



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 / 4 May 2022

[health.wa.gov.au](http://health.wa.gov.au)

*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.

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## 1. Definitions / Acronyms

Term / Acronym	Definition
ALT	Alanine aminotransferase is an enzyme commonly found in the liver. Used as a marker to monitor liver health post exposure to HCV positive blood.
Blood-borne viruses (BBVs)	Hepatitis B virus, hepatitis C virus and human immunodeficiency virus
Exposure-prone procedure	A subset of invasive procedures where there is potential for contact between skin of the HCW 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
HCV	Hepatitis C virus
HCV RNA PCR	Detects HCV viremia
HIV	Human Immunodeficiency virus
HIV Ab	Human Immunodeficiency virus 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.
Healthcare facilities (HCF)	Any facility providing a healthcare service, private or public, including ambulance and primary care services and healthcare organisations providing care in the home in Western Australia.
Healthcare provider (HCP)	An appropriately trained and qualified HCW responsible for the management of occupational exposures to blood or body fluids.
Healthcare worker (HCW)	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.
Liver function test (LFT)	A biochemistry test that determines liver function.

Non-parenteral exposure	Contamination of mucous membranes e.g. eyes, mouth, non-intact skin with blood or body fluids.
Non-responder HBV vaccine	A non-responder is 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. Persons who do not respond to the primary vaccination course, and in whom chronic HBV infection has been excluded, should be offered further HBV vaccination doses as per the Australian Immunisation Handbook, current edition.
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 BBV.
Parenteral exposure	Piercing of skin or mucous membrane with a sharp that is contaminated with blood or body fluids
PCR	Polymerase chain reaction
Post exposure prophylaxis (PEP)	Administration of drugs 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
SEMD	Safety engineered medical devices
Sharp	Any object capable of inflicting a penetrating injury
Source	The person from whom the blood or body fluids originated from
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 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 for human immunodeficiency virus (HIV) please refer to the [National Guidelines](#).

### 3. Introduction / Background

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

Generally, HCWs who sustain an OE have a low risk of contracting a BBV (refer 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 Appendix A).

Standard infection prevention practices e.g. protective eyewear to prevent mucosal and ocular splashes, use of safety engineered medical devices (SEMD) and safe disposal of sharps to prevent parenteral exposures should be promoted and compliance monitored in all 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 developing a BBV following an occupational exposure**

Virus	Source Blood	Estimated risk of Transmission*	Comments
HBV	HBsAg positive and HBeAg negative	1 – 6% when recipient non-immune	The risk of HBV infection is primarily related to the degree of contact with blood and to the HBeAg status of the source person
	HBsAg positive and HBeAg positive	22 – 31% when recipient non-immune	
HCV	HCV RNA PCR positive	1.8% (range 0% - 7%) **	Percutaneous exposure
		Rare	Mucosal exposure
HIV	HIV Ab positive	0.27 % if source not on antiviral treatment with a detectable viral load.	Following percutaneous exposure to blood.
		<0.01% if source not on antiviral treatment with a detectable viral load.	Following mucous membrane exposure to blood.

Adapted from: *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.*

\*Transmission risk is increased when exposed to high blood volume and high viral load.

\*\* CDC Guidelines – refer Supporting Information.

## 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 Appendix B). The following key principles are recommended for WA HCFs.

### 4.1 Executive Directors of each HCF 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 serology is documented.
- All HCWs receive education in standard infection prevention practices, and OE prevention strategies at induction, and ongoing, to maintain and update knowledge.
- 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 serology tests
  - documentation requirements for consent obtained from the source
  - the serology 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 post exposure prophylaxis (PEP), and of the pharmacy that stocks that HCF's PEP drugs.
- The HCW is supported with appropriate information, serology 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 serology tests.
- OEs are regularly reported at an Executive level and interventions are implemented, including the use of SEMDs 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 defining 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 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 serology 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 B2 and 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. 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

5.1 Western Australia Work Health and Safety Act 2020 and Occupational Safety and Health Regulations 1996

5.2 National Code of Practice for the Control of Work-related Exposure to Hepatitis and HIV (Bloodborne) Viruses. [NOHSC: 2010 (2003)].

