Government of **Western Australia**
Department of **Health**
Public and Aboriginal Health Division

Communicable Disease Control Directorate
Guideline

Management of Occupational Exposure to Blood or Body Fluids in Healthcare Settings

Guideline 0008 / 30 October 2024

These guidelines have been released by the Communicable Disease Control Directorate, Public and Aboriginal Health Division, Western Australian Department of Health, to provide consistent and evidence informed advice to agencies involved in the prevention of infections and management of communicable diseases in Western Australia.

ACKNOWLEDGEMENT OF COUNTRY AND PEOPLE

The Communicable Disease Control Directorate at the Department of Health acknowledge the Aboriginal people of the many traditional lands and language groups of Western Australia. We acknowledge the wisdom of Aboriginal Elders both past and present and pay respect to Aboriginal communities of today.

Contents

1. Definitions / acronyms

Term / Acronym	Definition
ASHM	**Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine**
BBVs	**Blood-borne viruses** Hepatitis B virus, hepatitis C virus and human immunodeficiency virus
CDC	**Centers for Disease Control and Prevention**
CNDA	**Communicable Diseases Network Australia**
EPP	**Exposure-prone procedure** A subset of invasive procedures where there is potential for contact between skin of the healthcare worker and sharp surgical instruments, needles or sharp tissue in body cavities or in poorly visualised or confined areas of the body
HBIG	**Hepatitis B immunoglobulin**
HBcAb	**Hepatitis B core antibody** (indicates prior or ongoing infection)
HBsAb	**Hepatitis B surface antibody** (indicates immunity)
HBeAg	**Hepatitis B core antigen** (marker of infectivity)
HBsAg	**Hepatitis B surface antigen** (indicates active infection)
HBV	**Hepatitis B virus**
HCF	**Healthcare facility** Any facility providing a healthcare service, private or public, including ambulance and primary care services and healthcare organisations providing care in the home
HCP	**Healthcare provider** An appropriately trained and qualified healthcare worker responsible for the management of occupational exposures to blood or body fluids
HCV	**Hepatitis C virus**
HCV RNA PCR	**Hepatitis C virus ribonucleic acid polymerase chain reaction** Detects HCV viremia
HCW	**Healthcare worker** A person whose activities involve contact with patients or with the blood or body fluids of patients in a healthcare or laboratory setting and includes those who are employed, honorary, contracted, on student placement or volunteering at the HCF
HIV	**Human immunodeficiency virus**
HIV Ag/Ab	**Human immunodeficiency virus antigen/antibody**
HIV service	A service that can provide access to a physician with expertise in HIV medicine; this may be an immunology or infectious diseases service
LFT	**Liver function test**

NHMRC	**National Health and Medical Research Council**
Non-parenteral exposure	Contamination of mucous membranes e.g. eyes, mouth, non-intact skin with blood or body fluids
Non-responder HBV vaccine	A person without HBV infection who has a documented history of an age-appropriate primary course of hepatitis B vaccine, but with a HBsAb level <10 IU/mL
OE	**Occupational exposure** An incident that occurs during a person's work and involves contact with blood or body fluids that places them at risk of acquiring a blood-borne virus
Parenteral exposure	Piercing of skin or mucous membrane with a sharp that is contaminated with blood or body fluids
PCR	**Polymerase chain reaction**
PEP	**Post-exposure prophylaxis** Administration of antiviral drugs, immunoglobulins or vaccines after exposure to a blood borne virus i.e. HIV or HBV in an attempt to prevent seroconversion
Recipient	The person who is exposed to another person's blood or body fluids
Seroconversion	A change in serological test results from negative to positive as antibodies develop in reaction to an infection or vaccine
Sharp	Any object capable of inflicting a penetrating injury
Source	The person from whom the blood or body fluids originated from
Serological window period	The time from exposure to seroconversion when the source may be asymptomatic, experiencing seroconversion illness, and when routine antibody testing may be negative

2. Purpose

This document describes the minimum requirements for the management of healthcare workers (HCWs) who sustain an occupational exposure (OE) to blood or body fluids in a healthcare setting and have a potential risk for the acquisition of a blood-borne virus (BBV). Compliance with this Guideline ensures healthcare employers and employees meet their legal, ethical and moral obligations relating to the management of OEs. In addition, guidance is provided for a situation in which a patient is accidentally exposed to blood or body fluids from a HCW or another patient.

