PREVENTING THE TRANSMISSION OF BLOOD-BORNE PATHOGENS GUIDELINES

Contents

1. Introduction ........................................................................................................................................... 2
2. Definitions ............................................................................................................................................. 2
3. Responsibilities .................................................................................................................................... 3
4. Prevention Control Program ............................................................................................................ 3
5. Personal Hygiene ............................................................................................................................... 4
6. Blood or Body Fluid Spills ................................................................................................................ 5
7. Safe Handling of Sharps .................................................................................................................... 5
8. Waste Disposal .................................................................................................................................... 5
9. Related Documents ........................................................................................................................... 5
10. Version Control Table ...................................................................................................................... 6
1. Introduction

In workplaces where staff and students may have contact with blood or body fluids there is a potential for transmission of blood-borne pathogens. This guideline is designed to assist University of Wollongong personnel who work with blood or bodily fluids to identify hazards and manage risks associated with this type of work.

The guideline has adopted the recommendations as set out in the National Code of Practice for the Control of Work-related Exposure to Hepatitis and HIV (Blood-borne) Viruses [NOHSC:2010(2003)].

2. Definitions

**Sharps**
Objects or devices having acute rigid corners, edge, points or protuberances capable of cutting or penetrating the skin e.g. hypodermic needles, broken Pasteur pipettes, scalpels, blades, lancets, broken glass etc.

**Cleaning**
The removal of all visible foreign material from objects using water, detergents or mechanical means.

**Disinfectant**
A substance capable of killing a wide range of microorganisms.

**Blood**
Human blood, human blood components and products made from human blood.

**Blood-borne pathogen**
Pathogenic microorganisms that are present in blood and can cause disease in humans.

**Blood-borne virus**
Virus that may be transmitted via blood or body substances that contain blood.

**Disinfection**
Process that eliminates many or all infectious micro-organisms except bacterial and fungal spores.

**Sharps injury**
An injury, which occurs when a sharp object penetrates the skin or mucous membranes.

**Standard precautions**
The routine use of safe work practices and protective barriers to minimise the spread of infectious disease. It is assumed that all blood and body fluids are potential sources of infection and safe work practices are routinely utilised. They include the use of:

- good microbiological practices (aseptic techniques)
- good hygiene practices (particularly washing and drying hands before and after patient and specimen contact)
- protective barriers (including the wearing of gloves, gowns, plastic aprons, masks, eye shields and goggles)
- waterproof coverings over any break in skin integrity
- appropriate procedures for the handling and disposal of contaminated wastes
- appropriate procedures for the handling and disposing of sharps.
3. Responsibilities

3.1 Managers and Supervisors

Managers and supervisors have overall responsibility for the implementation of these guidelines. This includes ensuring that appropriate risk assessments are completed and the required risk control strategies implemented.

3.2 Workers and Students

All University workers and students working with blood or bodily fluids have a responsibility to comply with these guidelines. This guideline applies to university activities, whether they are administration, maintenance, teaching or research oriented.

All University workers and students must ensure that any incident or near-miss involving blood or bodily fluids is reported immediately to the relevant supervisor and recorded in SafetyNet.

4. Prevention Control Program

Working with blood and bodily fluids can increase potential exposure to blood-borne viruses including Hepatitis B, Hepatitis C and HIV. Exposure to these types of viruses and other risks can be prevented through the implementation of effective risk management practices including undertaking risk assessments.

The following guidance has been extracted from the National Code of Practice for the Control of Work-related Exposure to Hepatitis and HIV (Blood-borne) Viruses [NOHSC:2010(2003)].

4.1 Stage One – Hazard Identification

Stage one aims to identify activities in the workplace where the transmission of blood-borne pathogens may occur. This can be achieved by

- Identifying the potential source of infection; and
- Identifying procedures, activities and occupations where hazards exist and the potential means of contamination or transmission. For example, when carrying out experiments using human blood products, when cleaning toilets or administering first-aid.

4.2 Stage Two – Risk Assessment

Identified hazards need to be assessed in accordance with the UOW Risk Management Guidelines.

