


iPlan

iPlan is designed to help people living with HIV to become active partners in their health care. It also aims to help people understand and monitor some of the more important health concerns people with HIV may need or choose to explore.

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Healthcare

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HIV today

The experience of living with HIV continues to improve significantly. Advances in research, care and treatment mean that in Australia today HIV is considered a chronic manageable health condition.

In fact, with proper care, healthy lifestyle choices and the timely commencement of HIV treatment, people with HIV can look forward to a near-normal life expectancy.

Making decisions about your health and treatment

The National Association of People With HIV Australia (NAPWHA) believes that all people living with HIV deserve the highest possible standard of care and treatment, and that it is also important for people with HIV to become active participants in their health care.

Research shows that people with HIV experience better health if their treatment and care is planned in partnership with their doctors and others involved in their care and support.

Your care

Firstly, it is important you choose a doctor who has experience working with people with HIV. There are a number of ways you can do this. Some doctors offer GP as well as HIV services, and so can provide all of your care. Or you may wish to continue to see your own GP and consult an HIV specialist doctor to co-manage your health care.

Doctors who specialise in HIV work in a range of settings, including public sexual health clinics, private practice and hospitals. You can choose to see an HIV specialist doctor in any of these settings under an arrangement that suits you, your health needs, schedule and budget.

You may also need to see other doctors and clinicians for other health issues, e.g., a dentist, dietitian, counsellor or other medical specialist. Talk to your doctor/s about the best way to manage and coordinate your HIV and general health care, in a way that works for you.

When seeing any health care professional it is important that you have a good relationship that allows you to be open about your health and lifestyle choices. You can get advice about finding a doctor that suits you from the HIV organisations listed on pages 52-53.

Your finances

Everyone, including people with HIV, can experience economic hardship from time to time, and some may even experience poverty. Financial hardship is one of the major factors linked to depression for people with HIV, and it is also a barrier to getting care and treatment. This is also true for anyone living with a chronic medical condition.

NAPWHA believes that financial difficulties should not prevent people with HIV from getting appropriate health care or taking advantage of their most optimal treatment opportunities.

If you are experiencing financial difficulties, talk to your doctor and others involved in your health care. Your doctor might agree on a fee structure that you can afford, and recommend organisations that can provide assistance.

You can also contact your local HIV organisation for information and support, and they are listed on pages 52-53.

Your health record

Keeping a health record can help you make informed decisions about your HIV care and treatment. This includes monitoring results from blood tests such as your CD4 count and viral load, as well as results relating to other important health concerns for people with HIV.

Keeping a personal health record can also help:

- keep track of your health information over time
- if you ever change doctors or clinics, or want a second opinion
- when you speak to other health care workers
- if you go on holiday or move home.

Your information

If you ever need to change doctors, you can ask for your medical information to be forwarded to your new clinic. This booklet cannot replace formal medical records but it can act as an informal record in the meantime.

Your doctor and other clinicians can provide the information to help you fill in this booklet.

By taking this booklet to all appointments you will have important health information on hand.

You can use your first name only or clinic number if you prefer.

Clinic or Medical Record Number _____

Date of Birth / / _____

Your contacts

Doctor

EMAIL (IF GIVEN)

PHONE NUMBER

Psychologist

EMAIL (IF GIVEN)

PHONE NUMBER

Dentist

EMAIL (IF GIVEN)

PHONE NUMBER

Dietitian

EMAIL (IF GIVEN)

PHONE NUMBER

Pharmacist

EMAIL (IF GIVEN)

PHONE NUMBER

Case Manager/Social Worker

EMAIL (IF GIVEN)

PHONE NUMBER

Other important contacts

EMAIL (IF GIVEN)

PHONE NUMBER

EMAIL (IF GIVEN)

PHONE NUMBER

EMAIL (IF GIVEN)

PHONE NUMBER

EMAIL (IF GIVEN)

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PHONE NUMBER

Understanding your health

The two most important health markers for people living with HIV are the CD4 (or T-cell) count and viral load.

Your CD4 count

Your CD4 cells are a type of white blood cell that are a key part of your immune system. Your CD4 count can be measured in a blood test, and results are given in amounts per cubic millimetre (mm³) of blood. The main role of the CD4 cell is to detect infection, and then signal your immune system to fight that infection.

HIV negatively affects your CD4 count as the virus uses the CD4 cell to replicate or reproduce itself. This replication process results in the destruction of CD4 cells, and your count will gradually decrease over time until you start treatment.

Remember, your body is making new CD4s all the time, and when you start treatment at the right time your CD4 count is very likely to return to normal levels. Starting HIV treatment can also decrease your viral load to undetectable (SEE NOTE, PAGE 13), which gives your immune system the opportunity to restore itself.

Your CD4 count will also vary in response to other factors such as the flu, other infections and even stress, so your numbers will go up and down. This is normal and is also true for people who do not have HIV.

Measuring your CD4 count over time will help you and your doctor understand how your immune system is responding to HIV, guide you on when to start treatment and then show you how well your immune system is responding to treatment. There are different guidelines for starting treatment, and the table below is a general guide only.

You and your doctor will need to discuss your personal situation, health and preferences to help you decide on the best time for you to consider starting treatment.

