



GUIDELINES FOR INFECTION PREVENTION AND CONTROL FOR BLOOD BORNE PATHOGENS

1. Introduction

- 1.1 This document sets out the University guidelines on infection control for blood/body substance transmitted pathogens. The University has a duty to provide and maintain a safe working and social environment for the entire University community comprising students, academic staff, general staff and visitors, and to ensure that the risk of blood borne infection is kept to a minimum. Infection control is based on the Standard (Universal) Precautions Model which requires that **all** individuals are regarded as potentially infected with Hepatitis B, Hepatitis C, HIV, and other blood/body substance transmitted pathogens, and that infection control procedures are applied accordingly. **This approach is necessary, as an individual's actual infection status is unknown at any given time.**
- 1.2 The Standard (Universal) Precautions Model is not restricted to health care worker: consumer relationships and should be universally applied in all settings.
- 1.3 The University's approach is one of setting in place education programs for different sections of the University community according to their needs and the establishment of appropriate infection prevention and control procedures.
- 1.4 These guidelines are in keeping with current University of Newcastle, Occupational Health and Safety, Anti-Discrimination and Public Health Legislation and with NSW Health Policies and Circulars, Hunter Area Health Service Policies, NH&MRC Guidelines and current legislation.
- 1.5 Various sub-populations within the University face different levels of risk, which are dealt with under Section 10. The majority of occupational and educational situations within the University pose no risk of transmission.

2. Hepatitis B, Hepatitis C and Human Immunodeficiency Virus (HIV)

- 2.1 Hepatitis B is a viral infection causing inflammation and dysfunction of the liver for a short duration. It is a more common infection than HIV and is easier to contract than HIV. In the adult population, approximately 90% of individuals infected with the hepatitis B virus have a successful resolution of the infection and develop lifelong immunity. It is important to be aware that some people can be exposed to the hepatitis B virus and not have any symptoms of the illness. Approximately 10% of those infected become carriers of the virus. There is a vaccine available to prevent infection with the hepatitis B virus and it is recommended that people with at risk behaviours and health care workers be vaccinated.
- 2.2 Hepatitis C is also a viral infection of the liver causing chronic inflammation with possible scarring (cirrhosis) and permanent liver dysfunction which occurs over a long period of time. Hepatitis C is not as easy to contract as hepatitis B, but is still more infectious than HIV infection. Of the people who are infected with hepatitis C, only a very small percentage eliminate the infection from their liver and remain antibody positive. The majority of people remain infected and become chronic carriers of the virus. There are no vaccines available to protect the population from hepatitis C and treatment is only experimental at present. However there is some success with current treatment regimes.
- 2.3 The Human Immunodeficiency Virus (HIV) is a human retrovirus that has the ability to impair the immune system of an infected person. The development of antibodies to the virus in the infected person does not give rise to immunity, as is the case with other infections. The virus proceeds to damage the immune system over a period of years to the extent that the body is unable to mount an effective defence against serious illness and other infections. There is no vaccine against HIV. Currently the only treatment to stem the progress of the infection in an attempt to prevent damage of the immune system is by using combinations of anti retroviral medications for life.

3. Transmission of, and Prevention of Infection by, Blood/Body Substance Borne Pathogens

- 3.1 Hepatitis B, Hepatitis C, HIV and other blood/body substance borne pathogens may be transmitted as follows:

- 3.1.1 **Blood to blood transmission** - may occur through sharing of needles and syringes among injecting drug users, by needlestick/sharps injuries, by exposure of non-intact skin or mucous membranes to blood and by injection with unsterilised needles and syringes. Since 1985 in Australia all blood and organ donors have been screened for HIV and Hepatitis B, and since 1990 for Hepatitis C. Since 1984/85 all blood products have been heat treated. Significant risk may be encountered by staff and students working in some overseas countries, where blood to blood transmission may occur by transfusion of unscreened blood or untreated blood products and by organ donation.
- 3.1.2 **Sexual transmission** - may occur through unprotected vaginal, oral, or anal intercourse with an infected person.
- 3.1.3 **Perinatal transmission** - may occur from an infected mother to her foetus or infant, before, during, or shortly after birth.
- 3.1.4 **Breast feeding** - transmission may occur through breast feeding.
- 3.1.5 **Sharing of personal items** To minimise transmission of Hepatitis B, Hepatitis C and HIV individuals should not share personal care items (such as toothbrushes or razors), needles and drug injecting equipment.
- 3.2 **There is no evidence to suggest that HIV is transmitted by such modes as casual social contact including kissing and hugging, sharing of crockery, toilets and showers, water fountains, coughing, sneezing or crying.**