For guidance on non-occupational exposure and post-exposure prophylaxis (PEP) for human immunodeficiency virus (HIV) please refer to the Australian National Guidelines for post-exposure prophylaxis after non-occupational and occupational exposure to HIV.

3. Introduction

An OE is defined as an incident that occurs during a HCWs' work and involves direct contact with another person's blood or body fluids. Transmission of hepatitis B virus (HBV), hepatitis C virus (HCV) or HIV can occur via parenteral (skin penetration) or non-parenteral (mucosal or non-intact skin) exposure.

Generally, HCWs who sustain an OE have a low risk of contracting a BBV (refer to Table 1). The risk of transmission is dependent on the type of injury and extent of the exposure, and the current viral load of the source of the exposure. A thorough risk assessment of each OE is required to ensure appropriate management (refer to Appendix A).

Standard infection prevention practices e.g. protective eyewear to prevent mucosal and ocular splashes, use of safety engineered medical devices and safe disposal of sharps to prevent parenteral exposures, should be promoted and compliance monitored in all healthcare facilities (HCFs).

In Western Australia (WA) any HCW who undertakes exposure-prone procedures (EPP) has an ethical responsibility to know their own BBV status, to follow recommended procedures to prevent BBV transmission as per the Australian National Guidelines for the Management of Healthcare Workers Living with Blood Borne Viruses and Healthcare Workers who Perform Exposure Prone Procedures at Risk of Exposure to Blood Borne Viruses, and to report BBV exposure incidents.

Table 1: Risk of blood-borne virus transmission following exposure[1]

Virus	Source blood	Route	Estimated risk of transmission
HBV	HBsAg positive and HBeAg negative	Percutaneous route	23–37% (1–6% risk of developing clinical hepatitis)
	HBsAg positive and HBeAg positive	Percutaneous route	37–62% (22–31% risk of developing clinical hepatitis)
HCV	HCV Ab positive	Percutaneous route	1.8% (range 0–7%)
		Mucosal route	Rare
HIV	HIV Ab positive and source not on effective antiviral treatment[2]	Percutaneous route	0.27%
		Mucosal route	<0.01%

Notes:

1. All estimates are assuming contact with infected blood and transmission risk is increased when exposed to high blood volume and high viral load.
2. Effective antiviral treatment is indicated by an HIV viral load <200 copies/mL.

Source: Queensland Health Management of occupational exposure to blood and body fluids Guideline.

4. Requirements

Any HCW who sustains an OE is to be managed in a prompt manner and consistent with the current evidence-informed literature (refer to Appendix B). The following key principles are recommended for WA HCFs.

4.1 Executive Directors of each healthcare facility are responsible for ensuring:

- A process is in place for HCWs whose employment places them at risk of contact with blood or body fluids, to provide either serological evidence of immunity to HBV, documentation of their non-responder status, or refusal to be vaccinated.
- Any refusal by a HCW to undertake recommended vaccinations and / or testing is documented.
- All HCWs receive education in standard infection prevention practices and OE prevention strategies at induction, and on an ongoing basis.
- A non-punitive culture exists that encourages the prompt reporting of all OEs.
- There is a nominated healthcare provider (HCP) with appropriate knowledge to coordinate the management of OEs.
- Access to a suitably qualified medical specialist to assist in the management of HCWs following any exposure with a known positive or high-risk source.
- Documented procedures on the appropriate action to be taken in the event of an OE are readily available to all HCWs and local processes are in place for reporting and managing OEs that include:
    - to whom the exposed HCW is to report and the afterhours management of OEs
    - a protocol for obtaining consent from the recipient and source for blood tests
    - documentation requirements for consent obtained from the source
    - the tests that are to be performed on both the recipient and source
    - how to access hepatitis B vaccine and hepatitis B immunoglobulin (HBIG)
    - contact details of the medical specialist that is to manage the HCW who has had an OE from a source that is positive or likely to be positive for HBV or HCV
    - contact details of the HIV service that is to manage the HCW who has an OE from a source that is positive or likely to be positive for HIV, and who is to authorise the release of PEP, and of the pharmacy that stocks that HCFs PEP.
- The HCW is supported with appropriate information, testing and review of work allocation if they perform EPPs.
- That confidentiality for the HCW and the source is always maintained.
- That all reported OEs are fully documented, and the records filed permanently, including the incident notification and all tests.
- OEs are regularly reported at an Executive level and interventions are implemented, including the use of safety engineered medical devices and protective personal equipment (PPE) to minimise the frequency of OEs.
- Systems are in place to ensure any person i.e. a HCW or patient identified with a new diagnosis of a BBV is reported to the Department of Health via the notifiable infectious disease process.

