



REDUCING
HEPATITIS C
TRANSMISSION
IN THE COMMUNITY

- Hepatitis C is transmitted through blood-to-blood contact.
- The transmission of hepatitis C and other blood-borne viruses can be reduced.
- It is important to be aware of the risks of blood-to-blood contact.
- For people who inject drugs, safer injecting practices can reduce the risk of becoming infected with hepatitis C. Safer injecting can also reduce the risk of transmission of hepatitis C, or of being infected with a different strain (genotype) of the hepatitis C virus.
- For people who are considering having a tattoo or body piercing, it is recommended that they visit a practitioner who consistently uses standard infection control procedures.
- Australia has a multifaceted prevention response to hepatitis C transmission based on the concept of harm reduction. A key component of the national response is the provision of sterile injecting equipment through the Needle and Syringe Programs (NSPs).
- Imprisonment is an independent risk factor for hepatitis C.



SUMMARY OF IMPORTANT POINTS



BLOOD AWARENESS

WHAT IS BLOOD AWARENESS?

- Being 'blood aware' means being alert to the potential or actual presence of blood in any situation or environment.
- It means being alert to the possibility of blood-borne organisms or viruses, and employing practices to prevent their transmission.

IMPLEMENTING BLOOD AWARENESS

In health care settings:

- always follow standard infection control procedures*;
- always follow First Aid guidelines; and
- always follow occupational health and safety procedures.

Health care workers should be blood aware to avoid discriminating against individuals on the basis of perceived or known virus status and to adopt better practice around blood issues.

** See Section on Standard Infection Control Procedures below for more detailed information.*

Outside the health care setting:

- **people who inject drugs:** advise to be aware that even traces of blood not visible to the naked eye can pose an infectious risk.
- **people who inject drugs:** advise to use harm reduction practices to avoid viral infection and re-infection;
- **within the home or workplace:** advise to avoid sharing any sharp personal grooming instruments (e.g. toothbrushes or razors);

- **when dealing with blood or other body fluid spills:** gloves should always be worn and other people involved should be made aware of the presence of blood;
- **when having tattoos or body piercings:** people should be alert to the potential presence of blood, and ensure that their practitioner is using standard infection control procedures. *See Section on Standard Infection Control* below; and
- **sexual practices:** some sexual practices can involve blood-to-blood contact (e.g. sex when menstruating, use of sex toys, practices that involve piercing, cutting or tearing of the skin, rough sex).



WHAT ARE THE ISSUES FOR EDUCATORS?

Promoting blood awareness should be a key focus of educators' work. The concept of blood awareness complements and builds on earlier HIV prevention messages such as 'use a clean fit for every hit', which contributed to Australia's success in preventing the transmission of HIV among people who inject drugs. However, to prevent the transmission of hepatitis C, information about new and sterile injecting equipment must be accompanied by information that creates a clear awareness of the possibility of blood in any interaction, situation or environment.

It is critically important that health care workers continue to use blood awareness as a pivotal concept to alert people to the risks of blood-borne viruses and to reduce hepatitis C transmission rates.

Educators should also be aware that blood has many different culturally-determined meanings that impact on their capacity to provide relevant education. These may include:

- blood is often seen as a symbol of life and vitality;
- blood is associated with belonging, strength and pride in some cultures; blood features in many religious rituals and rites of passage, lineage and kinship traditions, in war and in emergency life-saving procedures;

- blood awareness is challenging for Aboriginal and Torres Strait Islanders communities due to links between blood and cultural law; and
- issues around blood can generate strong emotional responses. In recent times, with increased awareness of blood-borne viruses such as hepatitis C virus and HIV, blood awareness has challenged our behaviours and ways of thinking. See *Chapter 7: Education and Training* for further details on key issues for educators.

HARM MINIMISATION

Harm minimisation is the official policy concept underpinning national and state public health strategies, such as the *National Hepatitis C Strategy 2005–2008* and the *National Drug Strategy 2004–2009*. Harm Minimisation is consistent with a comprehensive approach to reducing drug-related harm, and involves supply reduction, demand reduction and harm reduction strategies.



SUPPLY REDUCTION, DEMAND REDUCTION AND HARM REDUCTION

- *Supply reduction* aims to disrupt production and distribution of illicit drugs.
- *Demand reduction* means reducing the demand for and the uptake of harmful drug use.
- *Harm reduction* reduces drug-related harm in the community.

SUPPLY REDUCTION AND DEMAND REDUCTION

The effects of all proposed and implemented supply and demand reduction strategies must be examined to determine whether their net impact reduces or increases overall harm. Many supply and demand reduction strategies may have unanticipated effects, or effects that are not immediately apparent.

For example, imprisoning people for possession or use of injectable drugs may be considered to be part of a strategy for limiting supply and/or demand for drugs. It may also result in the greater harm of increased transmission of blood-borne viruses in prisons. Consequently, imprisonment is now considered an independent risk factor for hepatitis C.