5.3 Western Australia Public Health Act 2016 and the Public Health Regulations 2017.

## 6. Additional Resources

6.1 Australian Guidelines for the Prevention and Control of Infections in Healthcare. NHMRC <https://www.nhmrc.gov.au/about-us/publications/australian-guidelines-prevention-and-control-infection-healthcare-2019>

6.2 Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) <https://www.ashm.org.au/HIV/PEP/>

6.3 Australian Government Department of Health, [Series of National Guidelines](#) for hepatitis B, hepatitis C and human immunodeficiency virus.

6.4 Centers for Disease Control and Prevention (CDC) [Updated US Public Health Service Guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. MMWR Recomm Rep. 2001;50\(1\):16](#)

## 7. Guideline Contact

Enquiries relating to this Guideline may be directed to:

Program: Infection Prevention Policy and Surveillance Unit (IPPSU)

Directorate: Communicable Disease Control Directorate

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## 8. Document Control

Guideline number	Version	Published	Review Date	Amendments
0008	V.1	9/5/2022	May 2025	Original version

## 9. Approval

<b>Approved by</b>	Dr Revle Bangor-Jones, Acting Director Communicable Disease Control Directorate, Department of Health
<b>Approval date</b>	05/05/2022

## 10. References / Bibliography

1. Australian Government. Australian Technical Advisory Group on Immunisation (ATAGI). The Australian Immunisation Handbook. Table. Post-exposure prophylaxis for non-immune people exposed to a source that is positive for hepatitis B surface antigen at: <https://immunisationhandbook.health.gov.au/resources/handbook-tables/table-post-exposure-prophylaxis-for-non-immune-people-exposed-to-a-source>
2. Australian Society for HIV Medicine (ASHM). B Positive. Hepatitis B for Primary Care. Occupational Health: privacy and confidentiality. Infection control and occupational health. <https://www.hepatitisb.org.au/infection-control-and-occupational-health/>
3. Australasian Society for HIV Medicine. Post-Exposure Prophylaxis after Non-Occupational and Occupational Exposure to HIV: Australian National Guidelines. Second Edition. [Internet] Australasian Society for HIV Medicine, August 2016. [cited 2021 Feb 25]; Available from: <https://www.ashm.org.au/products/product/978-1-920773-47-2>
4. Communicable Diseases Network Australia: 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. Australian Government Department of Health 2018. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-cdna-bloodborne.htm>
5. Queensland Health. Management of occupational exposure to blood and body fluids 2017.

