

# Aboriginal and Torres Strait Islander Health Workers and Blood-Borne Viruses



This booklet was developed for Aboriginal and Torres Strait Islander Health Workers (Health Workers), including Aboriginal and Torres Strait Islander Health Practitioners, who work in both clinical and non-clinical roles. There may be some Health Workers and Practitioners with highly specialised or detailed knowledge of blood-borne viruses (BBVs) who may still find parts of this booklet useful.

This booklet provides basic information about BBVs: hepatitis B (hep B), hepatitis C (hep C) and human immunodeficiency virus (HIV). The first section contains information that is relevant to all BBVs, while the second half focuses on the three individual viruses. A quick reference table on what Health Workers can do is on page 10.

## What you should know

Hepatitis B (hep B), hepatitis C (hep C) and human immunodeficiency virus (HIV) are blood-borne viruses (BBVs).

While they are 3 different viruses, all can be spread by blood and blood products as well as other body fluids.

When you meet your clients, it is important to remember that many may have a BBV that you may not know about.

Therefore, you should always use standard infection control procedures (e.g. wash hands with soap and warm water, use gloves etc.) to minimise the spread and keep yourself, your clients, your family and the community safe from harm.

### Hep B

- Approximately 10% of Australians with chronic hep B are Aboriginal and Torres Strait Islander people.
- Hep B can be prevented with a vaccination.
- Treatment is available and a healthy lifestyle can minimise the harm done.

### Hep C

- The number of Aboriginal and Torres Strait Islander people who are newly diagnosed with hep C is increasing at 2.5 to 8.7 times the rate of non-Indigenous people.
- Treatment is available and a healthy lifestyle can minimise the harm done.

### HIV

- The rate of new HIV diagnoses in the Aboriginal and Torres Strait Islander population is about the same as the non-Indigenous population.
- Regular monitoring and treatment when needed means people can enjoy healthy and productive lives.
- The spread of HIV is reduced when people know about their infection.

## How are BBVs spread?

BBVs are spread through contact with infected blood, blood products and sometimes other body fluids.

Hep B, hep C and HIV are NOT spread by water, food, coughing, sneezing, hugging, kissing or other casual contact such as in the workplace, the gym or a shopping centre. Sharing food, drink and utensils is not a risk.

Breastfeeding does not increase the risk of the baby getting hep B if vaccination and hepatitis B immunoglobulin (HBIG) is given to the baby at birth.

There is no evidence that hep C can be passed to the baby through breast milk. However, advise the mother to express her milk and throw it away if her nipples are cracked and bleeding.<sup>1</sup>

Mothers living with HIV should avoid breastfeeding if clean water and baby formula is easy to get and affordable.



### Hep B can be spread by:

- vaginal, anal or oral sex without a condom.
- sharing or reusing drug-injecting equipment such as needles and syringes, spoons and tourniquets.
- a mother to her baby during pregnancy, at childbirth or in early childhood.
- needle-stick injury or non-sterile equipment for procedures involving skin piercing such as injections, tattooing and ceremony.
- sharing toothbrushes, razors, tweezers etc. which may lead to the exchange of blood.
- blood-to-blood contact through open sores or wounds.
- human bites where the skin is broken and there is blood (rare).

### Hep C can be spread by:

- sharing or reusing drug-injecting equipment such as needles and syringes, spoons and tourniquets.
- needle-stick injury or non-sterile equipment for procedures involving skin piercing such as injections, tattooing and ceremony.
- sharing toothbrushes, razors, tweezers etc. which may lead to the exchange of blood.
- blood-to-blood contact through open sores or wounds.
- before 1990, hep C could also be spread via blood transfusions.
- human bites where the skin is broken and there is blood (rare).
- childbirth (rare).
- sexual contact where there is blood-to-blood contact (very rare).

### HIV can be spread by:

- vaginal or anal sex without a condom.
- sharing or reusing drug-injecting equipment such as needles and syringes, spoons and tourniquets.
- a mother to her baby during pregnancy, at childbirth, or when breastfeeding.
- needle-stick injury or non-sterile equipment for procedures involving skin piercing such as injections, tattooing and ceremony.
- blood-to-blood contact through open sores or wounds.
- oral sex without a condom (rare).

## Standard infection control procedures

It is recommended that all Health Workers be vaccinated to protect against hep B. (→ See page 5)

Standard procedures should also be followed by Health Workers who have contact with blood, other body fluids, broken skin and clients' eyes, nose or mouth.

### 1. Wear personal protective equipment

- Use disposable gloves.
- Wear protective eyewear/masks.

### 2. Avoid exposure to broken skin

- Cover your open wounds/cuts/blisters with waterproof dressings.
- Avoid creams that may cause dermatitis or broken skin.

### 3. Safely handle and dispose of sharp objects such as needles, blades and glass

- Hold a syringe by the barrel with a gloved hand.
- Never touch the needle.
- Do not re-cap, bend or break.
- Do not remove a needle from the barrel.
- Never cross your hands when handling a sharp.
- Dispose of the sharp in a sharps container (a yellow, rigid-walled container displaying the biohazard label and symbol).
- When away from the clinic, dispose of a sharp in a thick plastic drink bottle.
- Always use tongs to pick up needles.
- Take the sharps container to the sharp rather than the sharp to the container.
- Do not put your hand into places you cannot see.

### 4. Clean up blood and body fluids as soon as possible

- Restrict access to the affected area.
- Wear gloves, eyewear and waterproof apron.
- Wash the spills with detergent solution then allow to air dry.
- Wash furnishings (e.g. chairs and mattresses) with detergent and water, and leave to dry.
- Wash uniforms daily. The hot temperature in a clothes dryer will help to disinfect uniforms.

