

# LA TROBE UNIVERSITY

## PREVENTION OF BLOOD BORNE INFECTIOUS DISEASES PROCEDURE

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### 1 PURPOSE

The University recognises that employees, students, contractors and visitors working or studying in the University may handle blood and body fluids, or be exposed to blood or body fluids. Working with blood, blood products, tissue and body fluids increases the risk of contracting potentially fatal diseases. This Blood Borne Infectious Diseases procedure is designed to ensure as far as practicable that the University community is protected from infection arising from activities involving blood borne disease and is designed to ensure the rights of all staff and students to a healthy, safe and non-discriminatory work and study environment, free from harassment, including scape-goating and vilification, as related to blood borne infectious disease.

The danger of occupational transmission of blood borne disease is manageable by adopting standard infection control measures, at all times in all appropriate circumstances.

Access to work or study and continued participation in all facets of university life should not be affected by known or imputed HIV or other blood borne disease status.

### 2. DEFINITIONS

#### **Blood borne viruses**

Include the human immunodeficiency virus (HIV), hepatitis B (HBV), hepatitis C (HCV) and other Hepatitis strains. It may also include new or emerging viruses which are considered to be transmissible by blood or other body fluids.

#### **Invasive procedures**

Include any surgical entry into tissue, body, body cavities or organs, or repair of traumatic injury.

#### **Exposure**

Exposure means contamination with potentially infectious blood or other body fluid or derivative by contact with mucous membrane or broken skin, or inhalation of aerosols.

#### **Exposure prone procedures**

Include those procedures with the potential for direct contact between the skin (usually finger or thumb) of the health care worker or student, and sharp surgical instruments, needles or sharp tissues (spicules of bone or teeth) in body cavities, or in poorly visualised or confined body sites (including the mouth).

#### **Entry of infected blood into another person's bloodstream.**

Through transfusion of blood products. Through sharing contaminated needles and syringes. Through inadequate infection control procedures in the health care setting, including injuries with sharps and spills onto mucous membranes or broken skin.

**Blood and Body Fluids**

Blood, blood products, tissue, body fluids, and any derivatives produced by chemical or physical means e.g. protein, enzyme or blood proteins.

**3. RESPONSIBILITIES****3.1 The Dean, Head of School/College or Divisional Manager** is responsible for:

- (i) Determining and minimising the risk of staff, students and public contracting blood borne disease in their area of management.
- ii) Determining whether staff under their management and control are at risk from contracting a blood borne disease in the workplace.
- iii) Ensuring that all staff and students are informed / trained in appropriate procedures.
- iv) Ensuring that all staff and students follow appropriate procedures in all relevant situations.
- v) Ensuring education programs are introduced where it is professionally relevant and for ensuring the delivery of an effective education program for staff within their area of control.
- vi) Developing and implementing local safe work instructions for employees, students, contractors and visitors working or studying at the University who handle blood and body fluids, or may be exposed to blood and body fluids.

Where there is doubt about the potential for exposure, the OHS Section may be contacted for assistance.

**3.2 Staff and students** have a responsibility and duty to:

- i) follow any information, training and instruction received
- ii) use the risk controls that have been provided.
- iii) report hazards via the Incident Report Procedure.
- v) familiarise themselves with the policy and procedures in place at facilities where they are sent on placements.

**4. DESCRIPTION****4.1 IDENTIFICATION AND ASSESSMENT OF THOSE AT RISK OF EXPOSURE**

Each School, Department or Centre is responsible for identifying and assessing those at risk of working with blood and body fluids. Those at risk will include employees, students, contractors and visitors who:

- i) Work in laboratories in which blood and body fluids are handled
- ii) Work in clinical roles in which blood and body fluids are handled
- iii) Work in the first aid field
- iv) Work in landscaping or cleaning.

Each School, Department or Centre is required to implement:

- i) local safe work instructions which are appropriate and lead to minimising the risk of contamination.
- ii) Immunisation requirements.
- iii) personal hygiene information and requirements and induction for new staff, undergraduate and post graduate students

**4.2 PREVENTION**

Prevention methods must be considered in laboratories, clinics and taken into account when designing laboratory and clinic layout and installing equipment.