4. Immunisation

- 4.1 Students working in a clinical setting in health care facilities are required by NSW Health to have commenced Hepatitis B immunisation. It is strongly recommended that students and staff directly involved in patient care or who may be handling or potentially in contact with human blood or tissue should be vaccinated and their immunity confirmed and then maintained by regular booster doses as prescribed by the NH&MRC Immunisation Handbook.
- 4.2 ***THERE IS NO VACCINE FOR HEPATITIS C.***
- 4.3 ***THERE IS NO VACCINE FOR HIV.***

5. Education

- 5.1 The University supports an integrated education policy that provides information on the risk factors associated with blood borne infection transmission, situations that pose increased risk of exposure and actions to be taken if accidental exposure should occur (see [Attachment 1 - Injury/Incident/Hazard Report Register](#) and [Attachment 2 - NSW Health Circular 98/11 Management of Health Care Workers Potentially Exposed to HIV, Hepatitis B and Hepatitis C](#)). The policy aims to increase understanding and awareness of infectious disease to prevent unlawful discrimination against individuals who are known to be or are perceived to be infected with Hepatitis B, Hepatitis C or HIV, and to increase awareness of individual responsibility with respect to transmission of blood borne infection. It also stresses the importance of confidentiality and privacy, and the legal requirements in this regard.
- 5.2 Education is provided through the Faculties and their Schools; the Divisions; the University Health Service; Human Resource Services; the Physical Planning and Estates Section and other relevant units; and the student associations. Education includes programs for staff, student orientation programs, videos, written material and individual consultation.
- 5.3 Information on infection control will be made available on the University's Web page.
- 5.4 It is the responsibility of each Faculty to examine closely the infection control requirements for the education of its students. Faculties will identify the risks students and staff may encounter, and will ensure that an appropriate education and management program is provided.
- 5.5 For most of the humanities it is envisaged that the risks will be no greater than those experienced by the rest of the community. However, for the medical, nursing and other health professional areas, and some laboratory/social sciences the risks are more significant (refer to Section 10).

6. Discrimination

- 6.1 The University recognises that it has a duty under the NSW Anti-Discrimination Act (1977) and the Commonwealth Disability Discrimination Act (1992) to ensure that individuals are not unlawfully discriminated against (that is treated unfairly compared to others) or harassed because of their physical impairment or disability (which includes infection with HIV and other pathogens), sexual preference (whether known or presumed), racial background, religion, gender, pregnancy, marital status or age.
- 6.2 It is University policy that the University does not use unlawful discriminatory practices as an employer, in the provision of services or as an **educational institution with regard to both existing and prospective students**. Advice will be provided for individuals who can be shown to have acted in an unlawful discriminatory way. Ultimately disciplinary action may be taken against such individuals.
- 6.3 It should not be inferred that the policy to prevent unlawful discrimination means that individuals must expose themselves to risk of blood borne infection.
- 6.4 In the event that an individual considers he/she has been unlawfully discriminated against, then he/she will have recourse to the University's Grievance Procedures for Staff and Grievance Procedures for Students. Due regard will be given to the confidentiality and privacy of the individual.

7. Confidentiality

- 7.1 The University recognises that individuals have a right to privacy and confidentiality regarding their infection status. Under the *Public Health Act 1991*, individuals who have tested positive for Hepatitis B, Hepatitis C or HIV are under no obligation to disclose that information to another person, except where that person is an intended sexual partner. Disclosure of a person's infection status by another person constitutes a breach of confidentiality. The individual who has breached confidentiality can be liable to a minimum \$5000 fine under the Act. Also, an infected individual who knowingly places another individual at risk of a blood borne infection can be charged under this Act.
- 7.2 As part of its responsibility to minimise the spread of Hepatitis B, Hepatitis C and HIV, the University's policy is to ensure confidentiality. It seeks the trust and cooperation of people who may be at risk of blood borne infection. If people do not believe that their confidentiality will be protected they should seek advice from the University Health Service.
- 7.3 There are particular considerations that apply to infected Health Care Workers (see [Attachment 3](#) - NSW Health Circular 99/88 *Health Care Workers Infected with HIV, Hepatitis B or Hepatitis C* which the University supports. These encourage such individuals to consider disclosure of their immune status to their employer in order that work arrangements may be appropriately modified.
- 7.4 With respect to disclosure of a person's Hepatitis B, Hepatitis C or HIV status to a third person the University recognises that **consent (preferably written) must be sought**. Under the NSW Public Health Act, a penalty of \$5,000 may apply to every individual unauthorised disclosure.
- 7.5 The relevant units within the University are required to ensure confidentiality of records of disclosure of infection with blood borne pathogens.