Another example is a reduction in the street supply of a drug, perhaps due to increased surveillance by authorities. The resulting reduction in availability and higher cost can lead to reduced drug purity with the consequent higher risks of contamination with other substances and possible overdose when the drug is injected.



HARM REDUCTION

Harm reduction is a philosophy that focuses on preventing and/or reducing the harm associated with potentially risky activities, not on preventing people from performing those activities. Harm reduction is a pragmatic concept that recognises the reality of drug use. The harm reduction approach acknowledges that it can be more effective for individuals and communities to reduce the harms associated with drug use than to support attempts to eliminate drug use altogether.

Although the term is of relatively recent origin (in the last 20 years), harm reduction has been practiced throughout history to address many different problems. For example, in medieval China many drunken people fell into canals and drowned or froze; preventing drunken behaviour proved impossible, but fences built around the canals prevented many deaths. More recently, Australia has led the world in making seatbelts a legal requirement in motor vehicles; a practical measure that has reduced the harm incurred through car accidents without stopping people from driving.

HARM REDUCTION AND HEPATITIS C

Harm reduction applies directly to the prevention of hepatitis C transmission in relation to injecting drug use. As described in Chapter 1, hepatitis C in Australia is most often diagnosed in people who inject or have injected drugs. Hepatitis C is one of the most significant health problems affecting people who have injected or do inject drugs, and consequently, this population is a major target of harm reduction programs and policies.

HARM REDUCTION AND GOVERNMENT POLICY

Harm reduction is a fundamental national, state, local government and public health response to hepatitis C transmission among people who inject drugs in Australia. It features strongly in Australia's *National Hepatitis C Strategy 2005–2008* and the *National Drug Strategy 2004–2009*.

The *National Hepatitis C Strategy* defines harm reduction interventions as 'interventions designed to reduce the impacts of drug related harm on individuals and communities'.

In supporting harm reduction, Australian governments at all levels do not condone illegal drug use; instead they acknowledge that these behaviours occur and that government has a responsibility to reduce drug-related harm.

HARM REDUCTION PROGRAMS

Harm reduction provides people who inject drugs with the capacity and resources to make informed decisions about their drug-using practices. Harm reduction suspends moral judgements about drug use, and instead accepts that, for a range of reasons, people choose to inject drugs. The focus of harm reduction in this field is on preventing and/or reducing the harm associated with drug use.



Harm reduction programs often involve measures to encourage people to change the way they use drugs specifically to reduce related health risks. Perhaps the most common examples of harm reduction applied to drug use are **Needle and Syringe Programs (NSPs)** which operate throughout Australia. These programs provide access to sterile injecting equipment, information about safer injecting and disposal facilities. The aim of NSPs is to enable people who inject drugs to avoid the sharing or re-using of equipment, and to provide a safe way of disposing of used equipment, thus reducing risks of infection with blood-borne viruses such as HIV or hepatitis C. Over 33 million units of injecting equipment were supplied by states and territories under the Needle and Syringe Program during 2005–2006.

The introduction of NSPs in Australia prevented an estimated 25,000 HIV infections and 21,000 hepatitis C infections, over the period 1988 to 2000. (*Annual Surveillance Report, National Centre in HIV Epidemiology and Clinical Research, 2004*). From 1991 to 2000, funding of \$130 million was provided to NSPs. It has been estimated that during this period, NSPs saved \$7,025 million in HIV treatment costs and \$783 million in hepatitis C treatment costs (*The Return on Investment in NSPs in Australia Report, Commonwealth of Australia, 2002*).

The lesser impact of NSPs on hepatitis C transmission compared to HIV transmission has been related to the following factors: there was already a reasonably high prevalence of hepatitis C amongst people who inject drugs before the virus and its routes of transmission were identified; the hepatitis C virus is highly infectious; people are often asymptomatic for longer and, not aware they have contracted the virus and, may unknowingly put others at risk during this period.

Pharmacotherapy is a recognised medical treatment using Schedule 4 and 8 prescription medicines to treat opioid dependency. It aims to reduce the health, social and economic harms caused by addiction to illicit drugs. Pharmacotherapy is used as part of a comprehensive treatment program including counselling as well as physical and mental health monitoring and support. Schedule 4 and 8 prescribed drugs have strict regulatory frameworks around their use.

Methadone is the most widely and effectively used drug substitution treatment for heroin dependence. It has an effect that is similar to heroin and is taken orally. Commonly methadone is used in long-term maintenance programs that

aim to reduce the harms associated with drug use and to improve the person's quality of life. Methadone is also used in withdrawal to ease the discomfort of withdrawing from heroin. There is reasonable evidence that longer duration of methadone maintenance treatment is associated with reducing the individual and social harms associated with illegal opioid use. Methadone treatment has been shown to significantly reduce the risk of death from overdose. The effectiveness of methadone maintenance programs in reducing HIV infections has been well-demonstrated. Currently, **Naltrexone**, **Buprenorphine** and **Suboxone** are other prescribed drugs used in drug withdrawal and maintenance programs.