Laboratory and clinic space and placement of equipment should not create a crowded working environment or inhibit cleaning. Laboratory surfaces and floors should be made of impervious material to allow for effective cleaning. Surfaces that may have been contaminated with blood or body fluids should, be decontaminated with a suitable disinfectant e.g. a sodium hypochlorite solution containing 1% available chlorine.

Facilities for hand washing with elbow or foot operated taps and eye wash facilities should be provided in each work area where applicable.

Biohazard containers for the safe disposal of contaminated materials and sharps should be provided in adequate numbers in appropriate places in each work area. Laboratory doors and specimen storage areas should be marked as containing a biohazard.

Procedures must be in place for the correct disposal and documenting of biohazardous waste.

Spill kits should be located in each laboratory or clinic work area where applicable for the confinement, treatment and disposal of blood or body fluid spills.

The design, calibration and validation of all autoclaves must comply with current Australian and New Zealand Standards.

Office and study areas should be separated from laboratory work areas.

Restriction of laboratory access should be enforced as appropriate.

#### 4.2.1 CONTAINMENT OF AEROSOLS

Local safe work procedures should be specific about control of aerosols through:

Defining the tasks required to be undertaken always in laminar flow cabinets

Defining the tasks to be undertaken in biological Safety cabinets. As a minimum Class1 or class2 cabinets should be used for any procedures likely to produce aerosols of blood, body fluids or their products such as sonication and agitation, blending, procedures producing foam, froth, spray and aerosols, decanting large volumes of fluids in open containers.

Defining the maintenance and testing procedures for Biological Safety and all ventilation systems to ensure that they are operating to specifications. Ensure that they are serviced and tested at intervals of no more than one year.

Centrifuge tubes should be sealed and enclosed or sealed rotors should be used for spinning of any potentially contaminated material. Operators should ensure the rotor has completely stopped turning before opening the lid.

#### 4.2.2. PROTECTIVE CLOTHING

The following points should be incorporated into safe working procedures:

##### **Gloves**

Always wear when likely to be in contact with the specimen or contaminated surfaces or material.

Always wear if there is any open wound, lesion or dermatitis.

Select gloves which fit well and are disposable and easily replaced. Replace damaged gloves immediately. Always remove gloves after task completion (before handling telephones, performing office work, leaving the laboratory etc)

Rings should not be worn under gloves.

##### **Face and Eye protection**

Facial protection such as safety glasses, mask or face shield must be worn if there is a risk of splashing or spraying of blood or body fluids. Eye protection should be worn during venipuncture and transfer

of blood or bodily fluids. A full face shield provides the greatest of protection but in some circumstances, prescription or plain lens spectacles may be suitable. Contact lenses do not offer any protection against exposure to blood borne pathogens.

### **Gowns**

Wear in laboratories at all times when there is a risk of exposure to blood or body fluids. (Except when there is a specific requirement for the subject of an approved laboratory experiment not to wear a gown.)

Gowns must be removed whenever leaving the laboratory.

Gowns should have a closed, complete covered front.

Cotton or cotton polyester should be used, gowns made of synthetic fibres are not recommended.

Gowns should be laundered when soiled. Gowns used where there is a risk of exposure to blood or body fluids should be treated as contaminated and kept separate from other linen.

Prior to laundering gowns used where there is a risk of exposure to blood or body fluids should be soaked in a sodium hypochlorite solution containing 0.5% available chlorine.

### **Footwear**

Specify closed shoes as appropriate (e.g. in laboratories)

Exclude high heels as appropriate (e.g. in a laboratory environment)

## **4.2.3. PERSONAL HYGIENE**

All blood samples or blood products should always be treated as if they are contaminated.

The following instructions should be included in safe work instructions:

### **Hand Washing**

Attention to hand washing is an essential part of good practice.

Hands should be washed thoroughly with liquid soap and water immediately if contamination with blood or other body fluids has occurred or if gloves have been torn or punctured.

All wounds should be covered with waterproof dressings.

Hands should be thoroughly washed and dried at completion of the workday or session.

Elbow or foot operated taps should be available.

### **Hand Care**

The use of moisturising cream is recommended where frequent hand washing is required. Nails should be kept trimmed and clean.