4.2 Nominated healthcare providers are responsible for ensuring:

- All OEs are managed appropriately and in accordance with Appendix B.
- A risk assessment is conducted as described in Appendix A that includes the:
  - nature and extent of the exposure
  - nature of the object causing the exposure (if applicable), type of body fluid and the amount of blood or body fluid that the HCW was exposed to
  - vaccination and immune status of the HCW
  - BBV status of the source
  - likelihood of an unidentified source being HBV, HCV or HIV positive.
- That a pre-test and post-test discussion is held with the HCW following a reported exposure, and prior to, and following, any testing for BBVs.
- Informed consent is obtained from the HCW to perform baseline testing to determine HBsAb levels and HBV, HCV and HIV status.
- Assessment of the HBV vaccination status of the HCW and the need to provide HBIG PEP in the non-immune HCW as per Table B3. If not immunised, enable the HCW to be commenced on a HBV vaccination schedule.
- Assessment of the HCW for any potential risk for other diseases e.g. tetanus and offer PEP as appropriate.

4.3 All healthcare workers are responsible for ensuring:

- They know their own BBV status, especially if they are performing EPPs.
- Their vaccination status against vaccine preventable diseases is current and those who have contact with blood or body fluids provide evidence of HBV vaccination and serological evidence of immunity or documented evidence of non-responder status.
- They adopt infection prevention practices to minimise the risk of OEs e.g. use of appropriate PPE and safe handling and disposal of sharps.

4.4 When the exposed person is a patient

On rare occasions, a patient may be inadvertently exposed to blood or body fluids from a HCW or another patient, either directly or indirectly. The same principles and management are to be applied as for OEs to HCWs. The nominated HCP should ensure the patient's medical team is informed of the exposure and the incident is disclosed to the patient and / or their guardian as soon as possible.

All HCFs are to ensure systems are in place for reporting, managing and documenting blood and body fluid exposure incidents that may occur from a HCW to a patient or patient-to-patient. HCWs have an obligation to care for the safety of others in the workplace, including patients, under both common law and the Work Health and Safety Act 2020.

5. Relevant legislation

1. Work Health and Safety Act 2020
2. Public Health Act 2016
3. Public Health Regulations 2017
4. Work Health and Safety (General) Regulations 2022
5. National Occupational Health and Safety Commission Act 1985
6. National Code of Practice for the Control of Work-related Exposure to Hepatitis and HIV (Blood-borne) Viruses [NOHSC:2010(2003)]

6. Additional resources

1. National Health and Medical Research Council (NHMRC) Guidelines for the Prevention and Control of Infections in Healthcare: https://www.nhmrc.gov.au/about-us/publications/australian-guidelines-prevention-and-control-infection-healthcare-2019
2. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) website: https://www.ashm.org.au/
3. Communicable Diseases Network Australia (CDNA) Series of National Guidelines for hepatitis B, hepatitis C and human immunodeficiency virus: https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdnasongs.htm
4. Centers for Disease Control and Prevention (CDC) Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for postexposure prophylaxis: https://stacks.cdc.gov/view/cdc/20711
5. Australian Commission on Safety and Quality in Health Care Preventing and managing occupational exposure eLearning module: https://www.safetyandquality.gov.au/our-work/infection-prevention-and-control/hand-hygiene-and-infection-prevention-and-control-elearning-modules/infection-prevention-and-control-advanced-education-elearning-modules