An effective assessment of risk should take into account:

- the type and frequency of exposure to blood or body fluids/substances and contaminated materials
- exposure and chance of recurrence
- frequency of contact with discarded syringes and needles
- risk from contamination due to work practices and work layout and design
- availability of relevant medical treatment
- level of knowledge and training of employees regarding Hepatitis and Human Immunodeficiency Viruses
- availability of personal protective equipment (PPE)
- suitability of equipment being used for the task
- individual risk factors for the individual, such as cuts to the skin, dermatitis and eczema
- number of workers and other persons at risk of exposure
- availability of vaccines
- potential need to update existing risk control measures.
4.3 **Stage Three – Control**

The three main steps in controlling risks are:

- Development and implementation of control policies and procedures
- Monitoring the control strategies
- Reviewing as necessary

Appropriate control strategies may include:

- Safe work procedures
- Use of standard precautions to control infection
- Post-injury testing and follow-up counselling
- Immunisation program
- Appropriate training and supervision
- Well-designed equipment
- Well-designed working premises.

Work practices should be designed to minimise the likelihood of exposure and harm arising from exposure. This includes ensuring:

- Work practices are designed to minimise exposure to blood and or other bodily fluids/substances and contaminated materials
- Isolate processes to reduce the number of people being exposed
- Use engineering controls e.g. use of biological safety cabinet
- Availability and use of appropriate personal protective clothing and equipment
- Purchase of suitable equipment to minimise risk of exposure
- Good house-keeping
- Appropriate waste management, including sharps handling and disposal
- Offer of vaccination to all at-risk employees
- Supervision and monitoring
- Appropriate education and training.

4.4 **Stage Four – Review**

Any completed risk assessments are to be reviewed in accordance with the UOW Risk Management Guidelines.

5. **Personal Hygiene**

It is recommended that anyone who is working with blood or bodily fluid be trained in the appropriate method of washing hands.

Staff, students, supervisors and managers should wash and dry their hands:

- After contact with blood or body fluids
- Immediately after removing gloves
- Before leaving the laboratory
- At the beginning and end of each shift
- Before and after eating, drinking, smoking and going to the toilet.

Staff should check for cuts or abrasions on exposed parts of the body. Cuts or abrasions must be covered with a band-aid or other type of waterproof dressing.
6. Blood or Body Fluid Spills

Blood or body fluid spills must be assessed and attended to immediately. All university staff and students must notify the relevant supervisor or manager

Refer to Biosafety Manual for spill clean-up procedures. If there is any uncertainty regarding how to appropriately clean and disinfect a blood or bodily fluid spill contact the WHS Unit or Facilities Management Division for advice.

7. Safe Handling of Sharps

Refer to the Working with Sharps Guidelines.

8. Waste Disposal

Workplaces should develop and implement procedures to ensure blood, other body fluids/ substances and other potentially infectious material is disposed of safely. This may mean disposal as clinical waste or disinfection by steam sterilization. Each area should have its own procedures in place.

Refer to Waste Disposal Guidelines for further information.

9. Related Documents

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011
- Protection of the Environment Operations Act 1997
- Biosafety Manual
- Notification Requirements for Occupational Exposure to Human Blood-borne Pathogens Guide 2003, WorkCover NSW
- Working With Sharps Guidelines
- Waste Disposal Guidelines
# 10. Version Control Table

<table>
<thead>
<tr>
<th>Version Control</th>
<th>Date Released</th>
<th>Approved By</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>June 1996</td>
<td>WHS Manager</td>
<td>New document created</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>WHS Manager</td>
<td>Documented updated to reflect current requirements</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>WHS Manager</td>
<td>Documented updated to reflect current requirements</td>
</tr>
<tr>
<td>4</td>
<td>March 2006</td>
<td>WHS Manager</td>
<td>Documented updated to reflect current requirements</td>
</tr>
<tr>
<td>5</td>
<td>July 2008</td>
<td>WHS Manager</td>
<td>Documented updated to reflect current requirements</td>
</tr>
<tr>
<td>6</td>
<td>August 2010</td>
<td>WHS Manager</td>
<td>Document updated to incorporate the Personnel name change to Human Resources Division.</td>
</tr>
<tr>
<td>7</td>
<td>June 2011</td>
<td>WHS Manager</td>
<td>Scheduled review. Updated superseded related documents.</td>
</tr>
<tr>
<td>8</td>
<td>March 2012</td>
<td>WHS Manager</td>
<td>Re-brand</td>
</tr>
<tr>
<td>9</td>
<td>June 2013</td>
<td>WHS Manager</td>
<td>Minor formatting changes. Updates to links, no content change.</td>
</tr>
<tr>
<td>10</td>
<td>December 2014</td>
<td>WHS Manager</td>
<td>Clarity provided around risk management guidance material for working with blood or bodily fluids. Also updated to incorporate recommended changes from Clare Atkinson.</td>
</tr>
</tbody>
</table>