8. Testing

- 8.1 Testing is available for Hepatitis B, Hepatitis C and HIV.
- 8.2 Testing is not compulsory under current legislation except HIV testing for people applying for permanent residence status.
- 8.3 The University policy does not require mandatory testing for Hepatitis B, Hepatitis C and HIV. However, students and staff in studying or teaching in the medical, nursing or other health professional areas should be aware of their immune status and should be tested in circumstances where they may be at risk of blood borne infection.

9. Counselling

- 9.1 Where individuals wish to determine their infection status specifically in relation to Hepatitis B, Hepatitis C and HIV and elect to be tested, pre and post-testing counselling is available through the University Health Service.
- 9.2 Counselling is carried out in accordance with NSW Health Circular 92/20 *Guidelines for Counselling Associated with HIV Antibody Testing* (refer to [Attachment 4](#)). Pre-testing counselling will include the legal and other possible consequences of a positive antibody test.
- 9.3 Counselling and infection assessment with respect to Hepatitis B, Hepatitis C and HIV and other blood/body substance borne pathogens will be carried out in accordance with the right of the individual to confidentiality and privacy. Individuals may use counselling and support services outside the University.

10. Specific Risk Categories and Management Strategies

The risk of exposure to blood borne infection and strategies for control vary in different settings, and may be considered in relation to three categories, determined by the nature of contact with infectious agents.

10.1 Category A: Clinical Settings - Direct/Indirect Patient Contact

- 10.1.1 This category refers to students and staff who are physically in contact with patients.
- 10.1.2 The University takes the view that intending or current medical, health sciences and nursing students and staff need to be aware of their immune/infection status. In line with their duty of care to others intending or current students and staff should be tested for Hepatitis B, Hepatitis C and HIV, and should consider disclosing the test result to the University Health Service to receive appropriate advice. For students this may be prior to commencing a course. The individual's right to privacy and confidentiality is recognised. (See [Attachment 5](#) - NSW Health Circular 98/100 *HIV - Confidentiality: A Guide to Legal Requirements*).
- 10.1.3 Advice, treatment and information on career options will be available to any students and staff who have concerns about body substance transmitted pathogens. The University supports the view that where a person has tested positive, it is important that he/she considers the implications for career choice and prospects, if appropriate. (see [Attachment 3](#) - NSW Health Circular 99/88 *Health Care Workers Infected with HIV, Hepatitis B or Hepatitis C*).
- 10.1.4 Education on body substance borne infection control and ethico-legal issues such as **professional duty of care** and the "**need to know**" is an early component of the medical, nursing and other health professional courses. Students and staff will be made aware of the policies of their professional association(s).
- 10.1.5 The University requires that students and staff comply with the infection control and management policy of the facility or agency in which professional practice is carried out.
- 10.1.6 Specific requirements and procedures for the staff and students in nursing programs are outlined in the *Faculty of Nursing Infection Control Policy, Guidelines and Requirement Handbook*.
- 10.1.7 Specific requirements and procedures for the Faculty of Medicine and Health Sciences are outlined in the Faculty guidelines for infection control.

10.2 Category B: Laboratory Settings

- 10.2.1 This category refers to students and staff who work in research or other laboratories that handle potentially infectious materials.
- 10.2.2 Laboratory procedures will embody the principle that **all** body substances both animal and human, and associated reagents are regarded as infected with pathogens. The risk of exposure to infectious agents, whether by percutaneous injury, exposure of non-intact skin or mucous membranes, will be minimised through the use of protective clothing. safe laboratory practices such as sharps disposal. contaminated waste

disposal, spills management, prevention of mouth pipetting, and basic hygiene measures. Training will be provided by the relevant Faculty to both new and existing laboratory students and staff on the importance of blood borne infection control procedures.

10.2.3 Details of the University's requirements and procedures for the use of human or animal materials in practical classes are contained in [Attachment 6 Laboratory Procedures When Handling Potential Infectious Materials in Practical Classes](#).