7. Guideline contact

Enquiries relating to this Guideline may be directed to:
Infection Prevention Policy and Surveillance Unit (IPPSU)
Communicable Disease Control Directorate
email: ippsu@health.wa.gov.au

8. Document control

Guideline	Version	Published	Review date	Amendments
0008	V.1	09/05/2022	May 2025	Original version
0008	V.2	19/04/2024	April 2027	Review with publication of updated ASHM Guidelines. Updated information on testing.
0008	V.2.1	30/10/2024	April 2027	Clarification of management of recipient if unknown exposure source.

9. Approval

Approved by	Dr Paul Armstrong, Director Communicable Disease Control Directorate, Department of Health
Approval date	10/04/2024

10. References / bibliography

1. Australian Technical Advisory Group on Immunisation (ATAGI). Australian Immunisation Handbook: Table. Post-exposure prophylaxis for non-immune people exposed to a source that is positive for hepatitis B surface antigen or has an unknown status [Internet]. Canberra (ACT): Australian Government Department of Health and Aged Care; 2023 [cited 2024 Jan 04]. Available from: https://immunisationhandbook.health.gov.au/resources/handbook-tables/table-post-exposure-prophylaxis-for-non-immune-people-exposed-to-a-source.
2. Richmond J, Hosking K. Infection control and occupational health. In: Australian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM): Matthews G, Elliott S, editors. B Positive: Hepatitis B for Primary Care [Internet]. 4th ed. Canberra (ACT): Australian Government Department of Health and Aged Care; 2022 [cited 2024 Jan 04]. Available from: https://www.hepatitisb.org.au/infection-control-and-occupational-health/.
3. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM). Post-Exposure Prophylaxis after non-occupational and occupational exposure to HIV: Australian National Guidelines [Internet]. 3rd ed. Sydney (NSW): Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine; 2023 [cited 2024 Jan 04]. Available from: https://pep.guidelines.org.au/.
4. Communicable Diseases Network Australia (CDNA). Australian National Guidelines for the Management of Healthcare Workers Living with Blood Borne Viruses and Healthcare Workers who Perform Exposure Prone Procedures at Risk of Exposure to Blood Borne Viruses [Internet]. Canberra (ACT): Australian Government Department of Health and Aged Care; 2019 [cited 2024 Jan 04]. Available from: https://www.health.gov.au/resources/publications/cdna-national-guidelines-healthcare-workers-living-with-blood-borne-viruses-perform-exposure-prone-procedures-at-risk-of-exposure-to-blood-borne-viruses?language=en.
5. Communicable Diseases Branch. Management of occupational exposure to blood and body fluids [Internet]. Brisbane (Queensland): Queensland Health; 2017 [cited 2024 Jan 04]. Available from: https://www.health.qld.gov.au/__data/assets/pdf_file/0016/151162/qh-gdl-321-8.pdf.

11. Appendices

Appendix A: Risk assessment and classification

The highest risk of transmission for any BBV is associated with:

- a deep injury with a device visibly contaminated with blood
- injuries associated with contaminated hollow bore needles
- a source patient with late-stage HIV infection or high viral load
- a source patient with HBV who is HBeAg positive, HBV DNA detectable or has a high viral load
- a source patient with HCV who is HCV RNA PCR detectable.