## 11. Appendices

**11.1 Appendix A Risk assessment and classification of occupational exposures**

**11.2 Appendix B Exposure management**

**11.3 Appendix C Exposure management flow chart**

**11.4 Appendix D HIV Specialist and HIV post exposure prophylaxis**

## 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**

<b>Classification and Risk</b>	<b>Assessment</b>
<b>Massive Exposure - High Risk</b>	<ul style="list-style-type: none"> <li>• Injection of large volume of blood or body fluid (&gt;1ml).</li> <li>• Parenteral exposure to laboratory specimens containing high titre of virus.</li> </ul>
<b>Definite Exposure - Moderate Risk</b>	<ul style="list-style-type: none"> <li>• Skin penetrating injury with a needle contaminated with blood or body fluid.</li> <li>• Injection of blood or body fluid &lt; 1ml.</li> <li>• Laceration or similar wound which causes bleeding and is produced by an instrument that is visibly contaminated with blood or body fluid.</li> <li>• In laboratory settings, any direct inoculation with material likely to contain HIV, HBV or HCV.</li> </ul>
<b>Possible Exposure - Low Risk</b>	<ul style="list-style-type: none"> <li>• Intradermal (superficial) injury with a needle contaminated with blood or body fluid.</li> <li>• A wound not associated with visible bleeding, caused by an instrument contaminated with blood or body fluid.</li> <li>• Prior wound or skin lesion contaminated with blood or body fluid.</li> <li>• Mucous membrane or conjunctival contact with blood or body fluid.</li> <li>• Scratched/broken skin caused by a fingernail injury when there is blood evident on the source hands.</li> <li>• 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.</li> </ul>
<b>Doubtful Exposure - Very Low Risk</b>	<ul style="list-style-type: none"> <li>• Intradermal (superficial) injury with a needle considered not to be contaminated with blood or body fluid.</li> <li>• Superficial wound not associated with visible bleeding, caused by an instrument considered not to be contaminated with blood or body fluid.</li> <li>• Prior wound or skin lesion contaminated with a body fluid other than blood e.g. urine.</li> <li>• Mucous membrane or conjunctival contact with a body fluid other than blood.</li> </ul>
<b>Non-Exposure - No Risk</b>	<ul style="list-style-type: none"> <li>• Intact skin visibly contaminated with blood or body fluid.</li> <li>• Needlestick with non-contaminated (clean) needle or sharp.</li> </ul>

## 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. Blood borne virus (BBV) testing

- 2.1 Informed consent for BBV testing must be obtained from both the recipient and the source, prior to performing any baseline serology 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 (up to 6 months of age), it is preferable to collect the blood from the mother.

**Table B1 Source and recipient baseline serology testing**

Testing	Baseline tests required	Rationale
<b>Source</b>	HBsAg, HIV Ab, HCV Ab, syphilis serology if indicated*	Evidence of disease
<i>If Source known positive HCV Ab</i>	Add HCV-RNA	Determine viral load / degree infectivity
<i>If Source known positive HBsAg</i>	Add HBeAg and HBV quantitative PCR	
<b>Recipient</b>	HBsAb	Evidence of immunity
	HIV Ab, HCV Ab, syphilis serology if indicated *	Baseline results
<i>If Source positive HBV, HCV, HIV</i>	Add baseline LFT, ALT	Baseline liver function
<i>If Recipient is a known non-responder to hepatitis B vaccine and HBV status unknown</i>	Add HBsAg, HBcAb	Evidence of HBV infection

\* Given the increasing rates of syphilis in WA, testing source and recipient should be considered if indicated by history and risk assessment. Any positive syphilis serology should be discussed with an Infectious Disease Physician or Clinical Microbiologist.

### 3. Management of source

- 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**

Source results	Management
<b>Negative for BBV</b>	<ul style="list-style-type: none"><li>• 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.</li><li>• Follow-up can be undertaken through the source's GP if required.</li></ul>
<b>Positive for BBV</b>	<ul style="list-style-type: none"><li>• Pre-test counselling should include the need for further testing should a source return a positive result.</li><li>• Ensure additional testing as per Table B1 is ordered.</li></ul>
<b>Likely to be positive for BBV</b>	<ul style="list-style-type: none"><li>• If suspected that the source is in the "window period" for a BBV provide appropriate counselling</li><li>• Seek consent to follow-up source at appropriate intervals i.e. 6 weeks and 12 weeks, to ascertain evidence of disease.</li></ul>
<b>Unknown or unable to be tested</b>	<ul style="list-style-type: none"><li>• The probable risk of the source being positive must be assessed from historical and epidemiological information when considering management of the exposed HCW.</li><li>• 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.</li><li>• 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.</li></ul>

### 4. Management of recipient

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

## 5. Management of recipient – BBV specific

### 5.1 Source positive for HBV or likely to be positive

- 5.1.1 The recipient will be managed in line with the recommendations in Table B3.
- 5.1.2 No modifications to the recipient’s role are required, based solely on exposure to HBV positive blood.
- 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 PEP**