Harm reduction also includes programs that reduce harm to the wider community. Syringes discarded in public places pose a risk of injury and a potential low risk of hepatitis C transmission to others; a harm reduction response is to provide syringe disposal facilities in appropriate public locations. Note that the risk of blood-borne virus transmission in the community for the general public is very low.

Peer education and outreach activities are additional examples of harm reduction strategies specifically aimed at reducing transmission of hepatitis C and other viruses among people who inject drugs. People who inject drugs generally keep a low profile and are hesitant to reveal their drug use if they feel that doing so will expose them to discrimination or prosecution. Peer educators are people with direct experience of drug use and drug-using cultures. They are well-placed to give information to people who inject drugs about reducing the risks of hepatitis C transmission and other drug-related harms. *See Chapter 8: Education and Training.*



SAFER USING

WHAT DOES THE TERM SAFER USING MEAN?

Based on the fundamental approach of harm reduction, the term safer using includes a series of precautions and practices aimed at preventing the harm associated with injecting drugs. Given that the quality, strength and content of any given street drug can never be assured, harm can never be completely

eliminated from this activity. The related harms include the transmission of blood-borne viruses and the possibility of overdose and may also include social, psychological and legal harms.

The technique of safer using aims to prevent exposure to blood-borne viruses (HIV, hepatitis C and hepatitis B) and to bacterial infections during the course of injecting drugs. The ability of an individual or group to practice safer injecting is, to some extent, dependent on the injecting event taking place in the context of:

- non-partisan political support for harm reduction;
- a government committed to providing accessible health and drug treatment services for people who inject drugs;
- sterile needle and syringe provision; and
- a community that understands the health, social and political dynamics of injecting drug use.

SAFER INJECTING PROCEDURES

The safest way to avoid the transmission of hepatitis C and other blood-borne viruses is for people not to inject drugs. Some people choose other ways of consuming drugs, such as smoking, snorting, drinking, swallowing or absorbing them rectally but if they choose to inject, they should never share any equipment.

The safest way for a person to inject is to never share any equipment.

- Always use new, sterile or clean equipment including:
 - sterile needle and syringe (fit);
 - new sterile water (where available, a new ampoule of sterile water is best);
 - new swabs (one to swab the spoon and one to swab the injecting site before injecting);
 - a clean tourniquet;
 - a new filter; and
 - a clean spoon.

- Choose a safe environment to inject: one that is private, clean, well lit and with running water if possible.
- Always:
 - wipe down the preparation area;
 - wash hands thoroughly before and after injecting;
 - ensure the injecting space is clean; and
 - use an approved disposal bin (or a puncture proof container for used fits).

If a person does re-use a needle and syringe, it is important that it is cleaned and not shared with others. Liquid bleach or other disinfectants may be used for the cleaning of blood spills, contaminated surfaces and equipment.

Note: there are no conclusive studies on the effectiveness of bleach to inactivate the hepatitis C virus.

Sterile equipment has undergone a process that destroys bacteria, viruses and other infectious agents. Sterile equipment includes pre-packaged needles and syringes, water and swabs that are marked as sterile. While it is best to use a new ampoule of sterile water, cooled boiled tap water that has been covered is acceptable. All other equipment, the injecting space and hands need to be cleaned with soap and water or with swabs.

- Safer using is equally important for people who are already infected with hepatitis C because they can become reinfected or can infect others with hepatitis C.
- Safer using means more than just using new and sterile needles and syringes. It includes being aware of how easy it is for blood to be transmitted. People may come into contact with someone else's blood when sharing any injecting equipment. Blood from used needles and syringes, tourniquets and fingers – even in microscopic amounts – can get into a shared mix, filters or water and onto injection sites.
- A used fit should be rinsed with cold tap water immediately after use to remove most of the blood. This will prevent it blocking and help to reduce blood-borne virus transmission if the fit is reused, shared or improperly

discarded. Water used for rinsing should be safely disposed of by flushing down the toilet or sink.

- A person should recap their own fit but NEVER recap another person's used fit.
- Used fits should be placed in a disposal container or puncture proof container and returned to the nearest NSP. *See Disposal Section below.*

The Australian Injecting & Illicit Drug Users League (AIVL) and state and territory peer-based drug user organisations produce pamphlets/booklets on safer using, cleaning fits and handy hints for people who inject drugs. *See Contact Section in Resources.*

OVERDOSE

A drug overdose can be fatal. Getting help for someone who has had a drug overdose could save a life. If a drug overdose is suspected an ambulance should be called immediately – dial 000 (or 112 from a mobile phone). The ambulance service is there to help and as much information as possible should be provided, including what drug the person has taken.

In most states and territories, ambulance officers do not have to call the police unless they feel they are in danger themselves or if someone dies.

For people with hepatitis C who inject drugs, the risk of overdose may be increased. A liver affected by hepatitis C is slower to break down drugs and this can lead to drugs having a longer life in the body. This is particularly true in multiple drug use situations.