### 5. Wash your hands with soap and warm water

- before and after each new client.
- before touching a client.
- before and after a procedure.
- after going to the toilet.
- before and after preparing or eating food.



## Before testing: obtaining informed consent

The doctor or nurse will explain to the client what they need to know and will ask the client's permission to do the test before ordering it. This is called 'obtaining informed consent'.

### Clients need to understand:

- Why the test is required.
- How the test is done.
- What may happen if the test is positive or uncertain.

As a Health Worker you may be asked to explain or interpret this information for the client in a culturally appropriate manner. You should be aware of the types of information that should be explained to the client and the requirements for obtaining informed consent. The client may have questions about the test procedures, when the results will be available and how they will be followed up.

### Health Workers can assist by:

- Assuring clients that the test and result is kept strictly private and confidential.
- Talking about safe practices for sexual partners and household contacts.
- Providing information about culturally appropriate support services and referrals.
- Providing information about general health maintenance e.g. diet.



### After testing: conveying a test result

Test results need to be given in a culturally appropriate manner, promptly, in person, and in private.

Results are usually given by the doctor or nurse who should ask the client if they would like the Health Worker present. It is important that all information is kept confidential.

#### If the result is positive, the client will need:

- Culturally appropriate counselling.
- Follow-up appointments.
- More tests to find out whether the virus has caused any damage.
- Possibly a referral to a specialist doctor.

As a Health Worker you may be asked to explain or interpret this information to the client in a culturally appropriate manner. Avoid giving too much information at one time – it is often useful to provide written material and details of support services instead.

#### Health Workers may talk to a client about:

- keeping doctors' appointments.
- transport support.
- safe behaviours e.g. not sharing drug-injecting equipment, use of condoms.
- who to tell and how they might tell them.
- not drinking too much alcohol, not smoking, and eating good food.
- finding other people they have been in contact with (contact tracing).

#### If the test result is negative, Health Workers can talk to a client about:

- positive education messages.
- safe behaviours.
- difficulties they may have in practising safe behaviours.

→ For more information on testing for BBVs see [www.testingportal.ashm.org.au](http://www.testingportal.ashm.org.au)

### Contact tracing

Contact tracing is the process of identifying relevant contacts of a client and ensuring those contacts are aware of their exposure. The likely period of infection determines who is a 'relevant' contact. The health professional who ordered the tests is responsible for contact tracing.

Confidentiality is vital and the importance of client support should be considered. Each State and Territory has their own laws and guidelines about how to do contact tracing.

#### Contacts may be:

- all sexual partners, male and female and not just the current or long term partner.
- household contacts or family members of people with hep B.
- people who shared needles or injecting equipment or equipment used for tattooing, body piercing or in ceremonies.

#### All contacts should know so they can be tested:

- Each client should be given information about why others need to know.
- Together you can work out who to contact and this may take some time.
- It is only urgent if a client is sexually active, sharing injecting, tattooing or body piercing equipment or is pregnant.

→ For more information on contact tracing see [www.ashm.org.au/ctm](http://www.ashm.org.au/ctm)

#### Clients may wish to:

- take time to consider how they want to deal with the issue.
- talk with partners themselves, bring them in or ask them to come in.

### Social stigma and discrimination

Myths and fears about transmission lead to stigma and discrimination.

Stigma and discrimination can happen in the community and also in clinics and hospitals. This may result in some clients not getting the medical help they need.

#### Health Workers can help by:

- educating service providers about the importance of cultural sensitivity.
- assisting clients to access appropriate services without judgement.
- maintaining confidentiality of clients and others when contact tracing.
- educating friends, family and the community about BBVs.

## ■ Hepatitis B (Hep B)

### Vaccination for hep B

**Hep B is a vaccine-preventable disease and Health Workers should share information about the importance of immunisation with their clients and community.**

At-risk or priority groups can get free vaccination but this varies in different areas. Contact your State or Territory health department for more information.

The Australian Immunisation Handbook has a detailed list of people who are most at risk from hep B and need to be vaccinated.<sup>2</sup>

Three doses of hep B vaccine are given over six months by injection. If immunity is achieved, no more doses are required. A blood test at the end of the course can show if it worked but not everyone needs to have this test. The Australian Immunisation Handbook gives more information about who needs to have this extra test.

If immunity cannot be confirmed, more vaccinations are required. If vaccination doesn't work, then Health Workers should explain to their client that the client has the same risks as unvaccinated people and has no protection against hep B.

→ See page 10 for more on what Health Workers can do.

### Mothers and babies

One of the most common methods of hep B infection is through mother-to-child transmission, so screening all women for hep B when they get pregnant is important. This makes sure hep B positive mothers are detected and their babies are well managed at birth by giving the baby both the hep B vaccine and hepatitis B immunoglobulin (HBIG). If this is done there is much less risk of hep B spreading to the baby.

The National Immunisation Program includes free hep B vaccination of all babies at birth and is best given within 24 hours or at least within 7 days. Three more doses are required over the next six months.

Pregnant women need to have accurate information about the risk of passing hep B to their baby and what they can do to reduce the risk, including taking treatment for hep B.

### Who has hep B?

An estimated 218,000 Australians are living with chronic hep B but only 56% have been diagnosed. An estimated 20,290 Aboriginal and Torres Strait Islander people are living with chronic hep B.<sup>3</sup>

Aboriginal and Torres Strait Islander people are three times more likely to be living with hep B than the non-Indigenous population.<sup>4</sup>

In most cases, a client with hep B was probably infected as a baby or child. Often they feel completely well, so the diagnosis may come as a surprise and it is important that they understand the need to look after themselves and have regular checks despite feeling well.

