

Guideline

Preventing and Responding to Work Related Exposure to Infectious Disease Policy Guideline

Objective file number: 2015 - 08377

Document classification: For Official Use Only I1-A1

Policy developed by:
Approved at Portfolio

People and Culture

Executive on: 10 April 2017
Next review due: 30 April 2020

Summary The Preventing and Responding to Work Related Exposure

to Infectious Disease Policy Guideline provides a systematic

approach to the identification of hazards and the

management of risk associated with work related exposure

to infectious diseases.

This policy guideline provides practical guidance using a risk management approach to assist in the identification of infection hazards; prevent and respond to work related exposure to infectious diseases so that a safe environment

is provided for all SA Health workers and consumers.

Keywords Preventing and Responding to Work Related Exposure to

Infectious Disease, standard precautions, transmission based precautions, personal protective equipment, blood and body fluid exposure (BBFE), contact tracing, hepatitis B (HBV), hepatitis C

(HCV) human immunodeficiency virus (HIV)

Policy history Is this a new policy? Y

Does this policy amend or update an existing policy? N

Does this policy replace an existing policy? N

If so, which policies?

Applies to All SA Health Portfolio

Staff impact All Staff, Management , Admin, Students , Volunteers

EPAS Compatible N/A

Registered with Divisional

Yes

Policy Contact Officer

Policy doc. Reference No. G0176

Version control and change history

Version	Date from	Date to	Amendment	
1.0	10/04/2017	Current	New	New





Preventing and Responding to Work Related Exposure to Infectious Disease Policy Guideline



Document control information

Document owner	Executive Director, People and Culture, Finance and Corporate Services			
Contributors	Manager Fitness for Work Program, Workforce Health, People and Culture Clinical Practice Consultant, Workforce Health, People and Culture Manager Strategy Policy Performance, Workforce Health, People and Culture Manager Infection Control Service Director Communicable Disease Control Branch Senior Consultant Sexual Health Communicable Disease Control Branch Principal Strategy and Policy Consultant, Strategy Policy Performance, People and Culture			
Document classification	For Official Use Only -I2-A2			
Document location	SA Health internet – 'policies page' SA Health intranet only – 'policies page' (publishing exemption requested and approved by Portfolio Executive)			
Reference	2015-08377			
Valid from	10 April 2017			
Review date	10 April 2020			

Document history

Date	Version	Who approved New/Revised Version	Change reference
10/4/2017	V.1	Portfolio Executive	New. PE Approved
			version.

Endorsements

Date	Endorsed by
24/11/2017	Deputy Chief Executive, System Performance and Service Delivery
23/11/16	Executive Director , People and Culture, System Performance and Service Delivery

Approvals

Date	Approved by
10/4/17	Portfolio Executive

Contents Page

1.	Objective	
2.	Scope	
3.	Principles	
4.	Detail	5
5.	Roles and Responsibilities	14
6.	Reporting	16
7.	EPAS	17
8.	National Safety and Quality Health Service Standards	17
9.	Other	17
10.	Risk Management	17
11.	Evaluation	17
12.	Definitions	18
13.	Associated Policy Directives / Policy Guidelines	19
14.	References, Resources and Related Documents	20

Preventing and Responding to Work Related Exposure to Infectious Diseases Policy Guideline

1. Objective

SA Health is committed to providing a systematic approach to the identification of hazards and the management of risk associated with work related exposure to infectious diseases.

This policy guideline provides practical guidance using a risk management approach to assist in the identification of infection hazards; prevent and respond to work related exposure to infectious diseases so that a safe environment is provided for all SA Health workers and consumers.

This policy guideline is to be read in conjunction with the following SA Health documents:

- Control of Tuberculosis in South Australian Health Services Policy Directive
- <u>Cleaning Standard for Healthcare Facilities Policy Directive 2014 Hand Hygiene</u> Policy Directive
- Healthcare Associated Infection
- Infection Control Management of Infectious Diseases Summary Table
- Immunisation Guidelines for Health Care Workers in South Australia Policy Guideline 2014
- Management of the Healthcare Environment to Minimise the Risk of Transmission of Infection Policy Directive
- Management of the Healthcare Environment to Minimise the Risk of Transmission of Infection Policy Directive
- <u>Management of Non-Work Related Disability or Medical Incapacity Work Health,</u>
 <u>Safety Injury Management (WHSIM) Policy Directive</u>
- Personal Protective Equipment (PPE) Selection Policy Guideline
- Respiratory Protection Guidelines
- Worker Health and Wellbeing Policy Directive
- WHSIM Hazard Identification and Risk Management Policy Directive

2. Scope

This policy guideline applies to all SA Health workers, including employees, volunteers, contractors, labour hire workers / agency workers and students who may be exposed to infectious diseases as a result of the work they do.

Out of Scope

This policy guideline does not apply to patient to patient exposure incidents. These incidents should be reported to direct line managers / supervisors and infection prevention and control services of the Local Health Network (LHN) / SA Ambulance Service (SAAS) / Health Service (HS) / Business Unit (BU).

3. Principles

The Local Health Networks / Health Services / Business Units (LHN / HS / BU) have a duty of care to provide a safe environment for workers, consumers and other persons attending SA Health workplaces and should ensure that exposure is kept as low as is reasonable practicable.

LHN / HS / BU must have documented and current procedures in place to minimise risks to workers of exposure to and the potential of contracting an infectious disease whilst at work by adhering to standard and transmission-based precautions, which consist of

- hand hygiene
- appropriate use of personal protective equipment
- safe handling and disposal of sharps and potentially infectious material
- appropriate reprocessing of re-usable instruments and equipment
- cleaning of the environment
- safe handling of waste and used linen
- additional precautions for patients suspected or confirmed to be infected with specific organisms of concern according to the route of transmission (droplet, airborne, contact).

