

# Blood and Body Substances Occupational Exposure Prevention

**Summary** Provides guidance in the prevention of risk to workers of occupational exposure to contaminated blood, body substances and needle stick/sharps injuries. It supports NSW Health Agencies in their primary duty of care obligations under the Work Health and Safety Act 2011 and Work Health and Safety Regulation 2017.

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**Audience** Senior Managers, Staff, Work Health and Safety Practitioners, Staff Health, Healthcare Workers

## Blood and Body Substances Occupational Exposure Prevention

### GUIDELINE SUMMARY

This Guideline provides direction to NSW Health organisations to meet their duty of care under the Work Health and Safety Act 2011 (NSW) and Work Health and Safety Regulation 2017 (NSW). This is by eliminating and minimising risk associated with occupational exposure to blood, body fluids (BBF) and needlestick/sharps injuries.

Each NSW Health organisation must have systems in place to identify hazards associated with occupational exposure to blood and body fluids (BBF) to eliminate or minimise the risks through the implementation of appropriate controls.

### KEY PRINCIPLES

This Guideline applies to NSW Health organisations and all other bodies and organisations under the control and direction of the Minister for Health or the Secretary of NSW Health where BBF is generated, and there is a risk of exposure to contaminated blood and body fluids.

BBF can include but is not limited to blood and blood products, body fluids from the heart, lungs, brain, spine, semen and uterus including the foetus. BBF are potentially infectious and the risk of transmission will depend on how the BBF exposure occurred (injury type) type of BBF fluid and the type of infection.

To systematically eliminate and if not reasonably practicable minimise the risk of exposure to BBF for workers and patients, NSW Health must implement a risk management approach in consultation with workers. They are to create a safe culture where workers are encouraged to identify and report any hazards and exposures associated with blood and body substances. This includes a system to ensure mandatory reporting of sharps injuries and other BBF exposures.

Hazards for BBF exposure can arise from the physical work environment, equipment, materials and substances, work design and how work tasks are performed. Processes and systems to monitor and review incidents and trends for BBF exposures and sharps injuries can help identify the source of the hazard.

A risk assessment needs to be performed for every identified hazardous procedure relating to occupational exposure where the risk is not known. Controls must be implemented based on the hierarchy of controls and monitored and reviewed regularly in consultation with workers to ensure continuous improvement and ongoing effectiveness.

Compliance with other policies and procedures for Infection Prevention and Control must occur to ensure the risk of exposure is minimised. Workers are to be provided instruction, education, training, and supervision regarding the appropriate use of standard precautions. NSW Health are to also have a system to monitor and report compliance with vaccination

requirements. This includes implementing systems to manage workers that are unable to seroconvert.

Officers and managers/supervisors are to have a Sharps Injury Prevention Program in place to protect workers and patients. Following a risk assessment in consultation with workers controls are to be implemented which may include safety-engineered sharps devices (SESD), equipment and training to mitigate the risk of exposure.

NSW Health organisations must also have systems in place for the management of occupational and non-occupational exposures to blood borne viruses. This includes immediate first aid and expert medical advice, assessment and treatment following exposure. A system should be available to support the physical and psychological requirements of workers including counselling and access to workers compensation if needed.

### REVISION HISTORY

Version	Approved By	Amendment Notes
GL2024_002 March 2024	Deputy Secretary, People, Culture and Governance	Updated guidelines including changes in the legislation with an increased focus on worker consultation in identification and prevention, risk assessment and processes for recording worker exposures and post incident management.
GL2018_013	Deputy Secretary People, Culture and Governance	Converted from a Policy Directive to a Guideline, expanded to include all workers, update to referenced legislation and policies and procedures.
PD2007_052	Deputy Director-General	New Policy Directive

## CONTENTS

<b>1. BACKGROUND .....</b>	<b>2</b>
1.1. About this document.....	2
1.2. Key definitions .....	2
1.3. Legal and legislative framework .....	5
<b>2. OCCUPATIONAL EXPOSURE .....</b>	<b>5</b>
2.1. Blood and Body Fluids (BBF) Exposure.....	5
2.2. Occupational settings for BBF exposure.....	6
<b>3. GENERAL REQUIREMENTS .....</b>	<b>6</b>
<b>4. RISK MANAGEMENT.....</b>	<b>7</b>
4.1. Hazard Identification .....	7
4.2. Risk Assessment .....	8
4.2.1. Workplace risk assessments.....	8
4.3. Identifying Control Measures Using the Hierarchy of Risk Control .....	9
4.3.1. Elimination .....	9
4.3.2. Substitution .....	9
4.3.3. Isolation .....	10
4.3.4. Engineering Controls.....	10
4.3.5. Personal Protective Equipment.....	13
4.4. Review of Control Measures .....	14
<b>5. SHARPS INJURY PREVENTION PROGRAM .....</b>	<b>14</b>
<b>6. NOTIFICATION TO SAFEWORK NSW.....</b>	<b>15</b>
<b>7. POST EXPOSURE MANAGEMENT .....</b>	<b>15</b>
7.1. Individual risk management post exposure.....	16
7.2. Counselling and Follow-up .....	17
<b>8. SUPPORTING RESOURCES .....</b>	<b>17</b>