Table A1: Risk assessment and classification of occupational exposures

Classification and risk	Assessment
Massive exposure – high risk	• Injection of large volume of blood or body fluid i.e. >1ml. • Parenteral exposure to laboratory specimens containing high titre of virus.
Definite exposure – moderate risk	• Skin penetrating injury with a needle contaminated with blood or body fluid. • Injection of blood or body fluid <1ml. • Laceration or similar wound which causes bleeding and is produced by an instrument that is visibly contaminated with blood or body fluid. • In laboratory settings, any direct inoculation with material likely to contain HIV, HBV or HCV.
Possible exposure – low risk	• Intradermal (superficial) injury with a needle contaminated with blood or body fluid. • A wound not associated with visible bleeding, caused by an instrument contaminated with blood or body fluid. • Prior wound or skin lesion contaminated with blood or body fluid. • Mucous membrane or conjunctival contact with blood or body fluid. • Scratched/broken skin caused by a fingernail injury when there is blood evident on the source hands. • Human bites that break the skin – the clinical evaluation should include the possibility that both the person bitten and the person who inflicted the bite were exposed to BBVs.
Doubtful exposure – very low risk	• Intradermal (superficial) injury with a needle unlikely to be contaminated with blood or body fluid . • Superficial wound not associated with visible bleeding, caused by an instrument considered not to be contaminated with blood or body fluid. • Prior wound or skin lesion contaminated with a body fluid other than blood e.g. urine. • Mucous membrane or conjunctival contact with a body fluid other than blood.
Non-exposure – no risk	• Intact skin visibly contaminated with blood or body fluid. • Needlestick with non-contaminated i.e. clean needle or sharp.

Appendix B: Exposure management

1. Immediate management of person exposed – 'recipient'

Immediately following exposure to blood or body fluids, the recipient is to:

1.1 Wash the wound or exposed skin thoroughly with soap and water or use an antiseptic wipe or skin cleanser. Apply a waterproof dressing as necessary and apply pressure if bleeding is still occurring. Do not squeeze or rub the injury site.

1.2 Rinse the eyes thoroughly (remove contact lenses), for at least 30 seconds, with water or normal saline. If blood or body fluids are sprayed into the mouth, spit out and then rinse the mouth with water several times.

1.3 If any clothing is contaminated, remove and shower if necessary.

1.4 The recipient should inform their supervisor or manager as soon as possible after the exposure so a timely risk assessment and follow-up can be undertaken.

2. Baseline blood-borne virus testing

2.1 Informed consent for blood-borne virus (BBV) testing must be obtained from, and pre-test counselling provided to, both the recipient and the source, prior to performing any baseline testing as described in Table B1.

2.2 In some instances, the source may have provided the HCF with written consent for BBV testing, at time of their admission. If written or verbal consent is unable to be obtained, then attempts should be made to obtain consent from the next-of-kin. If consent cannot be obtained at the time of the incident, delayed testing of the source should be considered.

2.3 Where the source is a neonate or an infant i.e. up to 6 months of age, it is preferable to collect the blood from the mother.

Table B1: Source and recipient baseline blood-borne virus testing

Testing	Baseline tests required	Rationale
Source (all cases)	HBsAg, HIV Ag/Ab and HCV Ab	Evidence of disease
If source known positive HCV Ab	Add HCV RNA	Determine viral load / degree infectivity
If source known positive HBsAg	Add HBeAg and quantitative HBV DNA	
If indicated by risk assessment	Add syphilis serology[1]	
Recipient (all cases)	HBsAb, HIV Ag/Ab and HCV Ab[2]	Evidence of HBV immunity and baseline record of results
If indicated by risk assessment	Add syphilis serology[1]	
If source known HBV, HCV or HIV positive	Add liver function tests (LFTs)	Baseline record of liver function
If recipient known non-responder to hepatitis B vaccine but HBV status (prior infection) unknown	Add HBsAg, HBcAb	Evidence of pre-existing HBV infection

Notes:

1. Given increasing rates of syphilis in WA, consider testing the source and recipient as indicated by history and risk assessment (e.g. within gynaecology and obstetric units). Positive syphilis serology should be discussed with an infectious diseases physician or clinical microbiologist.
2. A positive HCV Ab should be followed up with a HCV RNA PCR test.

3. Management of source following baseline blood-borne virus testing

3.1 The medical team caring for the source patient should be notified prior to any baseline testing being performed.

3.2 If the source is BBV positive and is not already in the care of an appropriate medical specialist, referral by the treating medical practitioner is required.