CD4 count	Immunity	Risk of developing HIV-related health problems	Treatment
Above 500	Normal	Some	Prepare for and/or start treatment
Between 500-350	Lowered	Greater	Start treatment
Less than 350	Greatly lowered	Significant	Start treatment

Your viral load

Viral load is the measure of the amount of HIV in your blood and is included with your routine blood work. Results can vary greatly, from undetectable (when on treatment) up to hundreds of thousands, especially if you have recently been exposed to HIV and are going through the 'seroconversion' period.

The seroconversion period is the interval immediately following HIV transmission when your immune system is initially responding to HIV. During this time, your CD4 count can fall and your HIV viral load can rise, sometimes dramatically. This is a normal response to HIV and can last from weeks to months. Some people experience temporary symptoms such as fevers, rash, sore throat or body aches.

Because someone's viral load can be high during this time, it is important to have safe sex. Using condoms and water- or silicone-based lube is still the safest way to prevent the transmission of HIV.

A note about undetectable viral load

If your result comes back as undetectable this does not mean there is no HIV in your blood. The term *undetectable* means that the amount of HIV in your blood is lower than the amount of virus that can be measured by the pathology test used.

Depending on the particular pathology test used, viral load tests used in Australia can have a lower limit of detection of 50, 40 or 20 copies per ml. Having an undetectable viral load under any of these limits of detection indicates that your treatments are working successfully. Some people may have a slightly detectable viral load, which can still indicate successful treatment.

Viral load and individual treatment decisions

As well as viral load, there are many things that can help you, your doctor and others involved in your care with treatment decisions.

In general, the higher your viral load and the lower your CD4 count, the greater your risk of developing HIV-related health problems. The overall risk can also increase with age (when not taking treatment). On the other hand, the lower your viral load and the higher your CD4 count, the lower your risk of developing HIV-related health problems.

As well as viral load and CD4 count, your doctor may want to discuss other factors specific to your health to help you decide when is the best time to start treatment. These may include hepatitis B or C, pregnancy and other factors that can help inform treatment decisions.

People are individuals, and what is suggested for someone else might not apply to you. Talk to your doctor about your own situation and ask about when the best time might be for you to start treatment.

Your treatment

The goal of HIV treatment is to reduce your level of HIV to undetectable levels and restore your immune system to its optimal levels. Controlling HIV prevents a range of potential HIV-related health concerns. When people start treatment, their CD4 cell count usually increases. Usually, the sooner someone begins treatment, the better their immune system and CD4 cell count recover.

Ask your doctor about when to start HIV treatment and what treatments they would recommend. If you are anxious or confused about treatments, consider talking to a counsellor or someone from an HIV organisation who can support and advise you with your treatment decisions.

You can also ask your local HIV organisation if there are opportunities to talk to other people with HIV about their experiences with treatment, and there is a list on pages 52-53.

Keeping a record of your results

Keeping a history of test results and treatment information can help you make informed decisions about your care. Your record should include results from blood tests such as CD4 count, viral load and resistance tests, any medications you have used, and why you might have changed treatment.

Viral blips

When people are taking treatment and their viral load becomes undetectable, some people will experience a temporary blip, when their viral load becomes minimally detectable for a short period of time. A blip can happen in response to missed doses of treatment, a recent vaccination, the flu and sometimes for no apparent reason at all. There is usually no cause for concern, and these blips usually resolve, and your viral load will return to undetectable levels. If you experience a blip in your results and you are concerned, you can ask your doctor to repeat your viral load blood test.

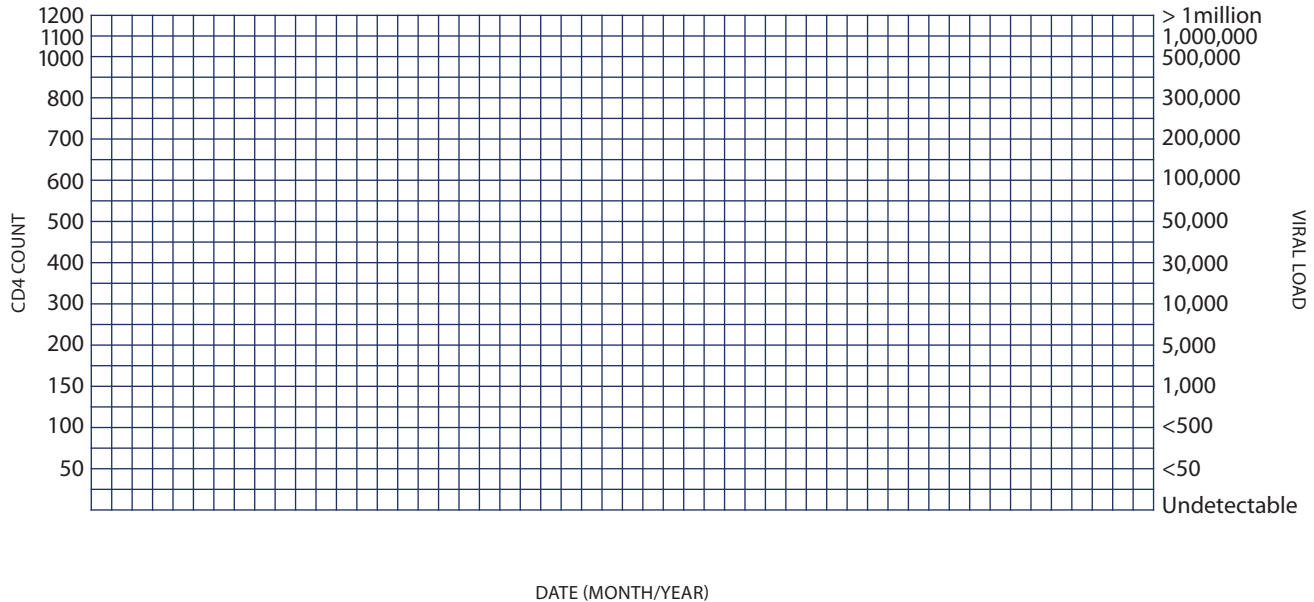
Viral load in blood and viral load in genital fluids