## 1. BACKGROUND

Occupational exposure to blood, body substances and needlestick/sharps injury in healthcare settings has the potential to transmit blood-borne viruses (BBVs) such as hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Blood or body substances exposures can occur through:

- Sharps injuries, such as a needle or scalpel (any object that can pierce the skin), and
- Contact of mucous membranes or non-intact skin with blood, tissue or other body substances that are potentially infectious.

NSW Health Policy Directive [Infection Prevention and Control Policy \(PD2023\\_023\)](#) outlines the broad principles of infection control and NSW Health Policy Directive *Clinical and Related Waste Management for Health Services* ([PD2020\\_49](#)) outlines the requirements for the disposal of waste.

Health Care workers (HCW) potentially exposed to HIV, Hepatitis B and C must be managed in accordance with NSW Health Policy Directive *HIV, Hepatitis B and Hepatitis C – Management of Health Care Workers Potentially Exposed* ([PD2017\\_010](#)).

Workers living with a blood borne virus and those doing exposure prone procedures are to refer to *Management of workers with a blood borne virus and those doing exposure prone procedures* ([PD2019\\_026](#)).

### 1.1. About this document

NSW Health organisations are required to meet all requirements in the prevention of risks associated with occupational exposure to blood, body substances and needlestick/sharps injuries. This fall under the *Work Health and Safety Act 2011* (WHS Act) and *Work Health and Safety Regulation 2017* (WHS Regulation).

NSW Health organisations who are co-located and have a shared duty of care for workers, e.g. Local Health Districts, NSW Health Pathology and HealthShare NSW must agree on a consistent approach to ensure compliance with this Guideline.

This Guideline is to be read in conjunction with NSW Health Policy Directive *Work Health and Safety: Better Practice Procedures* ([PD2018\\_013](#)).

### 1.2. Key definitions

<b>Blood borne virus (BBV)</b>	For the purpose of this Guideline is hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV).
<b>Exposure prone procedure (EPP)</b>	Clinical practices where there is a risk of injury to the worker resulting in exposure of the patient's open tissues to the blood of the worker. These procedures include those where the worker's hands (whether gloved or not) may be in contact with sharp instruments, needle tips or sharp tissues (spicules of bone or teeth) inside a patient's open body cavity, wound or confined anatomical space where the hands or fingertips may not be

**Blood and Body Substances Occupational Exposure  
Prevention**

	completely visible at all times.
<b>Hazard</b>	A hazard is anything that has the potential to cause harm to people, equipment, structures and/or the environment. For the purpose of this Guideline is defined as a source or situation with potential for harm in terms of human injury or ill health.
<b>NSW Health organisations</b>	<p>Throughout this document the term NSW Health organisation is used to mean all public health organisations and all other bodies and organisations under the control and direction of the Minister for Health or the Secretary of Health. These are:</p> <ul style="list-style-type: none"> <li>• Local Health Districts</li> <li>• Sydney Children's Hospitals Network</li> <li>• Justice Health &amp; Forensic Mental Health Network</li> <li>• NSW Health Pathology</li> <li>• Ambulance Service of NSW</li> <li>• HealthShare NSW</li> </ul>
<b>Occupational Exposure</b>	<p>An incident which occurs during a work activity and involves contact with blood and/or other body substances onto or into mucous membranes or non-intact skin. Such exposures include:</p> <ul style="list-style-type: none"> <li>• <b>Sharps Injury:</b> Needlestick (including hollow bore and suture needles), cut with a sharp object or device e.g. scalpel, glass slide, dental equipment, tooth (including bites) and bone</li> <li>• <b>Mucous membrane exposure:</b> Mouth, eye, nose</li> <li>• <b>Contact with non-intact skin:</b> Uncovered open wound/cut, dermatitis, eczema and acne.</li> </ul> <p>It <b>does not</b> include contact of blood or body substances with intact skin.</p>
<b>Non Occupational exposure</b>	An incident outside the workplace which involves exposure to blood and body substances.
<b>Person conducting a business or undertaking (PCBU)</b>	NSW Health organisations as PCBUs under the <i>Work Health and Safety Act 2011</i> are responsible for the primary duty of care for work health and safety, so far as is reasonably practicable.
<b>Point of use</b>	The placement of sharps disposal containers as close as is practical to the site where sharp devices are used to limit the distance between their use and their disposal.
<b>Post exposure management</b>	Assessment and treatment of workers who have sustained an occupational exposure to potentially contaminated blood or body