To avoid an overdose, health care workers should advise people to:

- not combine drugs – heroin overdose can result from mixing heroin (or other opiates) with other drugs. Alcohol, benzodiazepines and methamphetamines have been shown to be of particular concern;
- test and go slow – wait at least five minutes (the longer the better) between hits;
- think about tolerance – if a person has not used for a while or is using less, they should try a small amount first;

- think about what will happen if they overdose. Using with others can increase the risk of sharing and re-using contaminated injecting equipment, but having someone else present when using could mean the difference between life and death in the event of an overdose.

In overdose situations, health care workers should advise people to:

- take action before the situation escalates – monitor the person and call 000 (or 112 from a mobile phone) if the person is unconscious or has stopped breathing;
- call for an ambulance – less than four breaths per minute means that an ambulance is required immediately; and
- acquire resuscitation skills – it could save a life. (Courses are available through work places, Red Cross, St John Ambulance or drug user organisations.)

ACCESS TO INJECTING EQUIPMENT

Programs

Needle and Syringe Programs (NSPs) exist in all states and territories, although the range and names of services differ. Some of the services provided through these programs include free access to sterile needles and syringes, disposal options, information and education about safer using, safer sex, blood-borne viruses, management and treatment programs, overdose prevention education and referrals to user-friendly services. Some NSPs display this logo:



Health workers are advised to contact their local NSP or peer-based drug user organisation for more information about the range of services available from NSPs in their state or territory. *See Contacts Section in Resources.*

Pharmacies

In all states and territories, needles and syringes, swabs and sterile water are available to purchase from some pharmacies. In some jurisdictions, pharmacies also exchange (without cost), new needles and syringes for used ones. Some pharmacies will also accept used injecting equipment for disposal. *See Chapter 8: Education and Training for more information on pharmacies and injecting drug use.*

Personal supplies

It is recommended that people who intend to inject drugs or who are on medical treatment which requires the regular self-injecting of prescribed drugs keep a supply of new needles and syringes and safe, puncture-proof disposal containers. These should be stored in a dry place that will not be exposed to major changes in temperature, and are out of reach for children. Needles and syringes should be left in their sealed packages until they are to be used. Water ampoules should not be opened until needed and should be emptied and thrown away once used.

DISPOSAL

All items of injecting equipment should be disposed of appropriately to ensure that there is no risk of transmission through accidental contact with used items. Each state and territory has its own requirements for disposal of syringes. These requirements are generally specified in relevant legislation on environmental protection.

Specifically, needles and syringes should be:

- put in a puncture-proof, sealed container (not glass as it can break and needles are a hazard for recycling workers); or
- taken to a disposal service, such as an NSP, pharmacy or municipal council.

Some pharmacies and syringe vending machines provide injecting equipment and special containers or packs which double as disposal containers. The containers have an internal moulded flap which 'locks in' used needles and syringes, preventing both re-use and inappropriate disposal.

Some people who inject drugs do not have access to disposal facilities located at NSPs, or are unable to ensure safe disposal each time they inject. Health care workers should advise individuals about appropriate domestic disposal or refer people to local and municipal authorities for guidelines of safer disposal.



BARRIERS TO SAFER USING

There may be multiple barriers to people adopting safer injecting practices, including:

Cost and limited access to equipment: In some states and territories, distribution programs have limited opening hours. Needles and syringes are free from most NSP outlets or exchange programs. Needles and syringes from vending machines and some pharmacies may incur a cost. In some states and territories, pharmacies sell and exchange sterile equipment. The cost of, and access to, sterile water and other equipment also varies in each jurisdiction.

Availability of transport.

Discrimination by service providers. *See Chapter 7: Preventing Discrimination and Reducing Stigma and Isolation.*

Peer and partner pressure not to take precautions.

Limited appropriate locations for safer using: People in custodial settings or in rural areas, for example, may not have access to sterile equipment or appropriate locations. Many other people also have limited choices about where they might inject, and often do so in public spaces such as toilets or outdoor locations. The threat of being apprehended by police can result in people injecting as quickly as possible and consequently they may take greater risks i.e. sharing equipment.

Legislation: In most states, the act of administering the drug itself is illegal.

Inadequate knowledge about safer injecting practices: Access to appropriate and current information varies across the country. Access can be problematic for

people with low literacy skills, those whose first language is not English and people in rural or remote locations.

The context in which injecting occurs may also present barriers to safer using. These can include:

- the level of a person's dependency on the drug being used, and therefore the haste with which they inject;
- the regularity or number of times a day that injecting occurs;
- the social dynamics and culture of the injecting group e.g. the person who has paid most for the drug may want to inject first; one person may be nominated to inject others; more experienced injectors may take control of an injecting process involving novice injectors; and women in a relationship may inject after their male partner;
- competing priorities, such as lack of housing or inadequate income; and
- some people who use drugs may not rate their own health as a high priority, and hence may not be committed to safer using.

Safer using is possible, but only if these necessary conditions are present:

- access to sterile equipment;
- a safe and secure environment in which to inject; and
- the knowledge about how to inject safely.

For some, these essential conditions already exist; for others, they do not exist and may not in the future.