Having an undetectable viral load in your blood does not necessarily mean that HIV will be at the same level in other parts of your body, including genital fluids such as semen or vaginal secretions. Except for research purposes, viral load is not routinely measured in your genital fluids.

Studies are underway to understand the relationship between the viral load of genital secretions and risk of HIV transmission during sex. Using condoms and water- or silicone-based lube during sex is still the safest way to prevent the transmission of HIV and other sexually transmitted infections (STIs).

Use the graph on page 17 to record your CD4 count and viral load over time. Recording your results can help you monitor the success of your treatment.

Graphing your CD4 count and viral load



Note: Use a different coloured pen or marker to graph each so you can track them separately.

Pre-treatment tests

HIV treatment has improved significantly in recent years. Modern treatment combinations are easier to take, require fewer pills, carry a low risk of side effects and are more highly effective against HIV. The older treatments that were associated with side effects are very rarely used, and many of them are no longer manufactured.

Before you start treatment your doctor will want to perform some routine pre-treatment blood tests that can help you choose which treatments will work best for you. Your pre-treatment blood tests should include:

Abacavir hypersensitivity test This blood test shows if you have a hypersensitivity, or genetic allergy to an HIV treatment called abacavir. About 5% of people are thought to have this allergy to abacavir. If you do not have this genetic allergy then you can take abacavir.

Drug resistance tests These tests can tell if you are resistant to any HIV treatment(s). Knowing if you have resistance helps you understand which treatments will be most effective for you.

Tropism test Some newer HIV treatments work by blocking specific co-receptors that HIV needs to enter CD4 cells. The type of co-receptors on your CD4 cells determines your tropism, and this blood test will tell you your tropism, and also if you can take one of these newer treatments.

Starting treatment

It is a good idea to prepare yourself as much as you can before you start treatment. Successful treatment involves taking the same pill(s) at the same time(s) every day. So, think about your daily routine and when might be the best time for you to take your pill(s). Think about your morning routine and your evening routine: are they the same each day or can they differ?

It can be helpful to keep a diary of your routine over a week or so, to observe patterns that will help you fit treatment into your existing routine, and not the other way around. Think of the times of day that will be easiest for you to take your treatment. The majority of people are surprised at how easy it is to fit treatment into a routine, e.g., wake up, get up, brush teeth, eat breakfast and take treatment.

Your induction period

Your induction period is the *starting time* when you first begin HIV treatment. When starting any new medication, including HIV treatment, there can be a risk of certain side effects, including mild nausea, headache, and possibly diarrhoea or skin rash.

These side effects are often mild and temporary, if they occur at all. And there are many effective strategies for coping with them, so you should talk about these strategies with your HIV doctor and others involved in your care and support.

Just in case, here is a useful guide to help you prepare for side effects, and some useful strategies to help deal with them. This is a guide only, and you should talk to your doctor about will work best for you.

SIDE EFFECT **STRATEGY**

Anxiety

Ask your doctor about medication that can be used in the short term. Tell your partner, friends, family and others if you need support.

Nausea

Take medication with food, such as toast. Avoid spicy foods. Ginger is very good for nausea, and can be taken as tea, ginger beer or in tablet form, such as *Travel Calm*. Ask your doctor about prescription medication for nausea before you start. Eating plain crackers can also help. And remember to drink plenty of water.

Diarrhoea

Take your medication with food, such as toast. Avoid spicy foods. Ask your doctor to recommend an anti-diarrhoea medication just in case. Drink plenty of water, and over-the-counter rehydration therapy if needed.

Headache

Ask your doctor which medication to take, and drink plenty of water and rest. Avoid noisy and loud situations.

Skin rash

Ask your doctor if they would recommend any ointments or other medication.

Fatigue

Some people do get tired for a few days, a bit like getting over the flu. Eat well and drink plenty of water. Consider starting treatment on your days off from work, study or other commitments. Take extra days off if you need to. Ask your doctor for a medical certificate if needed, and there is no need to mention HIV. Your doctor will be used to writing certificates for a general Medical Condition.

In addition to their doctor and counsellor, some people find it helpful to talk to other people living with HIV. You may already know other people or you can contact your local HIV organisation and ask about peer support services. Many people find joining a peer support group helpful.

Remember that some people might have information relating to older treatments or unpleasant experiences, so focus your research and attention on those who have successful stories to share. Most people are doing just fine and experience few problems when they start treatments. In fact, the majority of people wonder why they worried in the first place.