**Blood and Body Substances Occupational Exposure  
Prevention**

	substances.
<b>Risk</b>	The likelihood and consequence of a potential injury or harm occurring.
<b>Risk assessment</b>	The overall process of estimating the magnitude of a risk arising from a hazard, before deciding what actions will be taken.
<b>Safety-engineered sharps devices (SESD)</b>	Devices used in the delivery of patient / client care with engineering features designed to prevent the device from causing a fluid splash or a sharps injury to those involved in their use or disposal.
<b>Sharps</b>	<p>Objects that:</p> <ul style="list-style-type: none"> <li>• Have sharp points or protuberances or edges capable of cutting, piercing or penetrating the skin (such as needles, syringes with needles or surgical instruments) or the package in which the sharps are disposed</li> <li>• Includes fragile items with the potential to break and form sharps during handling or transport e.g. Pasteur pipettes and safety engineered sharps devices, including retractable syringes</li> <li>• Are designed for the purpose of cutting, piercing or penetrating the skin.</li> </ul>
<b>Sharps Waste</b>	Any waste collected from designated sharps waste containers for sharps that are used for the following purposes: skin penetration or the injection of drugs or other substances.
<b>Unprotected</b>	The person is not compliant with the screening and vaccination requirements of NSW Health Policy Directive <i>Occupational Assessment, Screening and Vaccination Against Specified Infectious Diseases</i> ( <a href="#">PD2023_022</a> ) and is therefore classed as susceptible to infection, and/ or poses a risk of transmitting one or more of the specified infectious diseases. Such risks are managed as per an individual risk management plan for the worker. This also includes workers who are temporarily compliant, medically contraindicated or hepatitis B non-responders.
<b>Worker</b>	<p>Anyone who carries out work for NSW Health and including:</p> <ul style="list-style-type: none"> <li>• Employees</li> <li>• Contractors (including visiting practitioners)</li> <li>• Subcontractors</li> <li>• Sub-contractors and employees of contractors</li> </ul>



- Employees of a labour hire company e.g. agency staff
- Volunteers, cadets, apprentices or trainees and students on clinical work experience or other placements.

### 1.3. Legal and legislative framework

The *Work Health and Safety Act 2011* (NSW) [WHS Act] and *Work Health and Safety Regulations 2017* (NSW) [WHS Regulation] is designed to ensure the health and safety of everyone at the workplace. NSW Health organisations have a primary duty of care (Section 19 WHS Act), so far as is reasonably practicable, to ensure the health and safety of workers and other persons at the workplace, including patients. They must as eliminate and when not possible minimise the risks of BBF exposure as far as reasonably practical. This means taking all reasonable steps considering the likelihood and severity of the hazard, and the availability of suitable ways to eliminate or control it including whether costs are grossly disproportionate.

Workers also have a legal duty to take reasonable care for their own health and safety and the health and safety of others in the workplace. Workers have a duty to follow procedures and cooperate to comply with reasonable instructions given by the NSW Health organisation.

NSW Health organisations must ensure meaningful consultation about WHS related to BBF exposure and controls for prevention with workers, health and safety representatives and health and safety committees.

The Safe Work Australia Model Code of Practice [How to manage work health and safety risks](#) provides guidance on how to implement risk management principles in the workplace.

Australian standard AS23907:2023 *Sharps injury protection- Requirements and test methods- sharps containers (ISO 23907-2:2019, MOD)* provides information on the requirements of a sharp collection bins. Australian Standard AS3825:2020: *Procedures and devices for the removal, containment, and disposal of scalpel blades from scalpel handles* provides information on scalpel blade removal and disposal.

SafeWork NSW has guidance information on their website [Hepatitis and HIV | SafeWork NSW](#). For further information in relation to the WHS Act and duties refer to the NSW Health Policy Directive *Work Health and Safety: Better Practice Procedures (PD2018\_013)*, The Clinical Excellence Commission [Infection Prevention and Control Practice Handbook](#) and/or the [SafeWork NSW website](#).