**It is important that Health Workers inform the community through education and their daily work that:**

- a vaccine can prevent hep B infection.
- safe practices for sexual contact and injecting drug use are important.
- a person with hep B may not feel sick or know they have the virus.

### Who should get tested and vaccinated?

People can be immune from hep B because they have been infected in the past and cleared the virus or they have been vaccinated. Those who have not been vaccinated or have not had hep B should be vaccinated.

**All Aboriginal and Torres Strait Islander adults should be tested at least once for hep B, to see if they are immune because of past infection or vaccination, have hep B, or are at risk and need vaccination.**

**The following people should be tested as a priority:**

- people born overseas in countries with medium or high levels of hep B in the population.
- pregnant women.
- adults at increased risk of hep B, including sexual and household contacts and family members of people with hep B, men who have sex with men, people who inject drugs, people with multiple sexual partners (including sex workers) and dialysis patients.
- people living with hep C or HIV due to both increased risk factors and the presence of co-infection (infection with more than one virus at the same time) changing outcomes and treatment.
- people about to start chemotherapy or other treatments that suppress the immune system because those with past or present hep B infection may develop life-threatening issues.
- people who have liver disease and/or abnormal liver tests.
- health professionals who may be involved in exposure-prone procedures i.e. those where there is a risk of sharing body fluids with a client.
- members of the armed forces.

→ Further details of people who are recommended for hep B testing can be found at [www.hepbhelp.org.au](http://www.hepbhelp.org.au)

### How do you test for hep B?

A blood test is done to see if a person has hep B. Obtaining informed consent before the test is essential (→ see page 3).

**To make a diagnosis, the doctor should order:**

HBsAg	Hepatitis B surface antigen	Shows current infection (acute or chronic)
Anti-HBs	Hepatitis B surface antibody	Shows immunity (vaccination or past infection)
Anti-HBc	Hepatitis B core antibody	Shows infection (past or current)

The patient will not have to pay for the tests if the doctor writes 'chronic hep B' on the test form.

**Test results should only be given by those who are well informed about hep B as the following may be needed:**

- Vaccination of the client and/or other family contacts.
- Further diagnostic testing (such as ultrasound or more blood tests).
- Assessment of liver status and the need for treatment.

### What happens after a client is confirmed to have hep B?

- The test result should be accurately recorded in the client's medical record.
- A positive test result should be given privately and in a culturally appropriate manner.
- A Health Worker will play an important role by providing support and advice to both the doctor and client (→ see page 10).

### Acute hep B

#### Once exposed, there are four stages of acute hep B:

1. Incubation phase (4 to 12 weeks).
2. Symptomatic hepatitis (4 to 12 weeks: symptoms may include fever, fatigue, anorexia, dark urine, jaundice, myalgia (muscle pain) and right upper quadrant abdominal pain; symptoms are more common in adults than infants or children).
3. Recovery period.
4. Clearance phase which may occur after a few months and result in immunity.

There is generally no specific treatment for acute hep B infection and most adults will clear the virus. However, it is important to avoid more liver damage during acute hep B infection and the client should be monitored by a doctor.

### Chronic hep B (CHB)

If hep B infection lasts for 6 months or more, it is known as chronic hep B. The progression from acute hep B to chronic hep B infection is due to the immune system failing to clear the virus.

#### The risk of a client progressing from acute to chronic hep B depends on when the virus was contracted:

- 90% of infants with acute hep B will develop chronic hep B
- 30% of children with acute hep B will develop chronic hep B
- 5% of adults with acute hep B will develop chronic hep B

Clients with chronic hep B need life-long monitoring to check whether it is damaging their liver and if treatment is required.

#### The majority of people living in Australia with chronic hep B are:

- Aboriginal and Torres Strait Islander people; and
- people born overseas in countries with medium or high levels of hep B in the population.

Many people first know they have chronic hep B when they have a blood test for it as an adult.

#### Chronic hep B is an infection with varying activity over time and people move through four phases of it throughout their lifetime:

Immune tolerance (1)	The body leaves the virus alone. The person must continue to be monitored to check if they are still in this phase.
Immune control (3)	
Immune clearance (2)	The body's immune system is 'fighting' the virus, and at these times damage can occur to the liver. The client should be referred for treatment to reduce this damage.
Immune escape (4)	

The phase that the person is in depends on whether the body's immune system is reacting to the virus; this can be checked by a blood test.

### Treatment for chronic hep B

Not all people with chronic hep B need to be treated. Many only need to be monitored (through blood tests and ultrasound) on a 6-monthly basis to keep a check on their health.

#### If treatment is needed, it may have to continue for life, so careful selection of people for treatment is critical. Clients beginning treatment will need a lot of support to understand:

- they may have to take this treatment every day for the rest of their life.
- treatment also requires long-term monitoring.

Treatment for hep B is given by specially trained doctors and usually involves one tablet daily. Entecavir and tenofovir are the most commonly used hep B drugs in Australia. These medicines stop the virus from making copies of itself and help to prevent liver damage but do not usually cure the infection.

Pegylated interferon is not used a lot; however, in carefully selected people it does offer the chance of a single course (12 months) of treatment and will clear hep B in 7 to 8% of people.