In addition LHN / HS / BU must have procedures that include:

- healthcare worker immunisation and tuberculosis screening programs
- management of unprotected exposures to infectious diseases
- management of exposures to blood and body fluids
- management of healthcare workers infected with blood borne viruses.

Health care workers (HCW) have a duty of care to protect the health and safety of their patients and other persons, by preventing or minimising the risks of transmission of infectious diseases including blood borne viruses (BBVs) from themselves to their patients.

4. Detail

4.1 Introduction

Workers may be exposed to infectious diseases in the workplace from infected persons (including patients, employees, volunteers, contractors, students and visitors), infected animals, laboratory cultures or contaminated instruments and equipment.

Infectious diseases may impact a worker's ability to work because they are ill or may spread the infectious disease to patients or others in the workplace.

The transmission of infectious diseases requires

- a source
- a mode of transmission and
- a susceptible host.

The modes of transmission are contact, droplet, airborne; vector borne and contaminated food or water. In some cases the same organism may be transmitted by more than one mode of transmission.

LHN / HS / BU should refer to the SA health <u>Infection Control Management of Infectious</u> <u>Diseases – Summary Table</u> for information about specific infectious diseases and their mode of transmission.

4.2. Risk management processes to prevent and respond to exposure to infectious diseases

Infection risks can be managed by adopting a risk management approach which includes systems to eliminate, minimise or manage the risk so far as is reasonably practicable.

4.2.1 Hazard and associated risk identification

LHN / HS / BU should identify work places / areas, roles and practices which have contact with infectious diseases. For example working with:

- microorganisms
- persons with transmissible infections
- human blood and body fluids
- products made from human body substances
- animals and animal blood,
- waste, human and animal
- sharps
- contaminated environments, equipment, surfaces and substances

4.2.2 Risk assessment

A risk assessment is required when:

- there is uncertainty about how exposure to an infectious disease may result in injury or illness, for example with a new or emerging infectious disease
- changes occur at the workplace that may impact on the effectiveness of control measures

Infection Prevention and Control Guidelines may already list suitable effective control measures which can be used without further risk assessment.

4.2.3 Risk controls

Risk controls should be evidence based and consideration should be given to knowledge about the

- mode of transmission
- infectious disease
- risks arising from infection
- work processes and equipment available to mitigate those risks

Standard precautions are the primary strategy for minimising the transmission of health-care associated infections. Transmission-based precautions are used in addition to standard precautions, where the suspected or confirmed presence of infectious diseases represents an increased risk of transmission. Refer to SA Health webpage Standard and transmission-based precautions and LHN / HS / BU procedures

The transmission-based measures implemented depend upon the mode of transmission. Reference may be made to SA Health <u>Infection Control Management of Infectious</u> <u>Diseases Summary table</u> for information on the standard and transmission-based precautions required to prevent the transmission of infection from patients to workers.

When selecting risk controls consideration should be given to the hierarchy of risk controls. Refer to Approved Code of Practice How to Manage Work Health and Safety Risks and Work Health Safety Injury Management Procedure Mechanisms for Hazard Identification and Risk Management.

4.2.3.1 Level 1

Eliminating the risk of exposure

The risk of exposure to infectious diseases and blood and body fluids (BBF) can be eliminated by

- having workers who are immune to the infectious disease attending the person or
- eliminating a task for example prohibiting the recapping of needles

Where elimination is not reasonably practicable, consideration must be given to using level 2 risk controls.

4.2.3.2 Level 2

Substitution

Substitute the tasks, processes or equipment to reduce the risk of exposure to infectious diseases and BBF. For example:

- changing manual processes to automated non-touch ones
- changing equipment with an alternative which is easier to clean and decontaminate
- using a rubbish picker to remove rubbish instead of hands

Isolation

Isolate the risk of exposure to Infectious diseases by physically separating the hazard or hazardous work practice from people by distance or using barriers. For example:

- placing patients in an isolation room appropriate to their infectious disease
- using containment facilities in laboratory settings (refer to AS / NZS 2243.3:2010 safety in laboratories Microbiological Safety and containment)
- using automated laboratory testing equipment and processes
- enclosing, containing or restricting access to an at risk area like clinical waste storage area
- using appropriate containers for waste disposal including sharps.(refer to *Environment Protection Act 1993, Waste to Resources Policy 2010*
- providing separate areas for storing clean and contaminated plant or equipment

Engineering controls

Engineering controls are physical control measures to manage the risks of exposure to infectious diseases by changing the design of the workplace. For example:

- automating work processes (e.g. using automated washers in decontamination and sterilisation departments)
- ensuring a sufficient number and placement of handwashing basins to promote hand hygiene
- installing taps for hand hygiene which do not require hand operation such as sensor, wrist or foot operated taps
- installing ventilation controls (e.g. negative pressure airflow, local exhaust ventilation and high efficiency particulate absorption (HEPA) filtration systems)
- using containment facilities in laboratory settings refer to (AS / NZS 2243.3:2010 safety in laboratories Microbiological safety and containment)
- installing surfaces which are impervious to water and easy to clean
- minimising the release of infectious agents by installing drift eliminators in cooling towers
- using safety engineered sharps and medical devices (e.g. retractable needles and scalpels)

If a risk still remains, the risk should be minimised so far as reasonably practicable, by using Level 3 administrative risk controls.