## 2. OCCUPATIONAL EXPOSURE

### 2.1. Blood and Body Fluids (BBF) Exposure

The following body fluids pose a risk for blood borne virus transmission and are to be considered:

- blood, serum, plasma and all biological fluids visibly contaminated with blood
- laboratory specimens that contain concentrated virus
- pleural, amniotic, pericardial, peritoneal, synovial and cerebrospinal fluids



uterine/vaginal secretions or semen

Risk of transmission will depend on how the BBF exposure occurred (injury type), type of BBF fluid (listed above) and if the BBF is infectious and the type of infection.

## **2.2. Occupational settings for BBF exposure**

BBF exposures can occur in any health care setting where BBF is generated. Some of the occupational settings where BBF is generated and potential exposures could occur include:

- Operating theatres including specimen transport to other areas
- Clinical care areas
- Mental health settings
- Laboratory settings
- Dental services
- Paediatric services
- Community settings
- General public areas where paramedics may be called to assist
- Kitchens and food collection services
- Laundries
- Waste collection services
- Cleaners including specialties such as terminal cleaning services
- Vehicles such as Ambulance and Patient Transport Services.

## **3. GENERAL REQUIREMENTS**

For a systematic approach to eliminating and if not reasonably practical preventing blood and body fluid (BBF) exposures, NSW Health organisations must ensure all key principles are implemented including:

- Risk management approach, in consultation with workers to eliminate or minimise the risk of BBF exposure as far as reasonably practicable in the workplace to protect workers and patients
- Development of a Sharps Injury Prevention Program that protects workers, patients and members of the community
- Safety culture to encourage workers to identify and report any hazards associated with occupational exposures and be actively involved in eliminating, and if not practicable, minimising the risk of exposure.
- A system to encourage and support workers to ensure mandatory reporting of sharps injuries and other blood and body substances exposures via the Incident Management System (ims+).

- System to monitor and review incidents and trends for BBF exposure and sharps injuries to identify areas of concern for further controls for continuous improvement with governance structures to oversee and communicate trends.
- Processes and procedures to ensure compliance with NSW Health Policy Directive *Occupational Assessment, Screening and Vaccination Against Specified Infectious Diseases* ([PD2023\\_022](#))
- Processes and procedures to ensure compliance with CEC IPAC guidelines, including ongoing education and use of PPE. Ongoing supervision and support for workers exposed to BBF at intervals appropriate to the allocated risk level of the exposure.
- A system for the management of occupational and non-occupational exposures to BBV. This includes immediate first aid and expert medical advice, assessment and treatment following exposure. Ongoing medical management including post exposure prophylaxis (PEP) should be available.
- A system to inform and support the physical and psychological needs of workers. This includes Employee Assistance Program (EAP) or equivalent and follow up medical counselling and access to workers compensation if needed.
- Systems to ensure compliance with record keeping and the legislative requirements for privacy of information and reporting to SafeWork NSW.

## **4. RISK MANAGEMENT**

Risk management includes identifying hazards, assessing risks, controlling risks and monitoring and reviewing controls on an ongoing basis. Each of these steps needs to be in consultation with workers and their representatives who are, or are likely to be, directly affected. This approach will protect workers and others (e.g., patients and visitors) from exposure to blood and body substances.

### **4.1. Hazard Identification**

Hazard identification is the first step in a risk management framework to ensure the BBF sources in work areas are identified. Hazards can arise from the physical work environment, equipment, materials and substances, work design and how work tasks are performed. Implementation of a standardised process for recognising and defining any hazards relevant to blood and body substances exposure is essential, including:

- Reviewing audit and workplace inspection reports and complaints
- Reviewing incident reports from the Incident Management System (ims+) including aggregate reports on location, activity at the time, type of exposure, type of BBF, whether equipment was used and the source of the BBF and worker group involved.
- Inspecting and reviewing work areas with a reported high incidence of exposure for BBF
- Reviewing the work environment to check workflow, equipment use/suitability and how tasks are performed.

- Reviewing manufacturer's information on specific devices including safety precautions
- Reviewing the effectiveness of safe work practices and controls.
- Review education and training records of workers for sharp management and BBF exposure.
- Reviewing product trials for new equipment

Each NSW Health organisations need to allocate roles and responsibilities to those involved in occupational exposure identification in their facilities/services. Workers are to be encouraged to identify and report any hazards associated with occupational exposure to blood and body substances exposure and must enter incident reports in ims+ if exposure occurs in the workplace. A quick reference guide Notifying Biological Exposures [is here](#).

## **4.2. Risk Assessment**

Risk assessments are critical to determine the strategies required to achieve the elimination or minimisation of risks.

A risk assessment involves considering the likelihood of exposure to blood and body fluids and the consequences of exposure (severity of the risk). A risk assessment can help determine:

- what workers are exposed to the risk
- what is the seriousness of the risk
- what action should be taken to control the risk
- whether any existing control measures exist and are they effective
- how urgently additional actions needs to be taken.