Adherence

Successful HIV treatment involves taking your pills at the same time(s) each day; this is often called adherence. Your treatments are designed to reduce your viral load to undetectable levels, and to keep your viral load undetectable. Taking your treatments as prescribed enables you to control HIV. If you miss doses or take them late too often, you risk developing resistance to your treatments.

When first starting treatment, many people find reminders such as pill boxes, phone alarms, apps and watch alarms helpful. People also take their pills around the same time they brush their teeth or eat breakfast. This can both serve as a reminder and help fit treatments into your personal routine.

Choosing a treatment combination

If you are thinking about starting treatment, ask your doctor to recommend two or three treatment combinations. When deciding on a combination, think about how easily they will fit into your day-to-day life, and if one combination has any added health benefits for you compared to another. You can also use this format if you are considering changing your HIV treatment combination.

Suggested HIV treatment combination	Number of pills a day	Once or twice a day	Food requirements	Advantages	Disadvantages
EXAMPLE Virusaway + Adherandbloc (not real names)	3	2 in the morning, and 1 at night	Can be taken with or without food	Low risk of side effects and easy to take	Remember to take them on time each day, and avoid alcohol

Suggested HIV treatment combination	Number of pills a day	Once or twice a day	Food requirements	Advantages	Disadvantages

Listing your medications and supplements

It can be helpful to keep a list of all the medications you are taking, including vitamins and other supplements. Some supplements can interact with your HIV treatments, especially St John's Wort (Hypericum), so it is important that your doctor(s) knows what you are taking.

Name of medication or supplement	What it is for	Dose	Time of day	With or without food

Name of medication or supplement	What it is for	Dose	Time of day	With or without food

Medicare provides a Home Medicines Review for anyone who takes more than five medications. This free service allows a review of all the medicines you are taking by a pharmacist, at the request of your GP and with your consent. The review takes place in your home at a time convenient to you, so that your pharmacist can go through your medications with you personally.

Your GP will discuss the results of the review with your pharmacist, including any suggestions of potential benefit to you.

If you're interested, ask your GP about the Home Medicines Review.

Your health plan

The next part of this booklet will cover different health issues that are important for people with HIV to be aware of. Using this information to adopt an all-of-person or holistic approach to health has a number of advantages.

Having a greater awareness of your health allows you to become an active participant in your health care.

Having an understanding of your tests and results can help you make informed decisions about lifestyle choices. You may also feel better informed to participate in conversations and decisions about HIV treatment.

Regularly talking to your doctor(s) and others involved in your health care about HIV treatment can help you decide when to start treatment.

Sexual health

Sex is a natural and wonderful experience enjoyed by many, including people with HIV. From time to time anybody can experience changes in their sex drive, including people with HIV.

There are many factors related to sex drive, including mood, reaction to your HIV diagnosis or changes in hormone levels. Talk to your doctor if you are concerned about your sex drive. You can also talk to a counsellor experienced in working with people with HIV.

Sexually Transmitted Infections (STIs) do not always cause symptoms. Ask your doctor for a full sexual health screen as often as you need to. This can be every 3-6 months, or if you have had unprotected sex with a casual partner.

If you are embarrassed to talk to your regular doctor about having a full sexual health screen you can ask your local HIV organisation where to go for free and confidential sexual health checks. There is a list of HIV organisations on pages 52-53.

Getting tested

You can go to your own doctor or visit a sexual health clinic, family planning clinic, youth health centre, women's health centre, Aboriginal community controlled health service as well as some HIV organisations. Choose an option that is convenient for you and will make you feel comfortable.

Everybody looks for different things in their doctor. You might choose a doctor based on convenience, their gender or because they specialise in a particular area. The important thing is that you feel safe and comfortable talking with them. Some clinics have nurses and/or peer workers who can also perform sexual health checks.

A good sexual health clinician will:

- listen to what you have to say;
- not judge your behaviour;
- ask you questions about your health, sexual history and practices;
- explain things in a way that you can understand;
- talk to you about how to protect your health; and
- answer your questions.

Vaccination

Vaccination can protect your immune system from many things, including hepatitis A*, hepatitis B*, and the flu. Your doctor can check if you have immunity to any of these with a blood test, and also tell you if you need vaccination or a booster.

Sometimes when people travel overseas they need vaccinations against other diseases, depending on where they plan to travel. It is important to give your doctor as much notice about your travel plans as possible, as some vaccinations need to be given ahead of time.

Some vaccinations recommended for travel might not be recommended to someone with HIV with a low CD4 count or who has recently been unwell.

***NOTE** Vaccinations for hepatitis A and hepatitis B do not protect you against hepatitis C. Hepatitis C can cause serious health problems for people with HIV, and can be sexually transmitted through unprotected sex. Condoms and water- or silicone-based lube protect you and your partner(s) from hep C and other STIs.

On page 30, there is a list of vaccinations recommended for people with HIV. This is a guide only and should not replace medical advice. You can use this page as part of your personal record.