### Hep B and liver cancer

Hep B infection increases the risk of developing liver cancer (hepatocellular carcinoma - HCC)

#### Aboriginal and Torres Strait Islander people with chronic hep B infection need to be monitored for HCC:

- every six months from the age of 40 or
- from the time that cirrhosis (scarring of the liver) develops or
- if they have a family history of liver cancer.

Screening involves an ultrasound and blood test which provides early evidence of HCC.

HCC, if diagnosed late, has a very poor outcome, with most people not surviving for 12 months. Early detection improves outcomes as treatment is possible and can result in a cure.

Close family and all sexual contacts of those diagnosed with hep B should be followed up in a culturally appropriate manner and tested to see if they have hep B or ensure they have immunity either through past hep B infection or vaccination.

If they are not immune, they should be vaccinated.



## ■ Hepatitis C (Hep C)

### Who has hep C?

Hep C is one of Australia's most common infectious diseases. At the end of 2011, it was estimated that 291,000 Australians had been exposed to the virus, and 220,000 of them were living with chronic hep C infection.

Aboriginal and Torres Strait Islander people are more frequently affected by hep C than non-Indigenous Australians. In 2011, the rate of newly diagnosed hep C in Aboriginal and Torres Strait Islander people was over three times the rate in the non-Indigenous population. Between 5 and 21% of all hep C diagnoses in Australia in 2011 were in Aboriginal and Torres Strait Islander populations.<sup>4</sup>

### Who should get tested?

People who have risk factors associated with transmission of hep C should be tested. Like hep B, hep C is transmitted through blood-to-blood contact.

#### The following people should be tested as a priority:

- People with a history of injecting drug use – sharing injecting equipment is the most common way of spreading hep C in Australia.
- People who have ever been in prison – because of re-using needles for injecting drugs or tattooing.
- Children born to hep C positive mothers – women with hep C are unlikely to pass it to their baby (about 5%), but there is a higher risk if the mother has both HIV and hep C infections.
- People who had organ or tissue transplants, blood transfusions or blood products before February 1990 in Australia, or at any time where there is no mandatory screening of donors.
- People with tattoos or skin piercings.
- Sexual partners of people with hep C – infection through sex is rare but may happen if there is blood-to-blood contact.

→ For more information see [www.testingportal.ashm.org.au/hcv/indications-for-hcv-testing](http://www.testingportal.ashm.org.au/hcv/indications-for-hcv-testing)

### How do you test for hep C?

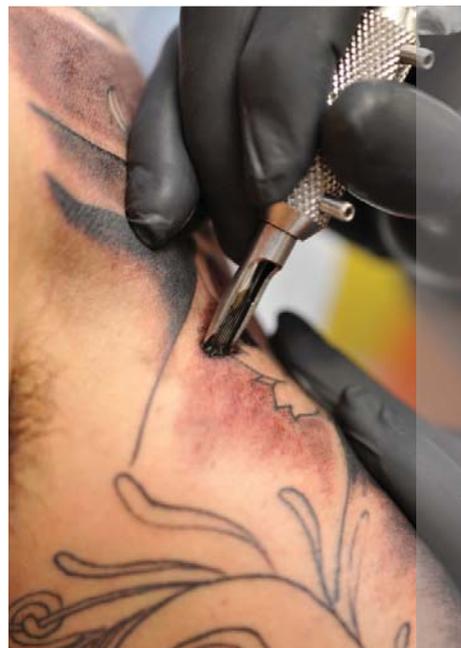
Hep C is diagnosed by a blood test. It is essential that the health professional obtains informed consent before doing the test (→ see page 3).

There is no hep C vaccine so prevention means identifying people who are at risk or who already have hep C and giving them advice about how to lower the risk of passing it on.

The Health Worker should talk to all their clients about hep C and those clients with a potential risk should be tested.

#### The laboratory will look for answers to the following questions:

Has the person ever had hep C?	Test for hep C virus antibodies (anti-HCV).
Does the person have hep C now?	If hep C virus antibodies are present, a hep C RNA test will confirm if it is still active.
What is the current level of replication?	Measure the amount of hep C virus in the blood (viral load). The viral load before treatment predicts the response to hep C treatment and is used to monitor response to treatment.
What is the hep C genotype?	There are 6 types of hep C, called genotypes. The genotype guides treatment dose and duration of therapy.



### What happens after a client is confirmed to have hep C?

Only 25 to 30% of people infected at any age clear hep C infection naturally, without treatment. The majority develop chronic hep C infection (hep C lasting for longer than 6 months).

- Over 20 years living with chronic hep C infection, the majority of people will have some symptoms but may not develop severe liver disease.
- After 40 years of living with chronic hep C infection, 5 to 8% will have died from liver problems and 20% may have cirrhosis (scarring of the liver).<sup>6</sup>

Some clients will be suitable for hep C treatment which can clear the virus completely. New medicines are being developed and trialled, and even better treatments will be available in the next 3 to 5 years so many people with mild disease may choose to wait for the best treatment to become available.

Clients should ask for advice from specialist services. If clients don't want treatment yet or live too far from the treatment centre, then local services can work with specialist services to monitor the clients' health. Clients with severe disease who need treatment but who may be hard to treat should always be referred to a hep C specialist centre.



## Vaccination

Clients with chronic hep C should have their immunity to hep A and hep B infections assessed and offered vaccination for both if needed.

There is no vaccination for hep C.

## Treatment for hep C

Treatment for hep C is changing quickly and new treatments are becoming available. The current treatment for most people will involve an injection once a week and up to 12 tablets daily.