4.2.3.3 Level 3 Risk Controls

These control measures rely on human behaviour and supervision and when used on their own tend to be least effective in minimising risks. Two approaches to reduce risk in this way are:

Administrative

Administrative controls manage infection risks through the use of policy, procedures or instruction. For example:

 using all relevant SA Health Infection Prevention and Control Policy Directives, and Policy Guidelines

- implementing all LHN / HS / BU Infection prevention procedures
- providing information, instruction and supervision that is necessary to protect all persons from infection risks arising from work
- implementing and maintaining health care worker immunisation programs which align with current SA Health Policy Guidelines
- implementing health care worker Tuberculosis screening which aligns with SA Health Policy Directive Control of Tuberculosis in South Australian Health Services
- maintaining workers' facilities including toilet, handwashing and eating facilities
- modifying the work for workers at greater risk of exposure to infectious diseases, or complication following acquisition of an infectious disease, by adjustment of tasks and/or exclusion from the workplace where indicated
- using labels or signage to communicate the presence of infection hazards and control measures that are in place
- maintaining plant and equipment
- prohibiting eating and drinking in at-risk areas
- undertaking planning and preparedness for potential infectious disease outbreaks e.g. pandemic Influenza:-refer to SA Health, Australian and LHN / HS / BU pandemic plans)
- providing first aid in accordance with SA Health WHSIM Policy Guideline First Aid Management and the <u>SA Health WHSIM Flow Chart Blood and body fluid exposure</u> (BBFE) or local risk assessment tools

Personal Protective Equipment (PPE)

Any remaining risk must be minimised so far as is reasonably practicable by providing and ensuring the appropriate use of PPE.

PPE should be used to increase protection from the infectious disease.

This control refers to a variety of barriers, used alone or in combination, to reduce the risk of acquiring and transmitting infectious diseases by protecting the skin, eyes, mouth, respiratory system and clothing of staff from potentially infectious excretions and secretions that may infect them or be carried to others.

Selection of PPE should be based on the mode of transmission of the infectious diseases

Reference may be made to the <u>SA Health WHSIM Policy Guideline Personal Protective</u> Equipment (PPE) Selection Policy Guideline 2015 and the SA Health <u>Respiratory</u> Protection against airborne Infectious Diseases Clinical Guideline.

4.2.4 Communication

Communication with workers should occur when:

- making decisions on processes for managing infection risks
- proposing changes to facilities, equipment or procedures that may affect the health and safety of workers and or other persons

4.2.5 Recording, Monitoring and Review

Risk controls and risk treatments need to be documented, implemented; and monitored for their effectiveness.

4.3 Responding to work related exposures to infectious diseases excluding BBF

Responding to work related exposures to infectious diseases in the workplace requires a risk management approach.

Step 1 Identify workers exposed

A response to work related exposure is required for infectious diseases where, preventative treatment or screening is required or where specific outbreaks are identified

Contact tracing is the first step and requires information to be obtained from workers to determine the type and extent of exposure.

Step 2 Assessing the workers exposure

Information gathered by contact tracing of workers is used to make an assessment of the type and extent of the exposure and to identify management required for exposed worker(s).

Step 3 Exposure management

Depending on assessment findings, management of a worker exposed to an infectious disease may include steps to:

- prevent the development of an infectious disease by
 - referral for prophylactic treatment such as antibiotics, antivirals, antiretrovirals and vaccines as recommended by relevant guidelines or advice provided by infectious disease consultants or Communicable Disease Control Branch
 - blood testing to identify immune status
- limit the potential for disease transmission to others by e.g. work modifications or exclusion. Refer to SA Health, You've Got What for exclusion information: <u>Exclusion Childcare</u>, <u>Preschool</u>, <u>school and work periods</u>, provide information and support to the exposed worker including referral to Employee Assistance Program (EAP) or other services as required.

4. Blood and body fluid exposure (BBFE) management

Work related transmission of blood-borne infections may occur through parenteral, mucous membrane, and non-intact skin exposure. The greatest risk for transmission is via a very deep skin penetration injury that is sustained with a sharp hollow-bore needle that has visible blood and has had recently been removed from a blood vessel of a patient with a high viral load.

The main infection risks of exposure to BBF are hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV).

There are many factors that determine the risk of infection transmission including Exposed person factors

- how the worker was exposed,
- the type and extent of exposure
- susceptibility of the exposed person(including immune status to HBV),

Source factors

- blood borne virus status (BBV) (known HBV,HCV or HIV positive)
- viral load (the amount of virus in the blood).

Table 2 Risk of transmission following exposure

Type of exposure	Estimated risk of transmission				
	HBV –infected source * not relevant when HCW fully Immunised	HCV infected source	HIV infected source		
Percutaneous	30% if the source patient is HBeAg positive but is less than 6% if the patient is HBeAg negative	Average incidence of HCV seroconversion after needlestick or sharps exposure from a known positive source patient is 1.8% (range, 0 to 7%)	Approx. 0.3% (blood exposure) Stated another way, 99.7% of needlestick/cut exposures do not lead to infection.		

Mucous membrane to blood Lower risk, no estimate available (the risk is related to the degree of contact with blood and the Hepatitis B e antigen status of the source person.)		Very low risk. (has not been quantified)	Approx. 0.09%		
Non- intact skin or wounds exposed to blood	low risk (has not been quantified)	Very low risk (has not been quantified)	The average risk of transmission by this route has not precisely been quantified but is estimated to be less than the risk for mucous membrane exposures		

References:

- Centers for Disease Prevention and Control. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post exposure Prophylaxis [Internet]. MMWR 2001 [cited 2013 Jan 14]; 50 (No. RR11):1-42.
- Queensland Department of Health Guideline for the management of occupational exposure to blood/body fluids/substances.