Vaccine	Type/brand given	Clinician	Date given dd/mm/yyyy	Date next dose due
Hepatitis A				
Hepatitis B				
Pneumococcal				
Tetanus-diphtheria/polio/ pertussis (Td/IPV) vaccine				
Diphtheria-tetanus- acellular pertussis (dTpa) vaccine				
Influenza vaccine				

Mental health

Living with HIV can sometimes be challenging, which can affect your mood and stress levels. NAPWHA believes that all people living with HIV should enjoy a happy and rewarding life and encourages people to monitor and maintain their mental health.

Talk to your doctor if you are concerned about your mental health. Many treatment options are available for depression and anxiety, and often the sooner symptoms are detected, the more that can be done. There are many specialised and affordable counselling services for people with HIV.

Talking to other people who are living with HIV can also be very helpful. Ask your local HIV organisation if they offer peer support groups, or counselling services. There is a list of HIV organisations on pages 52-53.

You might like to consider other strategies that can help with stress and anxiety, including meditation, yoga and exercise. Consider trying one or more of these options that you are interested in. Ask your local HIV organisation if they can recommend any of these classes.

BEYOND BLUE (beyondblue.org.au) is an organisation working to reduce the impact of depression and anxiety by raising awareness and understanding, empowering people to seek help, and supporting recovery, management and resilience.

Their website has a number of useful features and resources designed to help people understand causes, symptoms and treatment options for depression, anxiety and other mental health issues. There are interactive self-assessment tools as well as search options to help you find services in your area.

MOOD GYM (moodgym.anu.edu.au) is a free online self-help program to teach Cognitive Behaviour Therapy (CBT) and Interpersonal Therapy skills to people who may be more likely to experience depression and anxiety. The site has tools that can:

- assess your mood and anxiety levels through interactive quizzes
- help you to identify and change any 'unhelpful' patterns of thought and related behaviour
- offer proven coping strategies to help you deal with depression
- outline complementary therapies, such as relaxation and meditation

Healthy brain (HAND)

Years ago, before the availability of modern effective HIV treatments, some people with HIV were at risk of developing certain forms of dementia, including HIV dementia. HIV dementia occurred in about 20% of people not taking treatment and who had been living with HIV for a very long time and also had very low CD4 counts and very high viral loads. In these situations HIV could enter the brain and other parts of the nervous system, and interfere with normal brain function.

Today, with modern HIV treatments, severe HIV dementia is rarely seen. However, about 20% of people with HIV can experience mild HIV-associated neurocognitive disorders, or HAND. The term HAND is used to describe disorders that can manifest as difficulties with memory and concentration, difficulties performing very complex tasks at work or at home, frequent difficulty finding words, some mental slowness and mental fatigue.

Modern HIV treatments can both prevent and treat HAND.

Certain HIV treatments are better able to reach HIV in the brain than others, and it is important that your combination includes treatments that are known to cross the blood brain barrier, or BBB. The BBB is a membrane or shield that surrounds and protects the brain. The BBB also contains specialised blood vessels that prevent infection and harmful substances from circulating into the brain.

HAND

It is important to talk to your doctor if you or others think you or they notice a change in your memory, concentration, or a change in your ability to work or manage as well as you normally do. Your doctor will want to rule out other things that can look like HAND such as depression or excessive alcohol or other drug use.

You can ask your doctor if your HIV treatments are known to cross the BBB. Treatments can be rated and scored in relation to their ability to cross the BBB, and current thinking suggests that an HIV treatment combination with a total score of greater than seven is associated with better neurological functioning.

Taking HIV treatment combinations with a score of greater than seven can both prevent as well as reverse the symptoms of HAND.

High blood pressure (BP) and high cholesterol have been shown to reduce how well the brain functions in people living with HIV and who are taking HIV treatment. Improving your cardiovascular health by treating BP and high cholesterol, if necessary, as well as exercising, quitting smoking, reducing alcohol intake and eating a healthy diet can all help protect and improve your brain function (cognitive health).

Central Nervous System (CNS) Penetration Effectiveness (CPE) Ranks of HIV Treatments (2010)

Drug class	CPE SCORE			
	4	3	2	1
Nucleoside Reverse Transcriptase Inhibitors (NRTIs)	Zidovudine	Abacavir Emtricitabine	Didanosine Lamivudine Stavudine	Tenofovir Zalcitabine
Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs)	Nevirapine	Delavirdine Efavirenz	Etravirine	
Protease Inhibitor (PIs) (those marked with -r are boosted with Ritonavir)	Indinavir-r	Darunavir-r Fosamprenavir-r Indinavir Lopinavir-r	Atazanavir-r Atazanavir Fosamprenavir	Nelfinavir Ritonavir Saquinavir-r Saquinavir Tipranavir-r
Fusion/Entry Inhibitors		Maraviroc		Enfuvirtide
Integrase Inhibitors		Raltegravir		

Letendre S. et al., 17th Conference on Retroviruses and Opportunistic Infections, poster n° 430

Healthy weight and body fat

Carrying extra weight, especially around the abdomen or belly can increase your risk of developing health problems such as heart disease, diabetes, fatigue and even depression. Ask your doctor to calculate your Body Mass Index (BMI) and to measure your waist.

Measuring your waist circumference is a simple way to tell how much body fat you have and where it is placed around your body. Waist measurement compares closely with BMI; however, waist measurement is often seen as a better way of checking someone's risk of developing a chronic disease. For more information go to [measureup.gov.au](https://www.measureup.gov.au).