### Expected outcomes:

Genotype 1	24 - 48 weeks of treatment and approximately 40 - 79% achieve viral clearance.
Genotype 2 and 3	24 weeks of treatment and approximately 75 to 85% achieve viral clearance.
Genotype 4	48 weeks of treatment and approximately 43 - 70% achieve viral clearance.

The definition of viral clearance is a negative hep C RNA test 6 months after treatment has been completed.

**Clients who choose antiviral therapy may have significant side effects from the medicines and therefore require close monitoring.** In general, clients should be seen at least monthly until the end of treatment. Referral to appropriate counselling and support services is recommended and Health Workers can help do this.

## Hep C and liver cancer

Hep C which has progressed to severe liver damage (fibrosis) or liver disease (cirrhosis) increases the risk of liver cancer (hepatocellular carcinoma - HCC). People with advanced liver disease should be seen every 6 months for an ultrasound and a blood test to detect early evidence of HCC.

→ See page 10 for more on what Health Workers can do.

## Human Immunodeficiency Virus (HIV)

Human immunodeficiency virus (HIV) is transmitted through unprotected vaginal and anal sex in both men and women, from mother to child, and through contact with infected blood such as sharing injecting equipment.

### Who has HIV?

Between 2006 and 2011 6327<sup>7</sup> Australians were diagnosed with HIV and 129<sup>5</sup> of them were Aboriginal and Torres Strait Islander people. Most of the HIV positive non-Indigenous people were men who have sex with men (MSM). Although MSM are still the largest group with HIV in the Aboriginal and Torres Strait Islander population, new diagnoses are more likely to be in people who are heterosexual or people who inject drugs.

### Who should get tested?

**Anyone who asks for an HIV test should be tested. Health professionals should also recommend testing for people who are at higher risk of HIV including:**

- People who have another sexually transmitted infection (STI) or BBV (hep B or hep C).
- Pregnant women.
- MSM.
- People who inject drugs.
- People whose sexual partner has HIV.
- People who have had sex or medical procedures in countries that have a high level of HIV in the population.
- People with illnesses caused by low immunity such as tuberculosis, pneumonia or skin infections.

People who know about their HIV infection are much less likely to pass it on. This is especially true for pregnant women. When mothers are treated for HIV during pregnancy, very few babies get infected. Without treatment, up to one in three babies will be infected through birth and breastfeeding.<sup>8</sup> People who know about their HIV infection can have treatment that will keep them well.

### How do you test for HIV?

HIV is diagnosed by blood tests which detect antibodies and the virus.

**The tests will not be positive in someone with very early infection. While tests can be positive as early as 3 weeks after exposure, they can take up to 3 months. This period is known as the 'window period'.**

Most people will have an HIV positive result 6 weeks after infection. Ask your pathology laboratory which tests they use so you can discuss this with your client.

When the first test is positive, the laboratory will send the blood sample for another test called the 'Western Blot' to check the result of the first test. This test checks for HIV antibodies. When the report comes back, it will contain details of which tests were done and what the results mean. If you are confused about the results, talk to someone in your health service or contact the laboratory.

Offering a test to someone should be done with thought about their level of understanding about what a positive test result may mean (→ see page 3). Test results should be given in private by the health professional who ordered the test.

It is important to follow local protocols around test results (whether positive, negative or uncertain) and stick to the policies and procedures of your health service, community and State or Territory.

### What happens after a client is confirmed to have HIV?

→ See also page 4 'Conveying a test result'.

After a client receives an HIV positive test result they often show very strong emotions; they may be very upset or angry, frightened and sometimes confused. Some people will not believe the result and most need time to think about what it means to them.

It is really important to make a time for someone to talk to the client in the days after the diagnosis to check on how they are coping. If you cannot do this yourself, make arrangements with someone else in the health service to follow up with your client.

Your client may need to talk to the health professional who ordered the test and gave the result. It is important to try and make your client feel safe and supported.

**Different people will need different types of support. When preparing to give a positive test result, have information about available support ready to give the client, for example:**

- Ongoing support from Health Workers.
- Support groups or networks in their area.
- Organisations they can telephone to talk privately to, such as National Association for People Living with HIV/AIDS Australia (NAPWA), ACON or Australian Federation of AIDS Organisations (AFAO) (→ see page 12 Contacts section).
- Other leaflets or booklets they can take away to read.
- DVDs, CDs, websites etc.

→ See pages 11 and 12 for more resources.

People are often worried about their sexual partners, families and children, and what HIV means for them. They need to know how to protect others from infection, including safe behaviours such as using condoms during all sexual contact, cleaning up blood spills, and not sharing injecting, tattooing or piercing equipment.

### Management and monitoring

Information about a client's health can be obtained by checking their blood using a variety of medical tests. It will not be possible to do all the tests at the same time that they get the HIV test results, and some people will not want to do any tests until they feel ready. The client should be monitored every 3 to 6 months.

Sometimes the health service can do all of the testing and monitoring but often a specialist service is necessary.

**The amount of virus in the blood (viral load) and a measure of the amount of damage to the immune system (the CD4 cell count) give important information about how the virus is affecting the immune system.**

### Treatment for HIV

People who are diagnosed with HIV can take antiretroviral medicines (ARVs) to treat the infection. These medicines stop HIV from multiplying in the body and keep the person well with the same life expectancy as people who do not have HIV.

### People who take their medication every day can live healthy lives.

When it is not treated, HIV invades and kills specialised white blood cells (CD4 cells) which play a vital role in the body's immune system. This allows other infections to cause illness and death.