10.2.4 Details of the University's requirements and procedures for the handling of cadaveric material are available from the Faculty of Medicine & Health Sciences.

10.3 **Category C: Other Settings**

10.3.1 **Sports Facilities**

10.3.1.1 The Sports Medicine Australia policy has been adopted by the University (refer to [Attachment 7- Sports Medicine Australia Policy Infectious Diseases with Particular Reference to HIV\(AIDS\) and Viral Hepatitis \(B, C etc\)](#)). In accordance with this policy the University requires that where bleeding occurs during sporting activity, the individual concerned must cease the activity immediately and the bleeding must be stopped and an occlusive dressing applied before the activity may be resumed. Participants who have been diagnosed with Hepatitis B, Hepatitis C or HIV, or who are at risk of acquiring these diseases are strongly advised to obtain confidential advice and clearance from a doctor prior to participation.

10.3.2 **Childcare and Vacation Care**

10.3.2.1 The Childcare Centres and Vacation Care facilities will adopt the Standard (Universal) Precautions Model and will operate in accordance with the procedures outlined in the Department of Health and Family Services publication *Staying Healthy in Child Care - Preventing Infectious Diseases in Child Care 2nd Edition* (1997) and in updates to that publication.

10.3.3 **Residences**

10.3.3.1 On campus student accommodation will adopt procedures consistent with the Standard (Universal) Precautions Model as outlined in [Attachment 8 - Halls of Residence Infection Control Policy](#).

10.3.4 **First-Aid Officers**

10.3.4.1 All First Aid Officers are offered immunisation for Hepatitis B at University expense.

10.3.5 **Other Staff**

10.3.5.1 All gardeners, plumbers and other staff who may be at risk of infection are offered immunisation for Hepatitis B at University expense.

The University has adopted the guidelines on the management of blood spills detailed in [Attachment 9 - Blood and Body Substance Spills](#) for categories A to C above and all other University settings.

All instances of exposure to infectious or potentially infectious material will be reported, documented and followed up in accordance with approved occupational health and safety requirements for the University and the Health service (refer to [Attachment 1 - Injury/Incident/Hazard Report Register](#) and Attachment 2 - NSW Health Circular 98/11 *Management of Health Care Workers Potentially Exposed to HIV, Hepatitis B and Hepatitis C*).

GLOSSARY

Standard (Universal) Precautions Model-	Standard (Universal) body substance precautions assume that the blood and body substances of all patients are potential sources of infection, independent of risk. This involves the use of protective barriers and practices to protect health care workers from parenteral, mucous membrane, and non-intact skin exposure to blood-borne pathogens
mucous membranes-	the lining of the mouth, nose and respiratory tract, the conjunctival membrane covering the eye, the gastrointestinal tract, and the urinogenital tract
percutaneous injury-	injury involving puncture of the skin by a sharp object [eg scalpel, syringe needle ("needlestick" injury), broken glass]
body substances-	blood, faeces, urine, sputum, saliva, wound drainage, and other body fluids and body tissue
hypochlorite-	A 1% hypochlorite solution (10,000 ppm available chlorine) is used to decontaminate areas where blood or other body substances have been spilt

ATTACHMENTS

Attachment 1	<u>University Incident Reporting Procedure</u>
Attachment 2	<u>NSW Health Department Circular 98/11: Management of health care workers potentially exposed to HIV, Hepatitis B and Hepatitis C</u>
Attachment 3	<u>NSW Health Department Circular 99/88 - Health Care Workers Infected with HIV, Hepatitis B or Hepatitis C</u>
Attachment 4	<u>NSW Health Department Circular 92/20: Guidelines for Counselling Associated with HIV Antibody Testing</u>
Attachment 5	<u>NSW Health Department Circular 98/100 HIV Confidentiality - A Guide to Legal Requirements</u>
Attachment 6	<u>Laboratory Procedures for the use of Human and Potentially Infectious Materials in Practical Classes</u>
Attachment 7	<u>Sports Medicine Australia Policy with particular reference to HIV (AIDS) and viral hepatitis (B, C, etc.)</u>
Attachment 8	<u>Halls of Residence Infection Control Policy</u>
Attachment 9	<u>Blood and Body Substance Spills</u>

Also provided: [Management of a Blood and/or Body Substance Exposure chart](#), and a table of [Categories of Assessment of Exposure Risk](#)