You can also speak with an HIV specialist dietitian about your diet, and an exercise physiologist can work with you to develop an exercise plan to help you lose weight.

Body shape changes

In the past, some people did experience body shape changes as a result of taking certain HIV treatments. These earlier treatments that caused body shape changes, or lipodystrophy, are no longer used and some of them are no longer manufactured. Talk to your doctor if you are concerned about any possible relationship between your treatment combination and body shape changes.

Your BMI is a number calculated by dividing your weight in kilograms by your height in metres squared. The result can give you a general idea if you are in a healthy weight range for your height. To calculate your BMI, you need to know:

- Your weight in kilograms
- Your height in metres

Once you have these numbers, you then square your height in metres (height x height), and divide your weight by that number. The formula is:

Your weight in kilos ÷ the total of (your height in metres x your height in metres)

For example, say you weigh 75 kilos and you are 1.75 metres tall. You would divide 75 by 3.0625 (1.75 x 1.75), which equals 24.49. According to the table below, you would have a healthy weight. The result gives an indication of your weight in relation to your height. Results apply to both men and women.

BMI	CATEGORY
Below 18.5	Underweight
18.5 to 24.9	Healthy weight
25.0 to 29.9	Overweight
30 to 39.9	Obese
40 and above	Morbidly obese

Healthy blood sugar and diabetes

Diabetes is an increasing health concern in modern times, and people with HIV are no exception. Having a family history of diabetes or heart disease and being overweight can increase anyone's risk of developing diabetes. Quitting smoking, eating enough fruit and vegetables, moderating your alcohol intake and exercising can all lower your risk.

Ask your doctor for a diabetes health assessment. You can check your own risk of developing diabetes at [ausdrisk.com.au](https://www.ausdrisk.com.au).

An HIV specialist dietitian can talk to you about how to prevent and/or manage diabetes. To find an HIV specialist dietitian, ask your doctor or contact your local HIV organisation.

Exercise is also important. Walking for as little as 30 minutes each day can reduce your risk of diabetes as well as offering other health benefits. Talk to your doctor before you start with any major exercise program, especially if you are living with any serious health complications.

Being overweight, especially around your waistline, makes it more difficult for you to manage your diabetes and increases your risk of heart disease.

A small weight loss (5-10% of body weight) can make a big difference to helping you manage your diabetes, and, as a consequence, reduce your risk of developing complications such as heart disease, stroke and some cancers.

Measure your waistline around your belly button.

- Women should aim for a waist circumference less than 80 cm
- Men should aim for less than 94 cm.

If you are carrying excess weight around the middle:

- Follow a diet plan lower in kilojoules and total fat (particularly saturated fat)
- Do regular physical activity such as walking, dancing, riding a bike or swimming
- Ask your doctor, dietitian or Credentialed Diabetes Educator for advice.

For more information go to diabetesaustralia.com.au.

Healthy heart

Your cardiovascular (CV) system is made up of your heart and blood vessels. The role of the CV system is to circulate blood, oxygen and nutrients throughout your body, and to remove waste products.

HIV, especially when untreated over a long time, causes inflammation that can affect your CV health. Other factors that can affect your CV health include smoking and excessive alcohol and drug use. Maintaining a healthy weight, exercising regularly and eating a healthy diet all help maintain a healthy heart.

Ask your doctor for a comprehensive assessment of the health of your heart so you can know the current state of health of your CV system. Many symptoms of heart disease can occur long before they cause any health problems, and there are many interventions that prevent heart disease that are safe and that also offer other health benefits. Importantly, many symptoms of heart disease can be treated and even reversed!

An electrocardiogram (ECG) is a medical test that measures the electrical activity generated by your heart as it beats. An ECG can detect very early signs of heart disease and is a useful test to help you and your doctor know the health of your heart. Talk to your doctor about having an ECG, and let them know if there is any history of heart disease in your family. For more information, go to heartfoundation.org.au.

Result	Pre-action results and date	Action	Post-action results
Blood pressure (BP) (Top number) systolic			
Blood pressure (BP) (Bottom number) diastolic			
Blood sugar level (BSL)			
Total cholesterol			
HDL (good cholesterol)			
LDL (bad cholesterol)			
Ratio (total cholesterol divided by HDL)			
Triglycerides			

Healthy liver

Your liver is responsible for many functions in the body, including metabolising or breaking down alcohol, nicotine, and other potentially harmful substances. Your liver also releases glucose, vitamins and iron for energy.

Being overweight, having diabetes, a family history of liver disease, excessive alcohol and recreational drug use, some over-the-counter drugs (e.g., paracetamol) and prescribed medications, including some HIV medications, can affect the health of your liver.

Ask your doctor about your Liver Function Tests, or LFTs for short. These blood tests can help indicate the health of your liver.

Vaccinating against hepatitis A and B protects you from these viruses. If you have been vaccinated you can ask your doctor to check your immunity, as the effect of vaccinations can wear off over time, and some people might need a booster. Importantly, vaccinating against hep A and B does not protect you against hepatitis C.

There is more information about vaccination on pages 29-30.

Two of the most important things you can do for your liver are to monitor your alcohol intake and quit smoking.