4.4.1 Immediate Management for BBFE

Information on BBFE including LHN / HS / BU immediate management contacts information is available on the SA Health Blood and body fluid exposure web page.

Immediate management of a work related exposure to BBF includes the provision
of, first aid, risk assessment of the exposure incident, assessment of sources BBV
status, blood testing if necessary and management.

4.4.2 First aid

Health care workers should be relieved of duties as soon as possible to undertake first aid which may reduce the risk to the worker from potentially infectious blood or body fluids:

- Skin: wash the area thoroughly with soap and water as soon as possible. If soap and
 water is unavailable, a detergent wipe can be used until soap and running
 water can be accessed.
- **Mouth**: spit out, rinse with water and spit out, repeat twice.
- **Eyes**: flush with normal saline or water, remove lenses if worn flush again clean lens before reinserting.
- **Needlestick / Sharp**: remove any embedded material and manage as skin exposure.

4.4.3 Exposure assessment

- Initial risk assessment of the exposure incident can be undertaken by the exposed worker and assisted by the workers manager by reviewing the SA Health WHSIM Flow Charts BBFE Immediate Management or local risk assessment tools where applicable.
- Dedicated health professionals (including worker health nurses, infection prevention and control nurses or medical practitioners) trained and experienced in managing blood and body fluids may undertake a further risk assessment for low, moderate or high risk exposure types to assess the significance of the exposure and an assessment of the exposed workers immune status
- The significance of the injury should be based on consideration of the following factors:
 - the nature and extent of the injury
 - the nature of the item that caused the injury e.g. gauge of the needle
 - the nature of the body substance involved
 - the activity being undertaken e.g. blood withdrawal
 - the volume of blood and body substances to which the HCW was exposed
- Assessment of the source
 - history of previous testing for BBV and results

- current BBV status
- viral load if known HBV,HCV or HIV positive
- on antiretroviral treatment
- history of risk behaviours e.g. injecting drug use through the sharing of injection equipment, participation in high risk unprotected sexual practices
- prevalence of HBV,HCV or HIV in the population group
- Blood testing of Source
 - If the status of the source is unknown at the time of the exposure, a designated person should undertake baseline testing to determine the source's infectious status. Baseline blood testing should be undertaken in accordance with national testing policies for HBV, HCV and HIV and includes the following HBV surface antigen, HCV and HIV antibody tests. HBV,HCV and HIV national testing policies
- Where a source is unknown, refuses to disclose status or have a blood test, a
 designated person should assess information about where and under what
 circumstances the exposure occurred, to determine the likelihood for transmission of
 HBV, HCV or HIV. Certain situations, as well as the type of exposure, might suggest
 an increased or decreased risk.
- Where a source tests positive and is not already in the care of an appropriate medical specialist, they should be referred to such a specialist.

4.4.4 Baseline blood testing and medical management

- Exposed workers are recommended to participate in baseline blood testing for low, moderate and high exposure risk types as defined in SA Health WHSIM Flowchart BBFE Immediate Management Flow Chart
- Baseline blood testing includes HIV antibody, HCV antibody and HBV surface antibody (HBsAb) and HBV surface antigen (HBsAg) testing as required.
- Medical management is recommended for workers with high risk exposure to HBV / HCV / HIV in accordance with LHN / HS / BU local procedures.

4.4.4.1 Post exposure prophylaxis (PEP)

Hepatitis B (PEP)

 Where workers have sustained a needlestick injury or mucosal exposure and the source is known to be hepatitis B surface or e antigen positive and the worker is not vaccinated or is a non seroconverter, hepatitis B immunoglobulin is recommended within 72 hours of exposure and for those not previously vaccinated a course of hepatitis B vaccine commenced within 7 days of exposure. Refer to the Australian Immunisation Handbook section 4.5.11

Hepatitis C

No PEP available

HIV (PEP)

HIV PEP is the provision of antiretroviral treatment used as short term treatment to reduce the likelihood of HIV infection after a high risk exposure. The decision on the need for PEP is made on a case by case and should be discussed with an infectious diseases consultant as per local LHN / HS / BU procedures. PEP where recommended should be offered and prescribed as soon as possible after the exposure within 2- hours and 72 hours (72 hours being the latest possible time for initiation of PEP). Where treatment has commenced systems must be in place to ensure referral of an exposed worker to an S100 prescriber (e.g. Infectious Diseases Consultant as per LHN procedure) to ensure ongoing medication and medical management is maintained.

Tetanus (PEP)

- PEP consists of diphtheria and tetanus containing vaccines or provision of tetanus immunoglobulin.
- When undertaking the risk assessment of the exposure an assessment of the
 wound should be undertaken to determine if the wound is a tetanus prone wound
 (includes bite wounds and deep penetrating wounds, wounds with foreign bodies
 and any superficial wound contaminated with soil or dust). Refer to Section 4.19.9
 General measures for treatment of tetanus prone wounds and Table 4.9.1 Guide
 to tetanus prophylaxis in the Australian Immunisation Handbook.

4.4.4.2 Follow up blood testing and medical management

Exposed workers should attend for follow up testing as per the tabled recommendations below or as specified by the treating Medical Practitioner or Infectious Diseases Consultant.