Refer to NSW Health Policy Directive *Work Health and Safety Better: Practice Procedures* ([PD2018 013](#)) on how to undertake the risk management process.

### **4.2.1. Workplace risk assessments**

A risk assessment needs to be performed for every identified hazardous procedure relating to occupational exposure where the risk is not known. An effective assessment of a risk must take into account:

- Range of occupational settings for BBF exposure
- Identification of tasks causing BBF exposures including Exposure Prone Procedures (EPP)
- Review of ims+ aggregate reporting to determine injury mechanism and type and source of BBF exposure
- Risks from contamination due to physical work environment, equipment, work design and how work tasks are performed.
- Frequency and recurrence of BBF exposure for these tasks including number of contaminated needlesticks/sharps produced and the type of contact with discarded syringes and needles.

- Number of workers and other persons at risk of exposure
- Suitability of equipment being used for the task including Safety Engineered Sharp Devices (SESD) and sharps disposal containers.
- Level of knowledge and training of workers regarding safe work practices and Personal Protective Equipment (PPE)
- Availability and use of PPE
- Availability and worker knowledge of relevant first aid and medical treatment
- Level of knowledge and training of workers regarding hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV).
- Availability and access to vaccines and post-exposure treatment
- Waste disposal and emergency management processes in the event of a splash or spill.

This risk assessment should consider current risk control strategies and whether they are effective at managing the risk. If the risk control strategies are not effective, further controls will need to be implemented to manage the risk.

### **4.3. Identifying Control Measures Using the Hierarchy of Risk Control**

Clause 35 of the *Work Health and Safety Regulation 2017* (WHS Regulation) requires that the highest levels of practicable control measures appropriate to the level of risk are used.

Where a facility/service determines it is unable to eliminate the risk, so far as reasonably practicable, then the risks must be minimised, so far as reasonably practicable, using the hierarchy of controls as defined in clause 36 of the WHS Regulation. The hierarchy of risk control examples are as follows:

#### **4.3.1. Elimination**

Eliminating sharps or avoiding the use of sharps, glass or metal where practicable is a higher order control. Examples can include a clinical workflow redesign to eliminate workers injecting for example having patients self-inject (e.g. diabetic patients).

#### **4.3.2. Substitution**

Substituting with equipment that does not cause puncture wounds or lacerations. This can include:

- Having well-designed work premises, work processes and equipment which are automated where possible.
- The replacement of a sharp drawing up needle with a blunt drawing up needle and needleless injection bungs for IV medication.

### 4.3.3. Isolation

#### *Sharps Disposal Container*

Sharps must be immediately disposed in a rigid, puncture resistant sharps disposal container situated at the point of use. This is to limit the distance between their use and disposal. This placement must consider the workflow (including the volume of sharps used), work area design (including layout and height of work surfaces) and type of sharps to be disposed.

They must comply with Australian standard AS23907:2023 *Sharps injury protection- Requirements and test methods- sharps containers (ISO 23907-2:2019, MOD)* they are to have specially designed lids to only allow sharps to be deposited.

Each worker is responsible for the management and disposal of the sharps that they use and must not delegate or assign this responsibility to someone else.

Rigid containers that are used to transport sharps are to be puncture resistant, clean, leak-proof and labelled for appropriate disposal where disposal containers are not available at point of use.

Standardised methods are to be developed for securing and carrying sharps disposal containers during transportation by community-based workers.

Refer to Australian Standard AS3816: *Management of Clinical and Related Waste* and SafeWork [Hepatitis and HIV](#).

Biological safety cabinet systems and biological waste disposal systems must be used when handling blood and body fluid products in the laboratory.

### 4.3.4. Engineering Controls

Having well-designed work premises, work processes and equipment including Safety-engineered sharps devices (SESDs) contribute to the reduction or elimination of sharps injuries and are to be considered where clinically appropriate.

Clinical indicator data relating to sharps injuries, audits and risk assessments must be utilised to ensure that SESDs are only considered for the purpose of improving safety at the point where the risk is greatest or where actual injuries have occurred, i.e. before use, during use, directly after use, upon disposal or after disposal.

Prior to the introduction of SESDs into a particular area, devices for consideration are to be trialled in that area using the current clinical requirements and usage. Results are to be evaluated in consultation with users of the device. This includes consultation on the usability of the device and any unforeseen additional risks and availability of ongoing supply of the device.

Where the use of SESDs is determined by risk assessment to be clinically appropriate a replacement strategy for the existing conventional sharps devices are to be undertaken.