### **Long Hair**

Long hair should be tied back or otherwise confined.

### **Avoiding contact**

Staff should avoid inadvertent contact of blood or body fluid with their skin or mucosal surface (eyes, mouth).

Mouth pipetting is prohibited.

Cosmetics must not be applied in the laboratory unless forming part of an approved experiment.

Food and drink must not be kept in or consumed in the laboratory unless forming part of an approved experiment.

### **Skin Injury**

All skin problems such as cuts, abrasions, exudations and exudative rashes should be covered by a waterproof dressing applied prior to entering the laboratory.

#### **4.3. IMMUNISATION**

The University Immunisation procedure should be read in detail, and acted upon as appropriate.

#### **4.4 EDUCATION AND TRAINING**

The University accepts that education to prevent blood borne infection is an essential part of procedure implementation and will continue to review the most appropriate ways to provide information and education to the university community.

The University acknowledges that effective education can contribute to the capacity of individuals to protect themselves against blood borne infection related anxiety in the workplace, minimise the risks of disruption and provide protection against legal or industrial action. Education should seek to bring about behaviour change in individuals by change in knowledge, beliefs and values, and actions.

Each department / school centre is responsible for ensuring that employees, students, contractors and visitors maintain an ongoing education and training program including:

- Identifying the tasks in which potential infectious material is handled

- Understanding and minimising the risks involved

- Ensuring that local safe work instructions are appropriate and lead to Immunisation requirements, personal hygiene and induction for new staff undergraduate and postgraduate students.

#### **4.5 FIRST AID**

Those responsible for administering first aid as well as all staff and students whose work brings them into physical contact with human blood, body fluids or tissues or other infectious material, must follow approved infection control guidelines.

First Aid kits must contain appropriate equipment for safe handling of blood and that those responsible for administering first aid are trained to do so safely and are confident to apply all procedures without discrimination.

#### **4.6 EQUITY AND ACCESS**

The University is committed to actively ensuring the protection of the rights of individuals against discrimination due to an individual being known to be, or suspected of being, HIV or hepatitis B or C antibody positive, or having AIDS or an AIDS related condition.

Blood borne virus status alone should not be the basis for denying access to study or employment or eligibility for training and promotion. Nor should blood borne virus status alone be a reason for termination of studies or employment, or other conditions believed to be associated, such as haemophilia, or a history of injecting drug use.

There is no legal obligation for any student or employee to inform the University of their blood borne virus status. However, should a person's medical status, including information about infection with a blood borne virus, become known, University staff have a clear obligation to keep such information strictly confidential.

#### **4.7 EXPOSURE**

Any person who has been exposed to potentially infectious blood, body fluids or tissue as a result of an incident in the work place should immediately wash the affected area with soap and water. When the exposure includes mucous membrane e.g. the eyes or mouth, the area should be flushed with copious quantities of tap water. The person should then seek initial advice from the University Medical Centre and report the incident through the University Incident report procedure.

## **5. REFERENCES**

OH&S Act 2004, Section 21.

Victorian Legislation Relating To HIV/AIDS

Refer to the web site (<http://www.decs.act.gov.au/policies/pdf/newhiva.pdf>)

The Australian National Council on AIDS (ANCA) and NH&MRC *Infection Control in the Health Care Setting: Guidelines for the Prevention of Transmission of Infectious Diseases* (April 1996)

Equity and Access legislation

Victorian Department of Human Services THE BLUE BOOK: Guidelines for the control of infectious disease.

[http://www.dhs.vic.gov.au/phb/hprot/inf\\_dis/bluebook/app4.htm](http://www.dhs.vic.gov.au/phb/hprot/inf_dis/bluebook/app4.htm)

The National Hepatitis C Resource Manual CDHA (2001)

## **6. CROSS REFERENCES**

LTU First Aid Procedures

LTU Immunisation Procedure

LTU Hazard Alert - Student Blood Sampling by Lancet Puncture of the skin.

## **7. DOCUMENTATION**

This procedure, has been endorsed by the Executive Occupational Health and Safety Committee at its meeting on 7<sup>th</sup> June 2004

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