Table 3 Recommended follow up management

Source status			
To assist in determining the source assessment of the source is under	es likelihood to be in the window period it is recommended that a risk rtaken refer to section 4.4.3		
	Follow up and management for low, moderate and high exposure risk types		
Source negative and unlikely to be in the window period	No further blood testing is required once the source is known to be negative for HIV, HBV and HCV.		
Source negative and likely to be in the window period	 Seek further testing of source for HBV DNA, HCV and HIV RNA to determine infectivity. 		
Source HBV Surface Antigen positive	Exposed worker immune to Hepatitis B (recovered from HBV infection or has been successfully vaccinated). The risk of transmission is negligible.		
Source HBV Surface Antigen	Exposed worker non-immune		
positive	Inform of potential risk and measures to prevent secondary transmission		
	Advice may be required from a medical officer and or Infectious Diseases Consultant to determine the need for Hepatitis B PEF (Hepatitis B immunoglobulin) and blood testing requirements positional immunoglobulin administration.		
	 Commence Hepatitis B vaccination program. Liver Function blood test (LFT's), 6 weeks after exposure 12 weeks HBsAG tested at 6 months (if has received PEP) 		
Source HCV positive	Discuss RNA testing of the source with the sources treating medica officer at time of exposure		
	Inform exposed worker of the potential transmission risk and measures to prevent secondary transmission		
	 Discuss exposed worker follow up testing with LHN Infectious Diseases Consultant. 		
	 Discussion should occur with LHN Infectious Diseases Consultant about whether 2 weekly RNA testing for workers performing exposure prone procedures is required. 		
	LFTs at baseline and follow up at 6 weeks, 3 months.		
Source HIV antibody positive	 PEP may be recommended refer exposed worker immediately for medical management via local LHN / HS / BU procedures. Inform of potential risk and measures to prevent secondary 		
	 transmission. Follow up if on PEP managed by or as directed by treating medica officer 		
	Recommended at 4-6 weeks and 12 weeks post exposure.		
Follow up testing recommended for source remains unknown concerns exist in relation to	HIV, HCV and HIV testing at 4-6 weeks post exposure provided no PEP has been given.		

References

- Adapted from QLD Health Guideline for the management of occupational exposure to blood and body fluids
- Centers for Disease Prevention and Control. Healthcare Personnel Safety Component. Exposure Module [Internet]. 2013 [updated 2013 Jan 1; cited 2013 Jan 14].
- Centres for Disease Prevention and Control. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post
- Exposure Prophylaxis [Internet]. MMWR 2001 [cited 2013 Jan 14];50 (No. RR11):1-42.

4.5 Health Care Workers (HCW) who develop a BBV as a consequence of work related exposure to blood or body fluids.

The majority of procedures in the health care setting pose minimal risk of transmission of BBV from an infected HCW to a patient. There are certain procedures during which BBV's are significantly more likely to be transmitted these are referred to as exposure prone procedures (EPPs).

In the event of the worker being diagnosed with a BBV, participation in EPPs should cease immediately.

Workers who develop a BBV as a consequence of exposure to infected blood or body fluids should be referred for medical management.

LHN /HS / BU should ensure they have procedures in place to support and manage workers who develop a BBV as a consequence of work related exposure. Refer to the <u>Australian National Guidelines for the Management of Health Care Workers Known to be infected with Blood Borne Viruses</u>.

4.6 Worker to patient blood body fluid exposure (reverse BBFE)

- This exposure type refers to incidents where a patient has been exposed to blood or body fluid from a worker for example by use of scalpel blade or needle after a worker sustained a penetrating needle-stick injury
- LHNs/HS/BU must include the management of worker to patient exposures in local procedures

The incident must be managed in accordance with SA Health Incident Management Policy Guideline Incorporating Open Disclosure 2014 and the Open Disclosure Policy Directive 2014.

4.7 Record Keeping

- Employee health records must be established for workers who have had a blood or body fluid exposure
- Employee health records must be established for workers who were identified as having an unprotected exposure during contact tracing and required screening or treatment
- SA Health is accountable to maintain and protect the integrity and accessibility of all
 official documents and records by ensuring SA Health LHN / HS / BU and workplaces
 have a robust document control and records management system
- All official WHS records must be retained either centrally or locally in accordance with Work Health Safety Regulations 2012 (SA) and disposed of in accordance with GDS 30 (V1) - General Disposal Schedule for State Government Agencies in South Australia and SA Health's Record Management Procedure 001.

4.8 Management of Information

Management of information collected about workers exposures to infectious diseases in the workplace should comply with the Government of South Australia Cabinet Administrative Instruction <u>Information Privacy Principles (IPPS)</u> which governs the way that agencies collect, store, use, disclose, access and correct personal information.

In particular, principle 8 requires that the record-subject should be told the primary purposes for which the information is being collected (providing health care intervention and ensuring safe placement of a worker) and also any secondary purpose (such as contact tracing in the event of an infectious disease exposure).

Principle 10 details circumstances under which information may be disclosed and is aligned to section 93 (3)(e) of the Health Care Act 2008 covering disclosure reasonably required to lessen or prevent serious threat to the life, health or safety of a person or a serious threat to public health or safety.

5. Roles and Responsibilities

5.1 Chief Executive / Deputy Chief Executives

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with this policy guideline
- Establish awareness of and accountability for the implementation of this policy quideline.