All SESDs that have been implemented are to be re-evaluated in the following 12 months or following an incident to:

- Evaluate whether they have contributed to a reduced incidents of sharps injuries
- Determine the need for additional training

- Identify adverse effects on patient outcomes
- Identify adverse effects on worker safety
- Review contemporary technology trends.

Refer to Appendices 1 and 2 – Safety-engineered sharps device pre-selection worksheet and Safety-engineered sharps device evaluation form.

These principles are to be applied when purchasing other medical equipment e.g. blunt-ended scissors.

### ***Vaccination***

Workers need to comply with NSW Health Policy Directive *Occupational Assessment, Screening and Vaccination Against Specified Infectious Diseases* ([PD2023\\_022](#)).

The Health Organisation are to have a system to monitor and report compliance with vaccination requirements.

Unprotected workers, must comply with the protective measures required by the health service and as defined by the NSW Health Policy Directive *Infection Prevention and Control Policy* ([PD2023\\_025](#)). In the event of exposure, an unprotected worker must follow the requirements of *NSW Health Policy Directive HIV, Hepatitis B and Hepatitis C – Management of Health Care Workers Potentially Exposed* ([PD2017\\_010](#)). They must be offered post-exposure prophylaxis for hepatitis B as recommended by The Australian Immunisation Handbook including hepatitis B immunoglobulin within 72 hours of parenteral or mucosal exposure to the hepatitis B virus (HBV).

Unprotected workers, must be informed and adhere to the testing requirements of the NSW Health *Policy Directive Management of health care workers with a blood borne virus and those doing exposure prone procedures* ([PD2019\\_026](#)), if undertaking exposure prone procedures.

### ***Screening***

Health Care Workers (HCW) who perform exposure prone procedure (EPPs) must take reasonable steps to know their BBV status. Workers must be tested for BBVs at least once every three years as outlined in the [National Guideline](#) from Communicable Disease Network Australia for HCW living with BBV /performing exposure prone procedures.

### ***Administrative Controls***

General housekeeping principles including:

- Not eating, drinking, smoking or applying cosmetics in areas where there is a risk of contamination
- Clean up spills of blood and body fluids immediately and treat all waste products as contaminated
- Using standard precautions when handling BBF and cover all cuts and abrasions with waterproof dressings and use suitable gloves
- Regular supervision and instruction.



### ***Safe work practices***

All workers must take precautions to prevent occupational exposure from blood and body substances splashes and injuries such as those caused by needles, scalpels and other sharp instruments or devices during procedures, during disposal of used needles, when handling sharp instruments after procedures, when cleaning used instruments and handling linen soiled with blood and body substances.

Safe work practices must be developed, documented, communicated and monitored, and should include:

- Safe management of sharps to comply with the NSW Health Policy Directive *Infection Prevention and Control Policy* ([PD2023\\_025](#))
- Workers must not overfill or empty sharps containers
- Workers must wear the appropriate PPE and follow the proper procedural guidelines
  - Refer to Australian Standard AS3816: *Management of Clinical and Related Waste* and NSW Health Policy Directive *Clinical and Related Waste Management for Health Services* ([PD2020\\_049](#)) to handle clinical waste that include collecting, sorting, storing, transporting and disposal
- Processes to clean up blood and body fluid spills consistent with NSW Health Policy Directive *Cleaning of the Healthcare Environment* ([PD2023\\_018](#)) and Australian Standard AS3816: *Management of Clinical and Related Waste* and NSW Health

### ***Education, supervision, instruction and training***

All new workers whose activities may expose them to contaminated blood and body substances and potential of sharps injuries must be provided with information, instruction, supervision and appropriate training. This is to include:

- Safe Work Practices for tasks they perform to prevent BBF exposure
- Use of Personal Protective Equipment (PPE)
- Safe handling and disposal of sharps
- Routine use of sharps disposal containers at point of use
- Mandatory reporting of sharps injuries and other blood and body substances exposures
- Reporting of identified risks associated with sharps use and disposal
- The range of SEDDs used throughout an organisation and how to operate the specific safety features
- Risks for acquisition of blood borne viruses
- Occupational vaccination and screening requirements
- First Aid procedures and processes
- Post exposure management procedures and processes.



## Blood and Body Substances Occupational Exposure Prevention

- Safe handling and disposal of biological waste including not to manually compress or hold rubbish bags close to their body

All information and training must be provided in a manner appropriate to the workplace and take into account workers who may have a disability, language barriers and varying levels of literacy.

Refresher training must be provided to all workers whose activities may expose them to contaminated blood and body substances, including auxiliary workers such as cleaners, laundry and food services staff.