Recipient Status	Source HBsAg Positive or Unknown or Unable to be Tested
<b>Unvaccinated</b>	Administer HBIG* as a single dose within 72 hours of exposure <b>and</b> initiate hepatitis B vaccination within 7 days and at 1 and 6 months after 1 <sup>st</sup> dose.
<b>Previously Vaccinated BUT Known NON-Responder **</b>	Administer HBIG* as a single dose within 72 hours of exposure.
<b>Previously Vaccinated BUT response unknown / vaccination incomplete.</b>	If HBsAb < 10IU/L administer HBIG* as a single dose within 72 hours of exposure <b>and</b> initiate hepatitis B vaccination within 7 days***.  If HBsAb ≥10 IU/L no treatment is required.
<b>Previously Vaccinated Known responder with documented HBsAb level ≥10 IU/L at any time.</b>	No Treatment Required
<b>Known HBV positive</b>	Persons previously infected with HBV are immune to reinfection and do not require PEP
<ul style="list-style-type: none"> <li>• * Dose of HBIG: 400 IU by intramuscular injection (100IU if body weight &lt; 30kg). HBsAb response should be done when passively acquired antibody from HBIG is no longer detectable i.e. 4-5 months.</li> <li>• ** Non-responder: refer definition for non-responder to HBV vaccine</li> <li>• *** Review vaccination history and administer additional doses of HBV vaccine at 1 month and 6 months after 1<sup>st</sup> dose if required. Re-test for HBsAb 4-6 weeks post completion of course.</li> </ul>	

## **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 (IG) and antiretroviral 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 (Table B3).
- 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 positive and/or has an elevated ALT on subsequent testing, then HCV RNA testing should be performed.
- 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 an 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 D Tables D1, D2 and D3.
- 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 (Table D3).
- 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 HIV PEP or, if they choose not to have PEP, 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**