5.2 Chief Executive Officers / Chief Operating Officers (LHN / HS / BU)

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with this policy guideline
- Establish awareness of and accountability for the implementation of this policy guideline
- Provide financial and physical resources needed for the implementation and support of this policy guideline

5.3 Executive Directors / General Managers / Directors (LHN / HS / BU)

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with this policy guideline
- Ensure the provision of appropriate resources and processes to prevent and respond to work related exposures to infectious diseases
- Ensure the provision of an adequately resourced HCW immunisation program

5.4 Site Managers / Line Managers / Supervisors / Team Leaders

Will take reasonable practicable steps to:

- Where relevant, exercise due diligence to ensure compliance with this policy quideline
- Ensure that workers and others are not exposed to infectious risks whilst at work, by:
 - ensuring risk assessment occurs in areas of foreseeable risk
 - ensuring safe work procedures and control measures, including use of PPE are implemented
 - monitoring and maintenance of control measures e.g. engineering controls
 - providing adequate supplies of PPE
 - providing instruction in the use and maintenance of PPE where other risk control measures are not feasible
 - providing adequate provisions to manage sharps
 - providing adequate first aid provisions (e.g. eye wash equipment)
 - immediately releasing workers in the event of blood and body fluid exposures to attend to immediate management e.g. first aid
 - providing workers with adequate direction, support and training to fulfil their responsibilities to prevent exposures to infectious diseases where possible
- Ensure workers with infectious diseases adhere to exclusionary periods
- Ensure all incidents, hazards and unsafe working practices are reported on the SA Health, Safety Learning System (SLS) before the end of the shift / working da.

- Encourage and support HCWs to participate in, confidential testing following an exposure to potentially infectious blood or body fluids
- Provide support to HCWs who perform EPPs who have returned a positive test for a blood borne virus (BBV) following work related exposure to infectious blood or body fluids (BBF)
- Ensure appropriate placement for HCWs with a blood borne virus. Refer to SA Health (WHSIM) Policy Directive Work Health, Safety and Injury Management
- Investigate work related exposure incidents in conjunction with Worker Health / Staff Health /Infection Prevention and Control Practitioners

5.5 Worker Health Nurses / Staff Health / Infection Prevention and Control Practitioners

Will take reasonable care to:

- Develop LHN / HS / BU procedures to prevent and manage exposures to infectious diseases including blood and body fluid exposures
- Promote immunisation programs and provide education at the LHN / HS / BU
- Report adverse events following vaccine administration as required
- Undertake risk assessment of exposure incidents
- Manage exposed workers or refer for medical management, this may include any
 of the following;-vaccination, prophylactic antibiotics, immunoglobulin and or blood
 testing)
- Assist in investigation and reporting relating to exposures to infectious agents to prevent or reduce likelihood for recurrence
- Provide information and advice to exposed worker(s) and area manager as required
- Provide advice to management on the safe placement of non-immune or immunocompromised workers
- Maintain records of immunisation, blood and body fluid exposures in accordance with records management policies
- Maintain records of contract tracing in accordance with records management policies

•

- Maintain workers information in accordance with PCO212 Information Privacy Principles Instruction September 2013
- Provide reports such as influenza vaccination for SA Health WHS KPIs including immunisation data and WHS due diligence reports at LHN / HS / BU

5.6 Workers

Will take reasonable care to

- Cooperate with reasonable instructions i.e. policy directives, policy guidelines, procedures and safe work instructions or clinical protocols, that are given by LHN / HS / BU relevant to their role, responsibilities and accountabilities in service provision
- Participate in immunisation / screening programs at the LHN / HS / BU in accordance with the requirements of current SA Health policy, Immunisation Guidelines for Health Care Workers in South Australia
- Participate in the LHN / HS / BU tuberculosis screening requirements as per the Control of Tuberculosis in South Australian Health Services Policy Directive
- Be familiar with and comply with protective measures at all times when there is an identified risk of exposure to a transmissible infectious diseases
- · Adhere to safe work practices including
 - hand hygiene
 - standard and transmission based precautions
 - safe sharps handling and disposal

INFORMAL COPY WHEN PRINTED Preventing and Responding to Work Related Exposure to Infectious Disease Policy Guideline
Page 15 of 21

- blood and body fluid spills
- waste management
- Adhere to work exclusion periods recommended to limit transmission of infectious diseases at the workplace
- Report exposures to blood and body fluids (BBF) associated with a risk of transmission diseases transmission immediately after exposure in accordance with local procedures safety learning system (SLS) or IRQA(SAAS)
- Participate in voluntary testing for Blood Borne Viruses (BBV) immediately after exposure associated with a risk of diseases acquisition
- HCWs with a BBV must not perform EPPs
- Notify direct line managers in the event of acquisition of an infectious disease (other than BBVs) which is transmissible to patients/clients or other workers and were in the infectious period whilst at work
- Notify managers and stay away from work if the worker has active diarrhoea and vomiting (applies to all workers including catering and other non-direct patient care workers).

5.7 Contractors

Will take reasonably practicable steps to:

- Where relevant, exercise due diligence to ensure compliance with this policy quideline
- Ensure accountability and awareness of this policy guideline and the use of standard and transmission-based precautions to prevent transmission of infectious diseases including the appropriate use of PPE
- Abide by the terms of the contract / service level agreement, including compliance with work health and safety responsibilities for induction and orientation prior to commencement of any contracted work
- Ensure that a risk management approach is undertaken to identify any hazards and risks associated with the task(s) commissioned from them, taking into account physical location of the works and heeding workplace alerts and cautions that are present at that location
- Report any incident in accordance with SA Health Policy Directive Work Health and Safety Reporting and Investigation (WHS)
- Comply with SA Health / LHN / HS / BU / policy, policy guidelines, safe work procedures and instructions by SA Health authorised personnel (as relevant)

6. Reporting

6.1 All exposures to infectious diseases incidents must be reported and investigated in accordance with SA Health WHSIM Policy Directive Incident Reporting and Investigation.