Alcohol

Regularly drinking to excess can adversely affect your liver function. If you reduce your drinking, or stop altogether, your liver can recover. You should talk to your doctor if you are concerned about your alcohol intake. Also, drinkwise.org.au has information about how much is a standard drink as well as a list of numbers you can call for information and support.

Reducing your alcohol intake is one of the best ways to improve the health of your liver, and the information on the next few pages includes an exercise to help you understand and reduce your intake of alcohol and other drugs.

Some people find it helpful to seek professional support. Talk to your doctor or counsellor, and you can also ask your local HIV organisation if they can recommend someone. There is a list of HIV organisations on pages 52-53.

Smoking

Many of the toxins in tobacco smoke are processed by the liver, exposing the liver to cancer-causing substances. Your risk of developing liver disease increases the more you smoke and generally decreases the longer you stay quit. Talk to your doctor and local HIV organisation about the many treatments and support available to help people quit smoking. Also, quitnow.gov.au has lots of great information and resources to help people quit, or you can call the **Quitline 13 78 48**.

Changing how you use alcohol or other drugs

If you are concerned about the amount you are drinking or using, try keeping a record of every drink (or blast or snort or whatever) that you have. There's a chart you can use on page 45. Standard drinks vary from state to state, and in NSW for example, one standard drink equals a middy of beer, 100mls of wine or 30mls of spirits. Try familiarising yourself with these amounts by using a measuring cup. You might be surprised by how small a standard drink actually is.

Fill in each column with as much detail as you can, including if anything particularly unusual, stressful or good happens during the day. Record every drink etc so you know how much you are really having, any patterns, your riskiest periods, and how much it is costing as well as what might be causing you to drink. You might not enjoy doing this, but try sticking with it for at least a week.

At the end of the week have a look at what you have recorded and try to see if there are any patterns. Do you drink before going out, or more on a weekend, when you are with others or alone? Understanding when and why you use can help you replace it with something else, e.g., if you drink when you are stressed you could try meditation or exercise instead.

DATE	AMOUNT	WHERE	WHEN	WHO WITH	MONEY SPENT	FEELINGS BEFORE	FEELINGS AFTER	FEELINGS NEXT DAY
January 1	1 stubby of beer	Home	Saturday 5pm	Alone	\$3.80	Anxious	Relaxed	Tired, agitated

Now you have a record you can set some goals and limits for yourself. Try to be realistic; remember that telling yourself you won't drink for six months and drinking the next week can make you feel like you will never change, and perhaps make you think you have failed. Another approach is to set realistic boundaries and goals for yourself, including:

■ **When:** *What times will you drink?*

For example, only after 5pm and finish before 7pm on work nights, and 10pm weekends.

■ **Who with:** *Do some people encourage you to drink more?*

For example, only with friends who don't encourage drinking.

■ **Triggers:** *Some moods trigger us to drink more than usual*

For example, I won't drink when feeling sad; instead I will phone a friend.

■ **Amount:** *How much will you drink?* For example, two standard drinks three times a week.

■ **Where:** *In which situations will you drink?* For example, only with friends.

Lastly, the best of intentions and plans can sometimes be challenged by unforeseen events, such as a friend coming over with a bottle of wine or the boss taking the team out for work drinks. Planning ahead for tempting or difficult situations involves planning ways to cope with difficult situations should they arise. For example, keep ginger beer in the fridge to drink if others are drinking wine. After a stressful day, take a long walk and then a shower instead of having a drink or using.

Healthy kidneys

Your kidneys are specialised filters that remove waste from your body in your urine. Your kidneys manufacture vitamin D that facilitates calcium uptake to maintain healthy bones. Your kidneys also manufacture red blood cells and help control blood pressure.

Tests to monitor for kidney health are included in your routine blood work, and you can ask your doctor about your results and what you can do to keep your kidneys healthy. Your doctor might also want to check your blood pressure and ask for a urine sample that can be tested using a dip stick or sent to a laboratory for further testing, if necessary.

Some medications including certain HIV treatments can affect the health of your kidneys, so it is important to tell your doctor(s) about all the medications you are taking.

Ask your doctor for a comprehensive kidney health assessment.

You can reduce your risk of kidney disease by not smoking, maintaining a normal blood pressure (BP), staying fit, maintaining a healthy weight, maintaining normal blood sugar levels (BSLs), reducing stress and drinking alcohol moderately.

Ask your doctor for a kidney health assessment. This table can help you keep track of some of the health markers that your doctor may want you to monitor.

Health marker	Date and result	Date and result	Date and result
Blood pressure (BP)			
Weight			
Blood sugar level (BSL)			

For more information go to kidney.org.au.

Healthy bones

Your bones are complex living structures that provide support for muscles and protect vital organs including your brain, heart and lungs. Your bones are renewing themselves all the time by making new bone tissue using calcium, vitamin D and other minerals. A measure of the health and strength of your bones is your bone mineral density, or BMD.

HIV, length of time living with HIV, smoking, liver disease, lack of exercise, the natural ageing process, diet, testosterone and other hormone levels, and menopause can all affect the health of your bones. Certain HIV treatments can also contribute to loss of BMD.