Information and training is provided when:

- Workers relocate to a different work area within NSW Health, either temporarily or permanently and are trained in occupational exposure specific to that area and any safe work practices and personal protective equipment with which they are unfamiliar
- In response to specific incidents
- New devices are introduced e.g. SEDS or safe work practices are changed.

### 4.3.5. Personal Protective Equipment

NSW Health organisations are to provide suitable personal protective equipment for workers where there is a risk of occupational exposure; and the workers must use the PPE provided. This PPE must be used according to guidance from the [Clinical Excellence Commission Infection Prevention and Control Handbook](#) (CEC IPAC).

When selecting PPE it must be fit for purpose and consider anticipated exposure, durability and personal fit. Additional considerations when using PPE include use of:

- Gloves in accordance to guidance in the [CEC IPAC](#) to protect from exposure to BBF to ensure personal safety and prevent cross-infection
- Protective eyewear (goggles, face visor/shields) in accordance with [CEC IPAC](#)
- Respiratory protection including P2/N95 respirators comply with the requirements of the [Respiratory Protection Program](#) including fit testing
- Masks and protective clothing such as fluid-resistant gowns/aprons made of impervious material.
- Masks with filters for mouth-to-mouth resuscitation
- Rubber boots or plastic disposable overshoes where the floor is likely to be contaminated
- Puncture resistant industrial gloves which can be used in areas where risk is identified such as waste collection for contaminated waste
- Non-porous waterproof dressings to workers with broken skin
- Emergency Plans

NSW Health organisations are to have emergency management plans developed in consultation with workers and other PCBU's to manage BBF spills and biological hazardous

waste. Emergency management plans must be practiced, and workers must be trained in relevant procedures.

#### **4.4. Review of Control Measures**

Ongoing evaluation and review of BBF exposure risk controls will identify areas for improvement, gaps in administration systems and causes of any systems failures. Reviews are to be conducted regularly, in consultation with workers, to make sure that strategies to minimise and manage BBF exposure are effective.

It is to include people who have the knowledge, experience and training needed to competently identify whether the controls are effective or if they may have created other hazards that need to be addressed.

When determining the frequency to monitor and review controls the following needs to be considered:

- The level of risk; high risk hazards need more frequent assessments
- The type of work practices, schedules or equipment involved
- Changes to the environment or when new tasks, equipment, process, technology are introduced
- Data monitoring including review of incidents, near misses, injuries and other data, including workplace inspections. This data can provide information to monitor trends or emerging risks related to BBF exposure and needlestick injuries.

These results must be shared with governance structures within the organisation that oversee BBF exposure, infection control and workers health and safety. This could include local departmental meetings, Infection Control and Prevention Committees, Work Health Safety committees and facility and Health Agency executive meetings.

## **5. SHARPS INJURY PREVENTION PROGRAM**

A risk management approach to sharps injury is to implement a sharps injury prevention program. Contaminated needle sharps injuries are the main contributors to blood borne virus exposure.

To reduce the risk of these types of injuries NSW Health organisations are to implement a sharps injury prevention program, refer to Appendix 3: *Assessment Worksheet for Sharps Injury Prevention Program*.

### **The process for developing a sharps injury prevention program includes:**

Identification and documentation of relevant performance indicators (PIs)

Measurement of PIs over time

Undertaking baseline measurements prior to commencement of the program

Planning and implementation of the program

Monitoring of risk control measures

Documentation at all stages of the process

Evaluation of the program and identification of opportunities for continuous improvement.

### An effective sharps injury prevention program includes:

Timely, appropriate consultation with workers

Identification of foreseeable workplace hazards associated with the use of sharps

The risk assessment of sharps devices used in clinical areas

The risk assessment of sharps devices used in other work areas, e.g. community setting, laundries, waste collection services

The implementation of control strategies

Appropriate supervision of workers

Appropriate education and training programs for workers.

### An effective sharps injury prevention program includes continuous improvement by:

Collection and analysis of clinical indicator data relating to sharps injuries (to assist with hazard identification and risk assessment and to evaluate the effectiveness of risk elimination and control strategies)

The identification of situations where it may be practicable and clinically appropriate to introduce safety-engineered sharps devices

Clinical practice review and redesign strategies

The formation of, and appropriate representation on, product evaluation committees.

## 6. NOTIFICATION TO SAFEWORK NSW

Each NSW Health organisation must have a process in place to notify SafeWork NSW immediately after becoming aware that a notifiable incident has occurred.