THE CHALLENGE FOR ALL WORKERS IS TO COMMUNICATE EFFECTIVE HARM REDUCTION MESSAGES THAT ARE APPLICABLE IN A WIDE RANGE OF SITUATIONS AND CONTEXTS TO DECREASE THE HARM ASSOCIATED WITH INJECTING DRUGS, AND TO REDUCE THE TRANSMISSION OF BLOOD-BORNE VIRUSES SUCH AS HEPATITIS C.



BLOOD BANK STRATEGIES FOR PUBLIC HEALTH

Hepatitis C was responsible for the majority of post-transfusion hepatitis infection in the 1970s and 1980s. Prior to identification of the virus and the availability of effective screening tests, hepatitis C acquired through the receipt of blood and blood products accounted for up to 10% of all hepatitis C infections per annum in Australia.

Since 1990, improvements in the selection of donors, screening and viral inactivation of plasma products have virtually eliminated the transmission of hepatitis C virus through blood or blood product transfusion in Australia.

Blood banks have invested significant financial resources in minimising the risk of blood-borne virus transmission through blood and blood products. The annual Australian investment in viral screening of donated blood is more than \$20 million. It is likely that any further improvements in donor selection, screening and/or viral inactivation will require additional investment and the co-operation of Australians who volunteer as blood donors.

DONOR SELECTION AND TESTING

All blood donated in Australia is tested for hepatitis C antibodies. Blood banks also use a complex medical history and behavioural questionnaire to identify would-be blood donors who may be at risk of acquiring hepatitis C. Such careful scrutiny is a particularly important safety measure, as there are no laboratory tests that can totally eliminate the risk of hepatitis C transmission by blood transfusion. Testing technology can never be guaranteed fail-safe.

NUCLEIC ACID TESTING

Nucleic Acid Testing (NAT) was introduced into Australian blood bank screening in June 2000. It is a powerful and sensitive test that is capable of amplifying a small part of viral or genetic material over a billion times. This means that it is

now possible for the blood transfusion service to detect minute amounts of hepatitis C virus and HIV that may be present in blood.

NAT screens directly for the virus, and as such is capable of identifying infection before antibodies are formed or are present at detectable levels. NAT is able to reduce the window period (the time between infection and detection of the virus or antibodies in the blood stream). In the case of hepatitis C, it has been estimated that NAT can reduce the window period from an average of 66 days to 22 days. NAT is performed in addition to the current donor questionnaire and screening tests.



PLASMA PRODUCTS

Plasma products are subjected to a variety of processes that work to inactivate hepatitis C or other viruses that may have escaped detection through donor selection and screening. There have been no reported cases of hepatitis C plasma product transmission in Australia since the introduction of inactivation protocols in 1985.



STANDARD INFECTION CONTROL PROCEDURES

The *Infection Control Guidelines for the prevention of transmission of infectious diseases in the health care setting*, Department of Health and Ageing, January 2004 can be found at: www.health.gov.au.

Note that the principles underpinning infection control should include:

- isolating the infectious organism, not the person;
- assuming everyone has an infectious disease;

- all practices, including any protective practices, should be non-discriminatory;
- there should be no testing without informed consent; and
- a commitment to protecting the privacy and confidentiality of all people using health care services.

Standard infection control procedures are designed to protect both the health care worker and the client from infection with a range of blood and other body fluid-borne viruses. By assuming everyone is potentially infectious and by treating all clients in the same way through following standard procedures, the risk of infection is reduced and the potential for discrimination is avoided. See *Chapter 7: Preventing Discrimination and Reducing Stigma and Isolation for more information on standard infection control procedures.*

HEALTH AND SAFETY IN THE WORKPLACE

Health care workers, laboratory staff, beauty industry workers, tattooists, body piercers, cleaners and other workers who may come into contact with blood or blood products need to be 'blood aware' in order to avoid the risks of hepatitis C transmission.

PREVENTING TRANSMISSION OF BLOOD-BORNE VIRUSES IN THE HEALTH CARE WORKPLACE

Under Occupational Health & Safety legislation in all states and territories, employers have an obligation to ensure that workers are not exposed to any hazards while undertaking their duties, nor expose others to such hazards.

Developing and implementing workplace protocols and guidelines around blood awareness issues are recommended with tighter controls if the person is doing surgical procedures whereby they are exposed to blood (exposure-prone procedures). Exposure prone procedures (EPPs) are a subset of procedures which have the potential for transmission of blood-borne virus/viruses from a health care worker to a patient or from a patient to a health care worker during a medical or dental procedure.

Health care workers who are performing EPPs have a professional and ethical obligation to know their hepatitis C virus status. Health care workers who test positive for the hepatitis C virus must not perform EPPs. Employers and health care workers should refer to their state or territory policy and procedures for workers who have hepatitis C. *See Section on Prevention in the Workplace below for further information.*

A health and safety workplace policy should incorporate:

1. **Identification of work practices** that may put people at risk of infection with hepatitis C.
2. **Preventive measures:**
 - a. workers at risk should be offered hepatitis A and B vaccinations;
 - b. ensuring that safe work practices are followed. *See Infection Control Guidelines for the prevention of transmission of infectious diseases in the health care setting*, Department of Health and Ageing, January 2004 at: www.health.gov.au;
 - c. providing appropriate protective clothing and equipment; and
 - d. ensuring that all First Aid kits and equipment comply with the appropriate standards set by jurisdictions, such as the Victorian Workplace Code of Practice, No 18, June 1995.
3. **A reporting protocol** for incidents:
 - a. all risk incidents reported immediately to management; and
 - b. an accident report form filled out.