Modern treatments have transformed HIV into a chronic infection that people live with. The medicines stop the damage that HIV does to the immune system. Before these drugs were developed, people with HIV became sick and did not survive. Today, people with HIV, who take their tablets correctly, live healthy and productive lives.

Treatment with ARVs is usually organised through a specialist service. Once a client is stable on therapy, monitoring can be done by local health services.

→ See page 10 for more on what Health Workers can do.

### Hep B/hep C/HIV co-infections

Infection with two or more BBVs at the same time (co-infection) worsens the outcome of the two hepatitis infections but does not necessarily make HIV worse.

Given the low but significant rates of these 3 viruses in Australia, if you are talking about doing tests for one virus with your client, consider testing for all 3 viruses. Co-infection makes management more complicated and changes decisions about treatment. These issues are resolved in specialist clinics but testing is the job of the primary care setting. Hep B vaccination should always be offered to people with hep C and/or HIV.

### To ensure clients with hep B, hep C and/or HIV get the best care:

- Understand the risk factors for becoming infected with each of the 3 viruses.
- Counsel people at risk to get tested.
- Follow standard precautions when there is blood or body fluid around to protect your clients, yourself and your community.
- Help to identify household/sexual contacts that should be screened and vaccinated.
- Encourage stopping/minimising the use of alcohol, drugs and smoking.
- Encourage good nutrition, eating good food, keeping weight within healthy limits and diabetes control.
- Emphasise the importance of being monitored regularly and keeping doctors' appointments.

## What can Health Workers do?

	Hep B	Hep C	HIV
<b>Prevent</b>	Take standard precautions if you have contact with blood, other body fluids, broken skin and eyes, noses or mouths. → See page 3		
	Educate your clients and the community about safe practices such as using condoms and clean equipment for any procedure involving skin piercing: injections, tattooing and ceremony. → See page 4		
	Educate your clients and the community about covering sores and wounds.		
	Educate and encourage those at risk to be vaccinated for hepatitis A and B, especially children, household and sexual contacts, and at- risk groups. → See page 5 (Note: Hep A is NOT a BBV. It is spread by infected food and water.)		
<b>Promote</b>	Promote the importance of: Antenatal care and screening to prevent transmission from mother to baby. Knowing your hep B, hep C and HIV status, which should help protect you and others in the community.		
	<ul style="list-style-type: none"> <li>■ Knowing your hep B status so you can get vaccinated or care and treatment.</li> </ul>	<ul style="list-style-type: none"> <li>■ Knowing your hep C status so you can get care and treatment.</li> </ul>	<ul style="list-style-type: none"> <li>■ Knowing your HIV status so you can get care and treatment.</li> </ul>
<b>Educate</b>	Provide appropriate education, counselling and support – BBVs can potentially be life-long diseases.		
	Emphasise the importance of keeping doctors' appointments and help with this where possible. Regular visits to the doctor will allow monitoring and full discussion about how to stay in good health.		
	Advise clients who they need to tell about their positive status and ways to let family and friends know. Or how to disguise their positive status if they wish it to remain private e.g. "I am giving up drinking because my doctor says I have a sick liver."		
	Together with the doctor, make referrals to appropriate health and support services which encourage healthy lifestyles including eating good food, drinking less alcohol, keeping weight within healthy limits and ensuring good control of diabetes.		
	<ul style="list-style-type: none"> <li>■ ■ All improve liver function; reduce liver injury and the risk of developing cirrhosis.</li> </ul>	<ul style="list-style-type: none"> <li>■ Good nutrition makes it easier to stay healthy.</li> </ul>	
<b>Awareness</b>	Provide ongoing education to the community to raise awareness about BBVs.		
	Educate the mainstream health care workforce on the importance of cultural sensitivity.		
<b>Legal Responsibility</b>	<p>As a Health Worker, you need to know there may be consequences to what you say or do and you have a responsibility to yourselves, your clients and your community.</p> <p>There are laws that deal with the treatment of patients generally and others that focus on what is required of health care workers regarding HIV, hep B and hep C. Each State and Territory may deal with these things differently.</p> <p>For more information go to <a href="http://www.ashm.org.au/hivlegal">www.ashm.org.au/hivlegal</a> or contact your local health department or your state or territory peak body for Aboriginal Community Controlled Health Services. → See NACCHO page 12 contacts</p>		

## Glossary

Acute hep B	Newly infected with hep B virus (had the infection for less than 6 months)
anti-HBc	Hep B core antibody – Shows hep B infection (past or current)
anti-HBs	HepB surface antibody – Shows hep B immunity (from vaccination or past infection)
anti-HCV	Hep C antibodies – shows hep C infection (past or current)
ARV	Antiretroviral medicine
BBVs	Blood-borne viruses
CD4 cells	Specialised white blood cells attacked by the HIV. They are part of the immune system
CHB	Chronic hep B – person has had the hep B virus in their blood for more than 6 months
HBsAg	Hep B surface antigen – Shows current hep B infection
HBV	Hepatitis B virus
HCC	Hepatocellular carcinoma – liver cancer
HCV	Hepatitis C virus
Hep B	Hepatitis B
Hep C	Hepatitis C
STI	Sexually transmissible infections
viral load	The amount of virus in the blood
window period	Period of time after exposure to a virus when the virus may not be seen in the blood