6.2 Reporting to the to the Regulator (SafeWork SA), notifiable prescribed serious illness

- All incidents in which a worker develops an infectious disease which is reliably attributable to work must be reported to SafeWork SA as a prescribed serious illness in accordance with Section 36 of the Work Health and Safety Act 2012 (SA) and Regulation 699 of the Work Health and Safety Regulations 2012(SA). Reference should be made to the SA Health WHSIM Flowchart—Reporting and Notification of a Notifiable Incident
- Multiple prescribed serious Illness reports to the Regulator.

Where multiple workers develop an infectious disease from a single patient, one notification to the regulator may be completed which includes all affected workers.

6.3 SA Public Health Act 2011 -Reporting requirements

 Laboratories and medical practitioners are required under the South Australian Public Health Act 2011 to report any notifiable conditions refer to notifiable conditions list to the Communicable Disease Control Branch (CDCB) SA Health.

7. EPAS

N/A

National Safety and Quality Health Service Standards

Q			②	0	(II)	0	@	(E)	
National Standard 1	National Standard 2	National Standard 3	National Standard 4	National Standard 5	National Standard 6	National Standard 7	National Standard 8	National Standard 9	National Standard 10
Governance for Safety and Quality in Health Care	Partnering with Consumers	Preventing & Controlling Healthcare associated infections	Medication Safety	Patient Identification & Procedure Matching	Clinical Handover	Blood and Blood Products	Preventing & Managing Pressure Injuries	Recognising & Responding to Clinical Deterioration	Preventing Falls & Harm from Falls
\boxtimes		\boxtimes							

9. Other

N/A

10. Risk Management

Work Health and Safety risk management guidance and considerations defined in this policy guideline align in principle with SA Health Risk Management Framework 2014 and ISO 31000 Risk Management Principles and guidelines.

11. Evaluation

In accordance with SA Health WHSIM Policy Directive – Performance Review and Continuous Improvement, implementation of this Policy Guideline will be monitored via the SA Health WHSIM Internal Audit Program against the following criteria:

- A hazard identification and risk management process is implemented for the control of risks associated with exposure to infectious diseases and biological materials in the workplace
- Risks associated with potential and actual exposure to infectious diseases and biological materials are assessed in accordance with relevant guidelines.
- Control strategies for infectious disease and biological material hazards are developed, implemented and reviewed with consideration for the 'hierarchy of hazard control'
- LHNs / HSs have developed, implemented and reviewed procedures to prevent and manage exposures to infectious diseases and biological materials in accordance with relevant guidelines

- Vaccination programs are available to workers in accordance with relevant guidelines and promoted
- First aid provisions that minimise the risks of exposures to infectious diseases and biological materials are available and maintained in all areas in accordance with the SA Health WHSIM Policy Guideline First Aid Management
- Induction and training programs include information regarding the risks of exposure to infectious diseases and biological materials, immediate response measures to reduce risks, incident reporting provisions and general preventive measures
- Workers and their representatives are consulted in relation to the management of infectious disease and biological material hazards
- There are processes in place to manage HCWs with blood born viruses and other infectious diseases
- Documentation relating to the management of infectious disease and biological hazards (including worker follow up post exposures) is retained for requisite time periods in accordance with confidentiality provisions where applicable

*Relevant guidelines are included in section 13 and 14 of this document.

12. Definitions

Refer to <u>SA Health Work Health Safety Injury Management System – Glossary and Terms</u> for further definitions and clarification on general terms used throughout this policy guideline.

In the context of this document

Blood and body fluid (BBF): means blood (including dried blood), all other body substances, secretions and excretions (excluding sweat) regardless of whether they contain visible blood; non-intact skin; and mucous membranes.

Blood and body fluid exposure (BBFE): means an exposure that might place HCW at risk for HBV, HCV, or HIV infection is defined as a percutaneous injury (e.g., a needlestick or cut with a sharp object) or contact of mucous membrane or non-intact skin (e.g., exposed skin that is chapped, abraded, or afflicted with dermatitis) with blood, tissue, or other body fluids that are potentially infectious.

Blood Borne Virus (BBV) means a virus that is transmitted from the blood of one person to the blood of another person those of concern are human immunodeficiency virus (HIV), Hepatitis B and Hepatitis C.

Contact Tracing means the identification of persons who may have come into contact with an infected person

Exposure means a worker who does not have immunity to the infectious disease and who has had contact with a source person through

- not wearing the appropriate personal protective equipment
- equipment failure
- the infectious status of a source person being unknown at the time of exposure
- blood and body fluids contact where there is a risk of disease transmission

Exposure prone procedures (EPP) means procedures where there is a risk of injury to the hcw resulting in exposure of the patients open tissue to the blood of the HCW.

HBV means Hepatitis B virus.

HBeAg means Hepatitis B e antigen – which is a marker of high level of infectiousness. **HBsAg** means Hepatitis B surface antigen – which indicates current infection with HBV with some potential to infect others.

HBV DNA means Hepatitis B virus genetic material – which is a marker of high level of infectiousness.

HCV means Hepatitis C virus.

HCV RNA means Hepatitis C genetic material –which is a marker of high level of infectiousness.

HIV means Human Immunodeficiency Virus.

Incident means any event or circumstance that resulted or could have resulted in unintended and/or unnecessary harm to a person and/or a complaint, loss or damage.

Medical sharp means an object or device that has been discarded in the course of medical, dental or veterinary practice or research and has a sharp point, protuberance or cutting edge that is capable of causing a penetrating injury to humans, and includes (but is not limited to) needles, hypodermic needles, syringes with needles or any other surgical instruments.

Medical waste means waste consisting of medical sharps; or human tissue, bone, organ, body part or foetus; or a vessel, bag or tube containing a liquid body substance; or an animal carcass discarded in the course of veterinary research or medical practice or research; or a specimen or culture discarded in the course of medical, dental or veterinary practice or research.