There are a number of ways to measure your BMD. One test is a DEXA Scan; DEXA stands for Dual Energy X-ray Absorptiometry. It involves a specialised x-ray scanning machine that sends low-energy x-rays from two different sources through the bone being tested. The more dense the bone is, the fewer x-rays get through, and the results are calculated by a computer. Your doctor can also perform certain blood tests that can also indicate the health of your bones, including calcium, vitamin D, testosterone and thyroid function.

Talk to your doctor about what you can do to maintain healthy bones. Ask for a referral to an HIV specialist dietitian to talk about how diet can help maintain the health of your bones.

For more information and helpful tips go to healthybonesaustralia.org.au.

Cancer prevention

As is the case for everyone, people with HIV should talk to their doctor(s) about screening for the early warning signs of cancer. Before the availability of modern effective HIV treatments, people with HIV did have an increased risk of certain cancers associated with greatly lowered immunity.

Today, with modern HIV treatments there is good evidence that some of the most common cancers, including breast cancer and prostate cancer, do not occur at increased rates in people with HIV.

There is, however, an increased risk of some cancers, including cervical and anal cancers, both of which are caused by the Human Papilloma Virus (HPV). There is an increased risk of liver cancer in people living with hepatitis B or C. Taking HIV treatment can minimise your risk of cancer by suppressing HIV and increasing your CD4 count. Quitting smoking, reducing alcohol intake, avoiding too much sun and vaccinating against HPV and hepatitis B can also reduce your risk of developing cancer.

Ask your doctor for a full cancer check, including screening for skin cancer, and review as often as needed. Tell your doctor if there is any history of cancer in your family, and tell your doctor immediately if you think you have any symptoms that might be related to cancer. Follow up immediately on referrals for further screening or treatment.

For more information go to the [cancer council.com.au](https://www.cancer council.com.au), which also has details of support networks.

Quitting smoking

Using a Quitline advisor can double your chance of quitting successfully. When you ring Quitline, you can ask for a Quit pack to be sent free-of-charge and you can ask to speak to a trained advisor. Quitline also has Aboriginal or Torres Strait Islander Quitline advisors.

Quitline advisors are trained to listen carefully to you to help meet your needs. Advisors can also help you work out how you can be of support if someone you care about smokes.

Remember: the most effective way of quitting smoking is:

Coaching (e.g., Quitline) + Nicotine Replacement Product or Quitting Medication

Quitline can also offer advice on the range of quitting products available, including how to use them and how well they work. Quitline is available 8am to 8pm, Monday to Friday from anywhere in Australia for the cost of a local call (except from mobiles, where normal charges apply).

Quitline is confidential, and you don't have to give your name if you don't want to.

For more information, call Quitline **13 78 48** or go to quit.org.au.

Contacts

These organisations have staff who can talk to you about HIV, treatments and related health issues.

AUSTRALIAN CAPITAL TERRITORY

AIDS Action Council of the ACT

WEB aidsaction.org.au

PHONE (02) 6257 2855

EMAIL info@aidsaction.org.au

NEW SOUTH WALES

ACON

WEB acon.org.au

■ Sydney PHONE (02) 9206 2000

FREECALL: 1800 063 060 (within NSW)

■ Northern Rivers PHONE (02) 6622 1555

■ Hunter/Mid North Coast PHONE (02) 4927 6808

EMAIL acon@acon.org.au

Positive Life NSW

WEB positivelife.org.au

PHONE (02) 9206 2177 FREECALL 1800 245 677

EMAIL VIA positivelife.org.au/contact

NORTHERN TERRITORY

Northern Territory AIDS and Hepatitis C Council (NTAHC)

WEB ntahc.org.au

■ Darwin PHONE (08) 8944 7777

■ Palmerston PHONE (08) 8931 3676

■ Alice Springs PHONE (08) 8953 3172

EMAIL info@ntahc.org.au

QUEENSLAND

Queensland Positive People (QPP)

WEB qpp.net.au

PHONE (07) 3013 5555

FREECALL 1800 636 241 (within Queensland)

EMAIL info@qpp.org.au

SOUTH AUSTRALIA

Positive Life SA

WEB hivsa.org.au

PHONE (08) 8293 3700

Country Callers PHONE 1300 854 887

EMAIL reception@hivsa.org.au

TASMANIA

Tasmanian Council on AIDS, Hepatitis and Related Diseases (TasCAHRD)

WEB tascahrd.org.au

PHONE (03) 6234 1242

EMAIL VIA <http://tascahrd.org.au/contact/>

VICTORIA

Victorian AIDS Council/Gay Men's Health Centre (VAC/GHHC)

WEB vic aids.asn.au

PHONE (03) 9865 6700 FREECALL 1800 134 840

■ Positive Living Centre

PHONE (03) 9863 0444 FREECALL 1800 622 795

EMAIL enquiries@vic aids.asn.au

Living Positive Victoria

WEB livingpositivevictoria.org.au

PHONE (03) 9863 8733

EMAIL info@livingpositivevictoria.org.au

WESTERN AUSTRALIA

WA AIDS Council

WEB wa aids.com

PHONE (08) 9482 0000

EMAIL waac@wa aids.com

NATIONAL

National Association of People With HIV Australia (NAPWHA)

WEB napwha.org.au

PHONE (02) 8568 0300 FREECALL 1800 259 666

EMAIL VIA napwha.org.au/contact

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