3.3 Testing of needles or other sharp objects implicated in an exposure is not recommended. The reliability of findings in such circumstances is unknown and the practice poses additional risks to the persons handling them.

3.4 Table B2 outlines the management of OEs dependant on the source status.

Table B2: Management of source based on baseline testing results

Source results	Management
Negative for BBV	• If negative for HBV, HCV and HIV, further testing not required unless there is reason to suspect the source was involved in recent high-risk behaviours for BBV infection. • Follow-up can be undertaken through the source's general practitioner (GP) if required.
Positive for BBV	• Pre-test counselling should include the need for further testing should a source return a positive result.
Likely to be positive for BBV	• If suspected that the source is in the "serological window period" for a BBV, provide appropriate counselling. • Seek consent to follow up source at appropriate intervals i.e. 6 weeks and 12 weeks, to ascertain evidence of disease.

4. Management of recipient following baseline blood-borne virus testing

4.1 The nominated HCP is to discuss test results and have a post-test counselling conversation with the recipient.

4.2 If the recipient is found on baseline testing to be infected with a BBV and is not already in the care of an appropriate medical specialist, they should be referred as soon as possible. Management of a HCW known to be infected with a BBV must be in accordance with the Australian National Guidelines for the Management of Healthcare Workers Living with Blood Borne Viruses and Healthcare Workers who Perform Exposure Prone Procedures at Risk of Exposure to Blood Borne Viruses.

4.3 It is strongly recommended that recipients of OEs attend all follow-up appointments organised by the HCP. Recipients may opt to attend their own GP for follow-up.

4.4 For an unknown exposure source or if the source is unable to be tested, the probable risk of the source being positive must be assessed from historical and epidemiological information when considering management of the exposed HCW. This will depend on the type of exposure – refer to Appendix A and the prevalence of HBV, HCV and HIV in the community from which the source came.

4.5 If the source is negative on baseline testing for all BBVs, the recipient should be offered follow-up testing at 3 months. No further follow-up of the source is required. No behavioural or work practice modifications are required by the HCW.

4.6 If there is a high risk of the source being infected with a BBV, then the HCW is to be managed in accordance with a source positive approach.

5. BBV-specific management of recipient for a positive or likely positive source

5.1 Source positive for HBV or likely to be positive

5.1.1 If the recipient has a documented protective response i.e. anti-HBs level ≥10 IU/L, at any time following completion of a vaccination course, then they are considered immune to hepatitis B and no further action (PEP) is required regardless of the exposure. If the recipient is considered non-immune and the source is positive or potentially positive for HBV, they should be managed in line with the recommendations in Table B3.

5.1.2 No modifications to the recipient's HCW role are required based solely on exposure to HBV positive blood, however, those recipients who perform EPPs may require testing more frequently. They should be advised to:

- not donate plasma, blood, body tissue, breast milk or sperm
- seek medical advice regarding pregnancy and breastfeeding
- adopt safe sexual practices during the follow-up period
- seek medical attention if they develop signs and/or symptoms of acute hepatitis.

5.1.3 Any recipient who is non-immune for HBV or a known non-responder to the HBV vaccine should be reviewed by a physician with expertise in viral hepatitis and followed up in accordance with Table B4.

Table B3: Recommended HBV post-exposure prophylaxis

Recipient status	Post exposure prophylaxis
Unvaccinated	Administer HBIG[1] as a single dose within 72 hours of exposure **and** initiate hepatitis B vaccination within 7 days and at 1 and 6 months after first dose
Previously vaccinated BUT known NON-responder[2]	Administer HBIG[1] as a single dose within 72 hours of exposure Offer further HBV vaccination doses and follow-up with HBsAg as per the Australian Immunisation Handbook
Previously vaccinated BUT response unknown / vaccination incomplete	If HBsAb < 10 IU/L administer HBIG[1] as a single dose within 72 hours of exposure **and** initiate / complete hepatitis B vaccination within 7 days[3] If HBsAb ≥ 10 IU/L no treatment is required
Previously vaccinated known responder with documented HBsAb level ≥10 IU/L at any time	No treatment required
Known HBV positive (current or past infection)	Persons previously infected with HBV do not require PEP