This information should be treated as confidential.

The employer is responsible for ensuring that the worker has access to appropriate support/medical services, where they can discuss the incident and possible infection issues.



4. **Staff training plan:**

- a. providing access to the latest information on issues relating to HIV/AIDS and hepatitis in the workplace, and any other appropriate training programs.

5. **Review:**

- a. the policy should be reviewed on an annual basis; and include
- b. employees' compliance with standard infection control procedures and reporting of unsafe practices, incidents or risks to management.



PREVENTION IN THE WORKPLACE

GENERAL HYGIENE

Guidelines recommend that health care workers check their hands for cuts or abrasions each day and cover any breaks in the skin with a waterproof dressing. People are advised to wash hands before and after contact with each individual and after contact with used equipment. Thorough hand washing consists of:

- removing all jewellery;
- using soap and warm running water for 10–15 seconds to produce a good lather;
- rinsing all signs of dirt and soap away; and
- drying hands with a disposable paper towel.

In the absence of water, antiseptic products (such as alcohol swabs or other products which do not require water) can be used in emergency situations when there may be insufficient time and/or lack of hand-washing facilities.

BLOOD AND BODY FLUIDS

Workers should wear gloves whenever:

- exposure to blood/body fluids is anticipated;
- handling any equipment or materials contaminated by blood or body fluids; or
- there is the possibility of contact with either broken skin or the mucous membrane of any person involved in an invasive procedure.

Gloves are not necessary when dealing with skin that is intact. Remember that hands should be washed before and after removal of gloves. Gloves should be changed and disposed of when a worker is moving from one client to another and between any of the above procedures. To prevent cross-contamination, gloves should be removed and disposed of before undertaking clinical or other tasks.

BLOOD OR BODY FLUID SPILLS

The following procedure is recommended:

- disposable gloves should always be worn;
- avoid the use of hot water because this will cause blood to congeal and adhere to the surface;
- remove as much as possible with disposable towels;
- small blood spills can be managed easily by wiping the area of the spill with paper towels, then cleaning the area with water and detergent;
- for large blood spills, powdered bleach can be used to contain the blood pool. A scraper and pan can then be used to remove the absorbed material. The area can finally be cleaned with a mop and a bucket of detergent diluted in water; and
- if a spill occurs on carpet or soft furnishings, detergent with cold water should be used rather than bleach, which will damage fabrics.

Note: if there is any risk of skin contact with a previously bloodied area, such as a bathroom surface or a table, the surface should be wiped again with bleach solution and hands washed.

CLINICAL PROCEDURES

Some procedures may involve splashes or sprays of blood. For eye protection, goggles or face shields must be worn. Please note that contact lenses do not give protection. Surgical masks provide adequate protection for the mucous membranes of the mouth.

Gloves should always be worn when collecting blood and other specimens for laboratory evaluations and these should be placed in leak- and spill-proof containers for transport. Containers should be checked for exterior contamination and, if necessary, be disinfected before sending and/or upon receipt. Transport between institutions should comply with the carrier's conditions, and the requirements of relevant government environmental protection authorities.

FIRST AID

No one should be denied First Aid. If blood or body fluids are present, the precautions already outlined should be applied. For mouth-to-mouth resuscitation, specific airways or face masks should be provided to personnel likely to administer First Aid.

USED NEEDLES, SYRINGES AND OTHER INJECTING EQUIPMENT

Sometimes needles and syringes are inappropriately discarded in public places such as toilets. If employees are likely to come into contact with used needles, syringes and other injecting equipment in the course of their work, they should be well-informed and trained in how to safely handle these items.

- **Never** re-cap discarded needles.
- Dispose of used needles and syringes in an approved sharps container and dispose of the container in accordance with the requirements of the authority responsible for environmental protection.



In the case of a needlestick injury:

- wash the affected area with soap and water;
- apply antiseptic and a waterproof dressing;
- report the incident to management (occupational health and safety officer) immediately; and
- consult a doctor as soon as possible, who will advise on testing and possible treatment.

OTHER WASTE

Waste such as used gloves, soiled dressings and body tissues should be treated as infectious and placed in impermeable bags. Handle with care and dispose of the bags in accordance with the requirements of relevant government authorities that deal with environmental protection.

TATTOOING, SCARIFICATION, BODY PIERCING AND BODY ART

Tattooing branding, scarification, body implanting and body piercing workers should undertake infection control training through relevant health and medical training institutions.