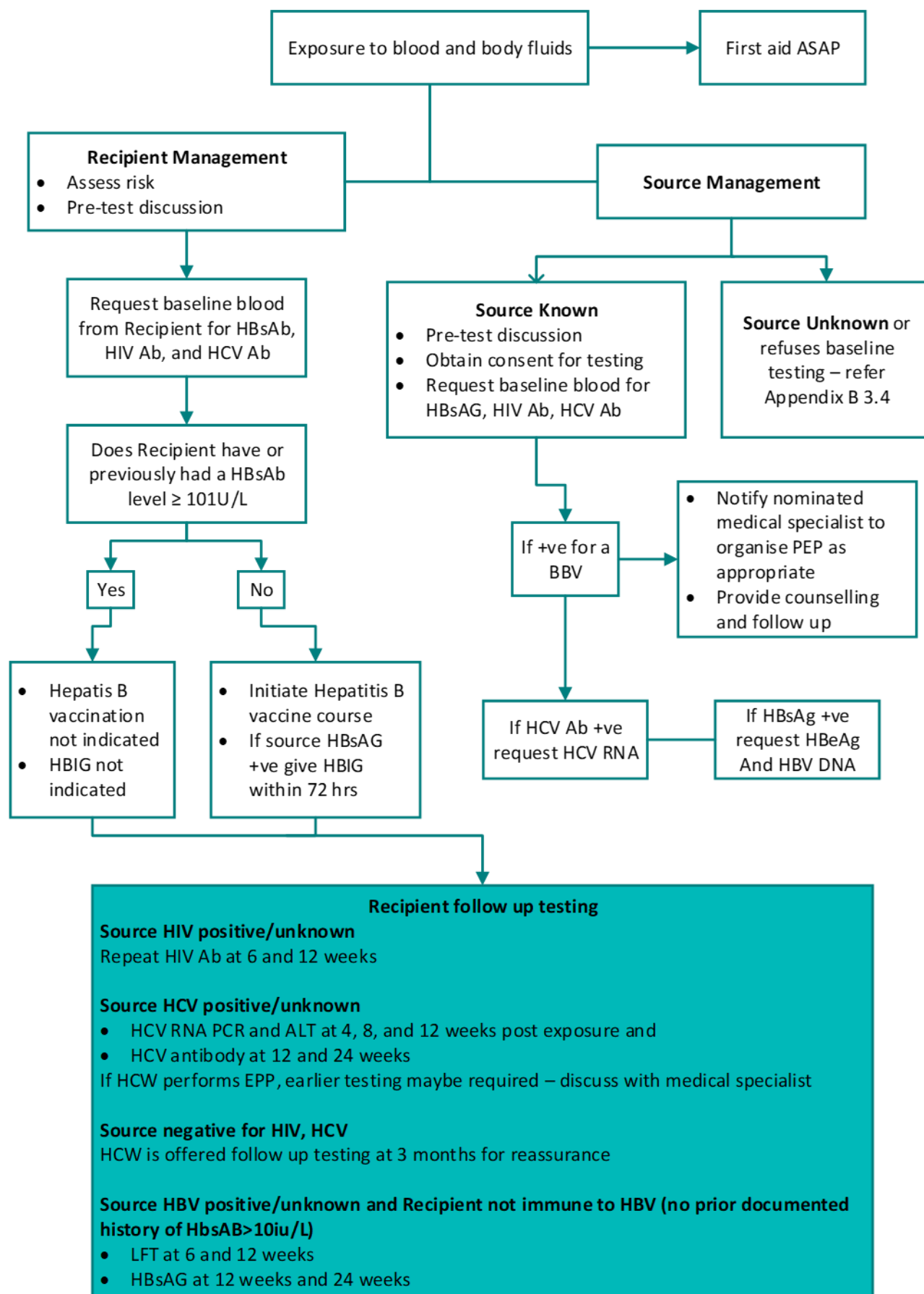
Source	Follow up Testing Recommendations
HBV positive and non-immune recipient	<ul style="list-style-type: none"> <li>• LFT at 6 weeks and 12 weeks.</li> <li>• HBsAg at 12 weeks and 24 weeks (may give a false positive if tested within 2 weeks of giving Hepatitis B vaccine).</li> <li>• HBsAb at 4-6 weeks post vaccination or delay for 4-5 months if HBIG administered (refer Table B3)</li> </ul>
HCV positive	<ul style="list-style-type: none"> <li>• HCV RNA PCR and ALT at 4, 8, and 12 weeks post exposure.</li> <li>• HCV antibody at 12 and 24 weeks.</li> </ul>
HIV positive	<ul style="list-style-type: none"> <li>• HIV antibodies at 4-6 weeks and at 12 weeks post exposure.</li> </ul>

## 6. Availability of antiretroviral starter packs

- 6.1 All HCFs are responsible for ensuring that the recommended HIV PEP starter packs 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 Exposure Management Flow Chart



## Appendix D HIV Specialist and HIV Post Exposure Prophylaxis

**Table D1 HIV Specialist Contact Details for HIV PEP Advice**

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

**Table D2 Drugs Commonly Prescribed in HIV PEP**

WA Health recommends	
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

**Table D3 Recommendations for PEP after exposure to a known HIV positive source**

Type of exposure	Estimated risk of transmission of HIV by exposure type	PEP Recommendation		Comments
		Source not on treatment or on treatment with detectable or UNKNOWN viral load	Source viral load KNOWN to be undetectable	
<b>Needle stick Injury or another sharps exposure (Percutaneous)</b>	1/440	3 drugs	Consider 2 drugs	Starter packs to contain sufficient drugs for 7 days.  Follow up with HIV medical specialist must be made for the HCW within 7 days to facilitate further supplies.
<b>Mucous membrane and non-intact skin exposure</b>	<1/1000	3 drugs	Consider 2 drugs	A 28-day course of PEP is recommended.
<b>Non-blood-stained urine, saliva, faeces</b>	Not quantifiable (negligible risk)	Not Recommended		

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on request for a person with disability.**

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**Management of Occupational Exposure to Blood or Body Fluid in the Healthcare Setting**