Notes:

1. Dose of HBIG is 400 IU by intramuscular injection (or 100 IU if body weight < 30kg). HBsAb response should be tested when passively acquired antibody from HBIG is no longer detectable (4-5 months).
2. Non-responders are persons who do not respond to the primary vaccination course, and in whom chronic HBV infection has been excluded.
3. Review vaccination history and administer additional doses of HBV vaccine at 1 month and 6 months after first dose if required. Re-test for HBsAb 4-6 weeks post completion of course.

5.2 Source positive for HCV or likely to be positive

5.2.1 Currently there is no prophylaxis proven to be effective in altering the likelihood of HCV transmission. Immunoglobulin and antiretrovirals are not recommended for use as PEP after exposure to HCV-positive blood. The recipient is to be reviewed and counselled by a physician with expertise in viral hepatitis as soon as possible.

5.2.2 The recipient is to have follow-up testing as per Table B4.

5.2.3 The recipient should be advised that during the follow-up period they should refrain from donating plasma, blood, organs, body tissue, breast milk or sperm. The recipient is not required to modify sexual practices or refrain from becoming pregnant or breastfeeding.

5.2.4 No modifications to a recipient's patient care responsibilities are required based solely on exposure to HCV positive blood, however those recipients who perform EPPs may require more frequent testing.

5.2.5 The recipient is to be advised to seek medical attention if they become unwell with symptoms consistent with acute hepatitis such as nausea, vomiting, abdominal discomfort or jaundice.

5.2.6 If the recipient becomes HCV Ab or HCV RNA PCR positive, promptly refer the HCW to a specialist in viral hepatitis for monitoring and possible treatment.

5.2.7 Ongoing support must be provided for the duration of post-exposure follow-up and be extended to the recipient's significant others as required.

5.3 Source positive for HIV or likely to be positive

5.3.1 Any recipient exposed to a known HIV positive source is to be referred immediately to a physician with expertise in managing HIV infection for consideration of initiation of HIV PEP. Physician contact details, PEP drug regimens and indications for PEP are described in Appendix C Tables C1, C2 and C3.

5.3.2 The decision to commence HIV PEP is based on the type of exposure and the risk associated with that exposure, source characteristics such as stage of HIV infection, viral load and antiretroviral treatment history as per Table C3.

5.3.3 The recipient is to have a full medical assessment as soon as possible after their exposure, taking note of factors that may influence HIV PEP selection and made aware of symptoms of seroconversion. All women with the potential to be pregnant on presentation for PEP should be offered pregnancy testing.

5.3.4 If HIV PEP is indicated, it should be commenced as soon as possible following the exposure, preferably within 1-2 hours and no longer than 72 hours.

5.3.5 Recipients who are prescribed HIV PEP must be informed of the uncertain efficacy of this intervention, the importance of adherence to the regime and the potential adverse effects associated with a 28-day course of antiretroviral medication.

5.3.6 The recipient must be fully informed of the symptoms associated with HIV seroconversion e.g. fever, rash, myalgia or lymphadenopathy and advised to report as soon as possible to their treating physician if any symptoms occur.

5.3.7 Irrespective of the decision to take HIV PEP, or the type of exposure, the recipient is to have follow-up testing as per Table B4.

5.3.8 During the follow-up period the recipient should be advised to:

- refrain from donating plasma or blood for a period of 12 months
- refrain from donating body tissue, breast milk or semen
- exercise sexual abstinence or use condoms to protect sexual partners and avoid pregnancy
- not share razors, toothbrushes, or other possible sources of BBV transmission
- cover open cuts and wounds with a waterproof dressing.

5.3.9 No modifications to a recipient's role are required based solely on exposure to HIV positive blood, however those recipients who perform EPPs may require testing more frequently.