## Further resources and support information are available from the following organisations:

<p><b>Aboriginal Health and Medical Research Council of NSW</b> www.ahmrc.org.au <b>Where's the Shame? Love Your Liver Campaign</b> Early detection and treatment of STIs and BBVs: a manual for improving access to early detection and treatment of STIs and BBVs within Aboriginal communities in NSW (2006)</p>	<p><b>Central Australian Rural Practitioners Association (CARPA) Standard Treatment Manual</b> Available from: www.carpa.org.au/fmanual.htm</p>
<p><b>Family Planning WA</b> www.fpwa.org.au <b>Sexually transmissible infections (STI) and blood-borne viruses (BBV). A guide for health professionals, educators, and general practitioners (2010)</b> www.fpwa.org.au/resources/STI-Table_2010.pdf</p>	<p><b>Hepatitis Australia Resource Web sites:</b> <b>Liver education - Love Your Liver</b> www.loveyourliver.com.au <b>Youth education - Hep C and Me</b> www.hspace.org.au <b>Hepatitis Educators' Education</b> www.hepedu.org.au</p>
<p><b>HepBHelp</b> is an independent website which aims to assist Australian GPs in the further investigation and management of patients diagnosed with chronic hepatitis B virus (HBV) infection. It also has resources for patients. www.hepbhelp.org.au</p>	<p><b>Hepatitis Queensland Resources</b> www.hepqld.asn.au</p>
<p><b>Northern Territory Government, Department of Health &amp; Community Services</b> NT Guidelines of Management of Sexually Transmitted Infections in Primary Health Care http://hdl.handle.net/10137/530</p>	<p><b>Queensland Health: I stay Safe Website</b> Advice for teenagers on sexual health, HIV and hepatitis www.health.qld.gov.au/istaysafe <b>Information for adults on blood-borne viruses</b> www.health.qld.gov.au/sexhealth/adults/bbv.asp</p>
<p><b>Rural Health Education Foundation</b> T: 02 6232 5480 www.rhef.com.au <b>Talking Together - Contemporary Issues in Aboriginal and Torres Strait Islander Health: HIV, Hepatitis and Sexual Health</b> www.rhef.com.au/programs</p>	<p><b>The Kirby Institute</b> <b>Reports and resources</b> www.med.unsw.edu.au</p>
<p><b>Third National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy 2010-2013</b> www.health.gov.au/internet/main/publishing.nsf/Content/ohp-bbvs-atsi</p>	<p><b>The Victorian Aboriginal Community Controlled Health Organisation</b> Sexual, HIV and Hepatitis programs and resources www.vaccho.org.au/programs/healthprograms</p>
<p><b>Vaccination for our Mob - Vaccine coverage and vaccine preventable disease in Aboriginal and Torres Strait Islander people</b> www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/atsi-mob-report</p>	<p><b>HIV/AIDS</b> <b>Hep C - No Shame on Me</b> <b>Hepatitis C Brochure</b> <b>Hepatitis C and Treatment Brochure</b> <b>Hepatitis B Brochure</b></p>
<p><b>Workers in Aboriginal and Torres Strait Islander Communities – Individually negotiated presentations on women's and men's education</b> www.shinesa.org.au/go/education-and-training/atsi-workers</p>	
<p><b>Yarning on Sexual Health Program</b> www.healthinonet.edu.edu.au</p>	

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## Training Courses for Health Workers

**Aboriginal Health College** – provides culturally appropriate education courses in Aboriginal health  
www.ahc.edu.au

**University of Queensland** – Education Course in Sexual Health & HIV Medicine for Health Care Workers working with Aboriginal & Torres Strait Islanders Communities  
www.som.uq.edu.au

## ASHM resources

ASHM resources are available from the ASHM website: [www.ashm.org.au](http://www.ashm.org.au)

### Profession Based Booklets

- An Overview of Hepatitis C: Clinical management in opiate pharmacotherapy settings
- Antenatal Testing and Blood-Borne Viruses (BBVs)
- Correctional Officers and Hepatitis C
- Dental and Orofacial Health and Hepatitis C
- Dentists and HIV
- Emergency Service Providers and Blood-Borne Viruses
- General Practitioners and Hepatitis C
- General Practitioners and HIV
- Hepatitis B and Primary Care Providers
- Nurses and Hepatitis C
- Pharmacy and Hepatitis C
- Police and Blood-Borne Viruses

### Factsheets

- Decision Making in Hepatitis B
- Decision Making in Hepatitis C
- Decision Making in HIV
- Hepatitis B Factsheet: for people newly diagnosed
- Hepatitis C in Brief – patient factsheet
- Hepatitis C Management and Treatment for Clients of Pharmacotherapy Services
- HIV Patient Fact Sheet

### Monographs

- B Positive: all you wanted to know about hepatitis B – a guide for primary care
- Co-infection: HIV & viral hepatitis – a guide for clinical management
- Hepatitis C: clinical management in opiate pharmacotherapy settings
- HIV and Viral Hepatitis C: policy, discrimination, legal and ethical issues
- HIV Management in Australasia: a guide for clinical care
- HIV, Viral Hepatitis and STIs: a guide for primary care

### Distance-learning Kit

- Clinical Science of HIV Medicine CD
- C Me, Hear Me DVD

### Manuals

- Australasian Contact Tracing Manual Available in hardcopy and online at [www.ashm.org.au/ctm](http://www.ashm.org.au/ctm)

### Online resources

- ASHM Directory of HIV, Viral Hepatitis and Sexual Health Services
- Guide to Australian HIV Laws and Policies for Healthcare Professionals. Available online only at [www.ashm.org.au/HIMegal](http://www.ashm.org.au/HIMegal)
- Testing Policy available on-line <http://testingportal.ashm.org.au>

### Online learning modules

- Managing Aboriginal and Torres Strait Islander patients with hepatitis B and hepatitis C
- Introduction to Blood Borne Viruses (BBVs)