It is recommended that people undergoing a body art procedure, such as tattooing, branding, scarification, body implanting or piercing, visit a practitioner who is registered with their local health authority and who consistently uses standard infection control procedures. Particular care is needed if a person decides to undergo a body art procedure in some overseas countries.

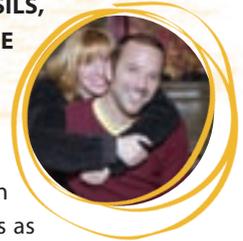


HEALTH AND SAFETY IN THE HOME – MANAGING THE RISKS OF TRANSMISSION

People with hepatitis C may be concerned that they could transmit the virus to their partners, their family, friends or other members of their household.

It is important to remember that hepatitis C is transmitted by blood-to-blood contact. This means that the blood of an individual who has hepatitis C must leave their body (e.g. via open wounds or sores) and enter the bloodstream of another person. See Chapter 1: *Hepatitis C: All about the Virus*.

HEPATITIS C IS NOT TRANSMITTED THROUGH SOCIAL CONTACT, HUGGING, KISSING, SHARING FOOD, DRINKS, PLATES, EATING UTENSILS, SNEEZING, COUGHING, WASHING CLOTHES IN THE SAME MACHINE AND USING THE SAME TOILET FACILITIES.



Mosquitoes or other insects do not transmit hepatitis C. When a mosquito bites a person, it injects salivary fluid (which acts as an anti-coagulant) through one passage and sucks up blood through a different passage. Blood goes directly to a mosquito's stomach where it is broken down (and used as food), along with any blood-borne organisms. Viruses that are transmitted by mosquitoes are ones where the virus also multiplies in the mosquitoes – this is not the case for the hepatitis C virus.

People should be aware that there are some personal care objects that may transmit hepatitis C from a person already infected to another person and these should not be shared. These may include body piercing jewellery, toothbrushes, razors, tweezers, scissors and nail clippers.

To reduce the possibility of hepatitis C transmission, everybody in a household should have, and exclusively use, their own personal care items, particularly toothbrushes and razors.

Another issue for the household relates to First Aid. Here are some basic infection control and First Aid hints:

- Skin acts as a barrier to infection with hepatitis C. To maintain this barrier, make sure that any cuts, abrasions, or dermatitis are covered with a waterproof dressing.
- Use disposable latex gloves when cleaning up blood and body fluids.
- Wash hands with soap and water before and after wiping up blood spills to reduce the chance of infection.
- Use disposable materials like paper towels when cleaning up blood or other body fluids and dispose of these soiled materials in a plastic-lined garbage bin.

Before giving First Aid:

- wash hands in soap and warm water;
- cover any cuts or abrasions with a waterproof dressing; and
- put on a new pair of disposable latex gloves (these are available at pharmacists and most supermarkets).

During First Aid:

- be aware of any blood spills and splashes. Blood or body fluids should not come into contact with any broken or unprotected skin.

After First Aid:

- use soap and cold running water to wash hands and any other part of the body that may have blood on it;
- mop or wash blood-stained surfaces with detergent, then disinfect with diluted bleach;
- bag any blood-stained items used during the First Aid procedure;
- wash any blood-stained clothing in cold water and detergent;
- use detergent in cold water to clean up a spill on carpets or soft furnishings;

- dispose of all items stained with blood, including tampons and sanitary pads, by putting them in a plastic bag and into a plastic lined rubbish bin; and
- wash hands thoroughly with soap and water.



PREGNANCY AND BREAST FEEDING

Hepatitis C does not have any adverse effects on a woman's ability to have children, unless she has advanced liver disease.

Women with hepatitis C are often very concerned about the risk of passing the infection onto their baby. They can be reassured that there is a very low chance (approximately 5%) of transmission and this can only happen if the mother is PCR positive (that is, the mother has hepatitis C virus in her blood). A negative result from a PCR test can provide reassurance to mothers that they do not have any virus to transmit to their baby. Unfortunately, there are no known strategies to reduce the risk. Unlike HIV infection, there is no proven benefit from caesarean section. Hepatitis C alone is not an indication for caesarean section.

Although the hepatitis C virus can be detected in breast milk, as the virus is not transmitted via the mouth, breast feeding is not thought to be a route of transmission of hepatitis C infection. However, it is advisable for breastfeeding to be avoided when the nipples are cracked and/or bleeding.

Testing the baby for infection should not be done until after 18 months of age to avoid confusion from maternal antibodies. If the baby has truly acquired hepatitis C, current research shows that it takes several decades before any liver disease develops. *See Chapter 1: Hepatitis C: All about the Virus.*



VACCINATIONS

Currently there is no vaccination for hepatitis C. Vaccination against hepatitis A and hepatitis B is available and is recommended for people with hepatitis C. In some instances, vaccination for hepatitis A and hepatitis B may incur a cost.