5.3.10 Support for the recipient must be continued for the duration of the post-exposure follow-up period. Support should be extended to family and other intimate contacts of the recipient.

Table B4: Recipient follow-up testing recommendations

Source	Follow-up testing recommendations
HBV positive and non-immune recipient	• LFTs at 6 weeks and 12 weeks • HBsAg at 12 weeks and 24 weeks (may give a false positive if tested within 2 weeks of giving hepatitis B vaccine) • HBsAb at 4-6 weeks post vaccination or delay for 4-5 months if HBIG administered (refer to Table B3)
HCV positive	• HCV RNA PCR at 4, 8 and 12 weeks post exposure • HCV antibody at 12 weeks and 24 weeks
HIV positive	• HIV antibodies at 4-6 weeks and 12 weeks post exposure

6. Availability of antiretroviral drugs

6.1 All HCFs are responsible for ensuring that the recommended HIV PEP (starter pack or full 28-day course) can be accessed to enable administration of the drugs as soon as possible after presentation, and no longer than 72 hours after of an exposure.

6.2 Smaller HCFs, including regional HCFs, are to have a documented process in place for obtaining HIV PEP, when prescribed, from a tertiary facility or a regional resource centre that ensures availability within 12-24 hours of request.

6.3 Follow-up arrangements with a physician with expertise in managing HIV, must be made for the HCW within 7 days of the exposure to ensure appropriate follow-up / access to ongoing supply of HIV PEP as required.

Appendix C: HIV specialists and post-exposure prophylaxis

Table C1: Specialist contact details for HIV post-exposure prophylaxis advice

Facility	Contact number	Who to contact
Fiona Stanley Hospital *Infectious Diseases Department*	**(08) 6152 6744**	**HIV Service** **Infectious Diseases Physicians**
Royal Perth Hospital *Clinical Immunology Department*	**(08) 9224 2899**	**Clinical Immunology Registrar** (Monday to Friday)
	(08) 9224 2244	**Page on-call Immunology Registrar** (Weekends, low activity days, public holidays and after hours)
Sir Charles Gairdner Hospital *Immunology Department*	**(08) 6457 3333**	**Clinical Immunology Registrar** (Monday to Friday) **Page on-call Immunology Registrar** (Weekends, public holidays and after hours)

Table C2: Drugs commonly prescribed in HIV post-exposure prophylaxis

WA Health recommendation	
Two-drug regimen	Tenofovir disoproxil fumarate 300mg / emtricitabine 200mg One (1) Tablet Daily
Three-drug regimen	Tenofovir disoproxil fumarate 300mg / emtricitabine 200mg One (1) Tablet Daily **AND** Dolutegravir 50mg One (1) Tablet Daily

Note: ASHM lists raltegravir 1200mg daily as a possible alternative to dolutegravir in the three-drug regimen in the third edition of the Australian National Guidelines for Post-Exposure Prophylaxis after non-occupational and occupational exposure to HIV. However, dolutegravir is listed as the preferred third drug for use with tenofovir and emtricitabine in the WA Statewide Medicines Formulary.

Table C3: Recommendations for post-exposure prophylaxis after exposure to a known HIV positive source

Type of exposure	Estimated risk of transmission of HIV by exposure type	PEP recommendation	
		Source not on treatment or on treatment with detectable or UNKNOWN viral load	Source viral load KNOWN to be undetectable
Needle stick injury or another sharps exposure (percutaneous)	1/440	3 drugs	Consider 2 drugs
Mucous membrane and non-intact skin exposure	<1/1000	3 drugs	Consider 2 drugs
Non-blood-stained urine, saliva, faeces	Not quantifiable (negligible risk)	Not recommended	

Notes:

1. The ASHM Australian National Guidelines for Post-Exposure Prophylaxis after non-occupational and occupational exposure to HIV advise that the complete 28-day course of PEP should generally be prescribed.
2. Starter packs remain an option in some settings e.g. emergency departments. Starter packs should contain sufficient drugs for 7 days, and follow-up with a HIV medical specialist must be made for the HCW within 7 days to facilitate further supplies.

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