Co-located NSW Health organisations will need to have a notification arrangement in place, for example NSW Health Pathology and HealthShare NSW located within a hospital. SafeWork NSW Fact Sheet [When to Notify Blood, Body Substances and Needlestick Injuries](#) provides information that notification must occur under the following circumstances:

1. A Worker has been exposed to blood or body substances and requires the following medical treatment:
  - Hepatitis B vaccination and hepatitis B immunoglobulin, and/or
  - Post-exposure prophylaxis against HIV infection.
2. An infection occurs as a result of the exposure, such as:
  - Hepatitis B
  - Hepatitis C
  - HIV.

## 7. POST EXPOSURE MANAGEMENT

Workers who are exposed through contact with contaminated blood, body substances and needlestick/sharps injuries require timely, considerate and knowledgeable post exposure

management in accordance with NSW Health Policy Directive *HIV, Hepatitis B and Hepatitis C – Management of Health Care Workers Potentially Exposed* ([PD2017\\_010](#)).

A procedure must be in place in the event of a BBF spill, splash or sharps injury to provide immediate first aid. This includes a process for puncture wounds and splash injuries to the eye, mouth and skin. First aid procedures need to be clearly communicated and understood by workers at risk of exposure. Workers are responsible for reporting the incident to their manager and entering an incident in incident management system(ims+).

Expert advice must be available to all workers (including non-LHD, non-hospital based health staff or volunteers) 24 hours a day following a potential BBV occupational exposure to enable rapid assessment and, if needed, timely administration of prophylaxis. This process must be clearly communicated to workers this includes, students, volunteers and contractors/ agency staff .

### **7.1. Individual risk management post exposure**

For an individual that sustains an occupational BBF exposure, a risk assessment is to occur for that incident by an appropriately qualified skilled officer. This includes establishing the type of injury and body fluid involved.

The information from the risk assessment must be entered into the record of the injury entered by the worker in the incident management system (ims+). The fields in the ims+ need to be completed to allow aggregate reporting to identify contributing factors for BBF exposures and needlestick injuries.

The information includes location, activity at the time, type of exposure, type of BBF, whether equipment was used, if the source of the BBF is known and access to first aid. This individual assessment is to also include personal risk factors, such as cuts to the skin, dermatitis, eczema and vaccination status.

To assist collecting evidence, Exposure Management Packs may be developed in advance to collect information and evidence in the event of a blood/body fluid exposure or needlestick injury.

Exposure Management packs for Workers can include:

- Instructions for use
- Exposure report forms (either Needlestick Injury report or Blood and Body Substance report) The use of this form will be based on local procedures. The worker is also required to enter ims+ record if this form is used.
- Exposure Risk Assessment tables
- Exposure Management Flow Chart
- Pathology request form (de-identification of staff specific information)
- Pathology tubes (de-identification of staff specific information)
- Information sheet
- NSW Health fact sheets for Hepatitis B and C and HIV
- Information on who to contact or how blood test results will be obtained

- Needlestick Injury hotline number.
- Post exposure follow up processes and Employee Assistance Program (EAP) contact details

Exposure Management Packs for source patients includes:

- Instructions for use
- Pathology request form
- Source patient consent form for serology
- Pathology tubes
- Information sheet for source patient
- NSW Health fact sheets for [Hepatitis B](#), [Hepatitis C](#) and [HIV](#).
- Information on who to contact or how blood test results will be obtained.

### 7.2. Counselling and Follow-up

Local follow up procedures for post-exposure management are to be communicated to the exposed worker. This includes arrangements for medical follow up and how to access Employee Assistance Programs and if necessary, workers compensation. Managers must follow up with all injured workers. It is also important to ensure the cultural safety and communication needs of exposed workers are met during this process.

All testing and results are bound by privacy and anti-discrimination legislation.

## 8. SUPPORTING RESOURCES

Resource	Function
<a href="#">Preselection of safety-engineering sharps device (SESD) worksheet</a>	When evaluating a SESD for a particular task, this worksheet can help you consider if the SESD is fit for purpose
<a href="#">Safety-engineered sharps device evaluation form</a>	This worksheet can be completed by a worker evaluating the SESD as part of the consultation process.
<a href="#">Assessment Worksheet for Sharps Injury Prevention Program</a>	This audit worksheet can be completed by worker/s to evaluate the Sharps Injury Prevention Program. This report can be completed and tabled at governance meetings (Infection Prevention Control or WHS Committee) and form the basis for action planning to address areas that are identified as requiring improvement strategies

The documents were adapted from the (Adapted from the [Sharps Injury Prevention Workbook – centers for Disease Control and Prevention](#). Atlanta: Georgia.

These resources and additional links are available on the NSW Health WHS resource web page [found at this link](#).