There are well-documented cases where co-infection with hepatitis A and/or B in people with hepatitis C has resulted in severe liver disease, including liver failure. There are also concerns that co-infection with hepatitis B can lead to a more rapid and severe course of disease progression for people with hepatitis C. See *Chapter 2: Hepatitis C, Other Hepatitis Viruses and HIV for further information.*

HEPATITIS A VACCINATION FOR PEOPLE WITH HEPATITIS C

The annual incidence of hepatitis A in Australia is approximately 0.01% and universal vaccination is not warranted. There is an increased incidence among some Aboriginal and Torres Strait Islander communities, and since November 2005, the Australian Government has funded hepatitis A vaccination in the second year of life for Aboriginal and Torres Strait Islander children living in the Northern Territory, Queensland, Western Australia and South Australia.

It is recommended that people, who may be at higher risk of acquiring hepatitis A, and especially those with hepatitis C, should consider vaccination. These people may include:

- travellers to areas outside Australia where hepatitis A is moderately to highly endemic (including all developing countries);
- persons with intellectual disabilities;
- people who inject drugs;
- men who have sex with men;
- childcare workers;
- plumbers and sewage workers;
- people chronically infected with either hepatitis B or C viruses;
- persons with chronic liver disease;
- those whose occupation may put them at risk of acquiring hepatitis A, including: health care workers in paediatrics, intensive care and emergency departments who provide care for substantial populations of Indigenous children; and
- visitors and education or health care workers in rural and remote Indigenous communities.

HEPATITIS B VACCINATION FOR PEOPLE WITH HEPATITIS C

The World Health Organisation (WHO) has recommended a policy of hepatitis B vaccination in all countries, particularly in those with a high prevalence of hepatitis B. In Australia, the Australian Government (through the National Immunisation Program) funds universal vaccination of new-born babies, infants and an adolescent catch-up program in schools. Hepatitis B vaccination is recommended for those at high risk of acquiring hepatitis B and for people with chronic hepatitis C and/or liver disease.

HEPATITIS A & B VACCINATION FOR PEOPLE WITH CIRRHOSIS

People with chronic liver disease may have reduced liver reserve or stamina. The National Health and Medical Research Council (NHMRC) recommends vaccination for any person with chronic liver disease against other viruses (i.e. hepatitis A and /or B) that may be toxic to the liver. It recommends vaccination against hepatitis A and B for people with hepatitis C who are not immune to hepatitis A or hepatitis B.

PRE-VACCINATION TESTING: GENERAL GUIDELINES

Vaccination provides protection against hepatitis A infection and/or hepatitis B infection in people who have not yet been exposed. If a person has been infected in the past, vaccination is normally not necessary as they will generally have developed immunity. The only way to be sure whether a person is already immune is by doing a blood test to look for specific **antibodies** associated with the particular infection. Antibodies indicating past infection with both hepatitis A and hepatitis B are common in people with hepatitis C.

People with chronic hepatitis B and/or hepatitis C should be vaccinated against hepatitis A if they are not already immune to it.

People with chronic hepatitis C should be vaccinated against hepatitis B if they are not already immune to it.



COMMONLY ASKED QUESTIONS



CAN I INJECT DRUGS WITHOUT GETTING HEPATITIS C?



As long as you do not share ANY item of injecting equipment with anyone, have no blood-to-blood contact, and follow the procedures for safer injecting, you can reduce the risk of transmission. However, the safest way of avoiding hepatitis C is not to inject drugs.



DO ALL PEOPLE WHO INJECT DRUGS GET HEPATITIS C?



No. However, if you have injected drugs with other people or have shared or re-used needles and syringes and any other injecting equipment (e.g. spoons, water, filters, swabs or tourniquets), you have been at risk of acquiring hepatitis C. Safer injecting behaviours can reduce the risk of acquiring or passing on hepatitis C.



I ALREADY HAVE HEPATITIS C. IS IT SAFE TO SHARE INJECTING EQUIPMENT WITH ANOTHER PERSON?



No. It is not safe. You can become re-infected with different genotypes of the hepatitis C virus, and you can infect other people. Ideally, people should not share any item of injecting equipment with another person, and if they are unable to get clean needles and syringes, should follow the cleaning guidelines produced by the Australian Injecting & Illicit Drug User League (AIVL).



WHAT IS THE LIKELIHOOD OF BEING INFECTED WITH HEPATITIS C AFTER A NEEDLESTICK INJURY?



In the health care setting, the risk of getting hepatitis C from a needlestick injury is estimated to be between 2% and 8%. This contrasts with a needlestick injury risk of the order of 0.3% for HIV, and 30% for hepatitis B, in the absence of vaccination. The risk of needlestick and sharps injuries can be reduced through adopting standard infection control procedures, being 'blood aware' and through the implementation of occupational health and safety guidelines.

Because of the very small amounts of blood and the likelihood that the virus has not survived in a public place such as a park or on a beach, the risk of transmission in this way is negligible.

Q I HAVE HEPATITIS C. IF MY CHILD GETS A CUT, CAN I ADMINISTER FIRST AID?

A Yes. Unless you are also bleeding, there is virtually no risk of transmission from you to your child. However, it is advisable to always follow standard infection control procedures. Parents or carers may consider carrying waterproof dressings, spare plastic bags and disposable latex gloves with them in case of accidental blood spills.