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## Contacts

NATIONAL	
<b>Anwernekenhe National Aboriginal and Torres Strait Islander HIV/AIDS Alliance (ANA)</b> T: 02 9557 9399 <a href="http://www.ana.org.au">www.ana.org.au</a>	<b>Hepatitis Australia</b> National hepatitis info line T: 1300 HEP ABC z(437 222) <a href="http://www.hepatitisaustralia.com.au">www.hepatitisaustralia.com.au</a>
<b>National Aboriginal Community Controlled Health Organisation (NACCHO)</b> T: 02 6248 0644 <a href="http://www.naccho.org.au">www.naccho.org.au</a>	<b>Positive Aboriginal Torres Strait Islander Network</b> T: 02 8568 0300 <a href="http://www.napwa.org.au/services/positive-aboriginal-torres-strait-islander-network">www.napwa.org.au/services/positive-aboriginal-torres-strait-islander-network</a>
<b>Scarlet Alliance Australian Sex Workers Association</b> T: 02 9690 0551 <a href="http://www.scarletalliance.org.au">www.scarletalliance.org.au</a>	<b>The Australian Injecting and Illicit Drug Users League (AIVL)</b> T: 02 6279 1600 <a href="http://www.aivl.org.au">www.aivl.org.au</a>
<b>The National Aboriginal and Torres Strait Islander Health Worker Association (NATSIHWA)</b> T: 02 6221 9220 Freecall: 1800 200 800 <a href="http://www.natsihwa.org.au">www.natsihwa.org.au</a>	
ACT	
<b>ACT Hepatitis Resource Centre</b> T: 1300 301 383 (office) <a href="http://www.hepatitisresourcecentre.com.au">www.hepatitisresourcecentre.com.au</a>	<b>AIDS Action Council of the ACT</b> T: 02 6257 2855 <a href="http://www.aidsaction.org.au/aac">www.aidsaction.org.au/aac</a>
NSW	
<b>ACON – ACON</b> is NSW's and Australia's largest community-based gay, lesbian, bisexual and transgender (GLBT) health and HIV/AIDS organisation. T: 02 9206 2000 Freecall: 1800 063 060 <a href="http://www.acon.org.au">www.acon.org.au</a>	<b>Hepatitis NSW</b> T: 02 9332 1853 (office) <a href="http://www.hep.org.au">www.hep.org.au</a>
<b>NSW Aboriginal STI, HIV and Hepatitis Workers Network</b> T: 02 9212 7211 <a href="http://www.ashhwntoolbox.org.au">www.ashhwntoolbox.org.au</a>	<b>Positive Life NSW</b> T: 02 9206 2177 Freecall: 1800 245 677 <a href="http://www.positivelife.org.au">www.positivelife.org.au</a>
NT	
<b>Northern Territory AIDS and Hepatitis Council</b> T: 08 8953 3172 (Alice Springs) T: 08 8944 7777 (Darwin) <a href="http://www.ntahc.org.au">www.ntahc.org.au</a>	<b>Tasmanian Council on AIDS, Hepatitis and Related Diseases (TasCAHRD)</b> T: 03 6234 1242 <a href="http://www.tascahrd.org.au">www.tascahrd.org.au</a>
QLD	
<b>Hepatitis Queensland</b> T: 07 3846 0020 Infonline: 1800 648 491 <a href="http://www.hepqld.asn.au">www.hepqld.asn.au</a>	<b>Positive Directions</b> T: 07 3028 4730 Freecall: 1800 422 313 <a href="http://www.positivedirections.org.au">www.positivedirections.org.au</a>
<b>Queensland Aboriginal and Islander Health Council (QAIHC)</b> QAIHC – Cairns T: 07 4081 5600 QAIHC – Townsville T: 07 4755 2522 QAIHC – West End T: 07 3328 8500 <a href="http://www.qaihc.com.au">www.qaihc.com.au</a>	<b>Queensland Association for Healthy Communities (QAHC)</b> Brisbane T: 07 3017 1777 Cairns T: 07 4035 6491 <a href="http://www.qahc.org.au">www.qahc.org.au</a> <b>QAHC – 2 Spirits Program</b> T: 1800 177 434 <a href="http://www.qahc.org.au/atsi">www.qahc.org.au/atsi</a>
SA	
<b>Hepatitis SA</b> T: 08 8362 8443 (office) <a href="http://www.hepcouncilsa.asn.au">www.hepcouncilsa.asn.au</a>	
VIC	
<b>Hepatitis Victoria</b> T: 03 9380 4644 (office) <a href="http://www.hepcvic.org.au">www.hepcvic.org.au</a>	<b>Victorian AIDS Council – Gay Men's Health Centre</b> Health promotion, counselling & operations T: 03 9865 6700 or Freecall: 1800 134 840 <a href="http://www.vicaids.asn.au">www.vicaids.asn.au</a>
WA	
<b>Hepatitis WA</b> T: 08 9227 9800 (office) <a href="http://www.hepatitiswa.com.au">www.hepatitiswa.com.au</a>	<b>The WA AIDS Council</b> T: 08 9482 0000 <a href="http://www.waids.com">www.waids.com</a>
<b>WA Sexual Health Network</b> <a href="http://www.washn.org.au">www.washn.org.au</a>	<b>WA Substance Users Association - WASUA</b> T: 08 9321 2877 <a href="http://www.wasua.com.au/Home">www.wasua.com.au/Home</a>

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For further information on upcoming ASHM courses visit [www.ashm.org.au/courses](http://www.ashm.org.au/courses).

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