites/default/files/Opposites-Attract_0.pdf

10. SUGGESTED SOURCES OF INFORMATION FOR STUDENTS AND OTHERS.

In addition to the web pages listed at the end of some of the sections above, the following websites have been used to inform our work and the information in this booklet and may offer access to a wider range of HIV/AIDS information. We do not necessarily agree with or endorse information found on these sites.

In many cases, to read downloaded documents, you must have Adobe Acrobat Reader installed on your computer, which is a free program. A link to Adobe is usually featured on websites where required, or can be found at: www.adobe.com.

Government Publications

Publications on HIV, Sexual Health and hepatitis C from the Commonwealth Department of Health and Aged Care are available at:

www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-hiv_hepc-hiv-index.htm

Useful documents may include:

- The National HIV/AIDS Strategy: “Revitalising Australia’s Response” 2005 - 2008
- The National Sexually Transmissible Infections Strategy 2005 - 2008
- The National Hepatitis-C Strategy 2005 - 2008
- Aboriginal and Torres Strait Islander Sexual Health and Blood Borne Virus Strategy 2005 - 2008

NSW Health also has a number of useful documents which can be found at:

www.health.nsw.gov.au/publichealth/sexualhealth

Useful documents may include:

- NSW HIV/AIDS Strategy 2006 - 2009: Overview and Action Plan
- NSW HIV/AIDS Strategy Environmental Scan 2006 - 2009 - NSW
- NSW Sexually Transmissible Infection Strategy 2006 - 2009

- Sexual Health Promotion Guidelines 2002, NSW
- STI Strategy 2006 - 2009, NSW

Statistics

- For the latest Australian HIV/AIDS and STI statistics and other clinical publications go to The Kirby Institute. The statistics can be found at http://www.kirby.unsw.edu.au/, then go to 'About Surveillance' where there are both Annual Reports and Quarterly Surveillance Reports.
- The Australasian Society of HIV Medicine has some information and links to some State based statistics on HIV and STIs at: www.ashm.org.au/surveillance.
- For world statistics you can go to the UNAIDS website www.unaids.org and look for their Annual Epidemic Update.

Social Research

The National Centre in HIV Social Research (NCHSR), nchsr.arts.unsw.edu.au has published a number of studies, mainly dealing with high risk groups and associated behaviours. They are available for download or hard copies can be ordered.

Some other Australian sites for HIV/AIDS Information

Australian Federation of AIDS Organisations (AFAO) www.afao.org.au

National Association of People Living with HIV/AIDS www.napwa.org.au

AIDS Trust of Australia Aids Trust www.aidstrust.com.au

Some Useful International HIV/AIDS Sites

The AIDS Education Global Information System www.aegis.com, has lots of information about HIV/AIDS and also news archives.

Aids Map, www.aidsmap.com is a UK site with news and information.

An international site based in the UK, www.avert.org has excellent, referenced information on a large number of topics, such as the origins of HIV, types of HIV and the history of HIV.

This booklet was last revised in February 2012 by Health Promotion Staff, Doctors, Nurses and Psychologists at The Albion Centre. The information is regularly checked and updated using many sources, including, but not limited to: medical journals, www.acon.org.au, www.afao.org.au, www.aidsmap.com, www.aegis.com, www.ashm.org.au, www.avert.org, www.fda.gov, www.health.gov.au, www.health.nsw.gov.au, www.napwa.org.au, www.newscientist.com and www.thebody.com.