Open disclosure means the process of providing an open, consistent approach to communicating with consumers and their support persons following an incident.

Personal Protective Equipment (PPE): means a general term used for pieces of equipment or clothing used to protect the healthcare worker from BBF and the transmission of infectious microorganisms.

Potentially Infectious Body Fluids means: those fluids capable of transmitting BBV body fluids / tissues capable of transmitting blood borne virus (BBV) include cerebrospinal fluid, synovial fluid, pleural fluid, amniotic fluid, peritoneal fluid, pericardial Fluid, semen and vaginal secretions and tissues and laboratory specimens that contain concentrated virus.

Reverse BBFE means: a patient has been exposed / potentially exposed to the blood of a worker during a procedure.

Risk assessment means: a process used to determine the level of threat to the healthcare worker prior to commencing an activity and estimates the probability of the threat occurring and the impact if the threat were to occur.

S100 Prescriber means: A Medical Practitioner who is accredited and maintains their continuing professional development to prescribe Antiretroviral therapy(HIV) drugs classified as section 100 Highly Specialised Drug under the National Health Act.

Standard Precautions means: work practices that are applied to everyone, regardless of their perceived or confirmed infectious status and ensure a basic level of infection prevention and control.

Susceptible host means: a susceptible or non-immune person is one who has little resistance against a particular organism and who, if exposed to this organism, is likely to contract disease.

Source Individual means: the person usually a patient /client to whose blood or body fluid was inoculated or splashed onto (exposed worker).

Transmission-based Precautions means: additional work practices implemented when standard precautions alone may be insufficient to prevent transmission.

Window Period means: the period between the onset of infection and the appearance of detectable antibodies in the blood to the virus.

Work exclusion means: a defined period of time for which a worker is excluded from the workplace to prevent transmission of a particular infectious agent.

13. Associated Policy Directives / Policy Guidelines

SA Health Cleaning Standard for Healthcare Facilities Policy Directive 2014

SA Health Policy Directive – Control of Tuberculosis in South Australian Health Services

SA Health Hand Hygiene Policy Directive

<u>SA Health Immunisation Guidelines for Health Care Workers in South Australia 2014</u> <u>Policy Guideline</u>

SA Health WHSIM Policy Directive – Hazard Identification and Risk Management

SA Health Management of the Healthcare Environment to Minimise the Risk of Transmission of Infection Policy Directive

SA Health WHSIM Personal Protective Equipment (PPE) Selection Policy Guideline

SA Health Risk Management Framework 2014

SA Health WHSIM Procedure - Reporting and Investigating WHS Hazards and Incidents

SA Health WHSIM Policy Directive - Roles, Responsibilities and Governance

SA Health WHSIM Policy Guideline - System Documentation

SA Health WHSIM Worker Health and Wellbeing Policy Directive

SA Health WHSIM Work Health and Safety Reporting and Investigation

<u>SA Health Clinical Guideline for Respiratory Protection against Airborne Infectious Diseases</u>

SA Health BBFE Immediate Management Flow Charts

<u>SA Health WHSIM FOR223 Flowchart – Reporting & Notification of a Notifiable Incident</u> Flowchart

SA Health Healthcare Associated Infection Policy Directive

SA Health Infection Control Management of Infectious Diseases –Summary Table

<u>SA Health WHSIM Mechanisms of Hazard Identification and Risk Management Procedure)</u>

SA Health WHSIM Procedure Reporting and Investigating WHS Hazards and Incidents (SA Health WHSIM Work Health Safety Injury Management System

SA Health Scabies management in care facilities 2012

14. References, Resources and Related Documents

Australian Guidelines for the Prevention of Infection in Healthcare 2010 Australian Government Department of Health

Australian Immunisation Handbook 10TH Edition 2015 Australian Government Department of Health

Australian National Guidelines for the management of Health Care Workers known to be infected with Blood Borne Viruses. Communicable Diseases network Australia AS/NZS 2243.3 Safety in Laboratories Microbiological Safety and Containment

Centers for Disease Control and Prevention: Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Post exposure Prophylaxis [Internet]. MMWR 2005 [cited 2013 Jan 21]; 54 (No. RR09); 1-17

Environment Protection Waste to Resources Policy 2010

Invasive Meningococcal Disease Communicable Diseases Network Australia Guidelines for Public Health Units April 2015

Guideline for the management of occupational exposure to blood and body fluids Centre for Healthcare Related Infection Surveillance and Prevention (CHRISP) Queensland Health

Management of Blood and Body Fluid Exposure Procedure; The Albion Centre New South Wales Health 2014.

Measles National Guidelines for public health units 2015 Communicable Diseases Network Australia National Code of Practice for the Control of Work-related Exposure to Hepatitis B, C and HIV (bbv) [NOHSC: 2010 (2003)]

National Australian HBV Testing Policy 2012 Commonwealth of Australia

National Australian HCV Testing Policy 2012 Commonwealth of Australia

National Australian HIV Testing Policy 2014 Commonwealth of Australia

Pertussis National guidelines for Public Health Units Communicable Disease Network Australia 2015

Police and Blood Borne Viruses Australasian Society for HIV Medicine (ashm)

Post Exposure Prophylaxis after Non – Occupational and Occupational exposure to HIV National Guidelines -. Australasian Society for HIV Medicine (ashm)

Scabies management in care facilities 2012, SA Health

South Australia and Environment Protection Authority 2003 Medical Waste – Storage, Transport and Disposal and Environment Protection Waste to resources Policy 2010.