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## 1.0 INTRODUCTION

This document focuses on providing guidance for healthcare workers (HCWs) on the assessment of risk and management of persons potentially exposed to hepatitis B virus (HBV), hepatitis C virus (HCV) and Human Immunodeficiency Virus (HIV) transmission, through contact with blood and body fluids (BBF) in a healthcare or community setting.

### *Practitioner Alert!*

These guidelines are applicable to situations of sexual assault and potential BBF exposures involving healthcare workers.

For guidance on the handling of exposures outside the parameters of this document (e.g., community acquired needlestick injuries) also refer to the [BCCDC Communicable Disease Control Manual](#), [BC Centre for Excellence in HIV/AIDS \(BC-CfE\) guidelines](#) and [BC Women's Hospital Sexual Assault Service](#) resources.

For additional information on managing BBF exposures (BBFE) in survivors of sexual assault (e.g., STI screening, pregnancy prevention and medico-legal options) refer to:

- [BC Women's Hospital Sexual Assault Service](#) resources
- [The BCCDC Non Certified Practice Decision Support Tool for Prophylaxis Post Sexual Assault](#)

## 1.1 Goals

To support HCWs with information to reduce the transmission of bloodborne viruses by providing appropriate risk assessment and clinical management recommendations in persons exposed to BBF in a healthcare or community setting. Using principles of health equity, trauma informed practice and cultural safety to:

1. Assess the risk of exposure.
2. Test the exposed and source person.
3. Administer post-exposure prophylaxis (PEP) when appropriate to prevent the development of HIV and/or HBV infection.
4. Counsel to address anxiety, encourage follow-up testing and prevent further transmission.

**Post-exposure management must be undertaken when the following conditions are present:**

- Percutaneous/parenteral exposure through a needlestick, scratch or shared intravenous drug use (IDU) equipment.
- Permucosal contact or contact with damaged skin.
- BBFE is from a source that is either known to be infectious (has detectable viral load) or may be potentially infectious.
- The exposed person is known or considered to be at risk for HBV, HCV or HIV.



## 2.0 DEFINITIONS

**Bloodborne pathogen** - Any pathogen that can be transmitted from one person to another via blood or other body fluids. Likelihood of transmission is dependent on the pathogen, the type of body fluid and the nature of the exposure.

**Blood or body fluid (BBF) exposure** - An event where a person is exposed to potentially infectious blood or bodily fluids through one of the following exposures:

- **Percutaneous:** Puncture of skin by needlestick or another sharp object.
- **Per mucosal:** Contact with mucous membranes.
- **Non-intact skin:** Eczema, scratches, and damaged skin.

**Hepatitis B Immune Globulin (HBIG)** – Passive immunoprophylaxis used in combination with hepatitis B vaccine to prevent mother-to-infant transmission and in certain other post-exposure scenarios:

- Prepared as a solution of hepatitis B Ig for intra-muscular administration.
- Waning anti-HBs levels can be detected up to 6 months later.
- Most effective if given within 48 hours, but may be given up to 7 days following percutaneous exposure and 14 days following per mucosal exposure.

**Settings and scenarios where transmission could be more likely** –

- Settings or communities with an established high prevalence of HBV, HCV and HIV (e.g., supervised consumption sites, acute care drug and alcohol treatment clinics).
- Scenarios where the source person is thought to be at higher acquisition risk for HBV, HCV and/or HIV infection (e.g., sexual assault involving a person engaging in IDU).

**Post-exposure prophylaxis (PEP)** –

- **HBV:** Hepatitis B vaccine and [HBIG](#) can provide susceptible individuals with protection from HBV infection after exposure to HBV in certain scenarios when given within a certain timeframe. An assessment of the type of transmission event, and if available, the immunization histories and serologic testing of the source and exposed persons, will help guide the decision as to whether or not PEP is indicated.
- **HCV:** There is currently no PEP available.
- **HIV:** The use of antiretrovirals after a single high-risk event to prevent HIV seroconversion. Most effective if started within 72 hours of exposure, ideally within 2 hours.

**Susceptibility – a person is considered susceptible to:**

- **HBV**, if they have no history of protective anti-HBs  $\geq 10$  IU/L level following a complete hepatitis B vaccine series OR no history of a prior natural HBV infection.
- **HCV**, if they do not have a current HCV infection. Reinfection can occur.
- **HIV**, if they have no history of HIV infection.

**Window period** – duration of time between infection and laboratory detection of infection



## 3.0 MANAGEMENT OF A PERSON WITH A BBF EXPOSURE

### 3.1 Initial follow-up care

**Needlestick/wound:** Allow the wound to bleed freely

- Do not promote bleeding by squeezing the wound. This may damage the tissues and increase uptake of any pathogen(s).
- Wash well with soap and water

**Mucous membrane or eye:** Irrigate with water or normal saline

**Skin:** Wash well with soap and water

- Do not apply bleach to wound or mucosa

### 3.2 Risk Assessment

A risk assessment should be done as soon as possible to determine the type of transmission event and to review available immunization histories and lab results of the source and exposed persons. This will guide the decision as to whether or not PEP is indicated, and what type of lab tests need to be ordered.

#### 3.2.1 Transmission

Assessment of the exposed person includes hepatitis B vaccine history and immune status, and personal risks for HCV and HIV. For complete lists of potential risk factors, refer to the [BCCDC CDC Manual](#).

#### Common Transmission Pathways for HBV, HCV and HIV

- Condomless sex, multiple partners
- History of IDU
- History of dialysis
- Immigration from an endemic country
- Tattooing, body piercing, electrolysis or acupuncture in unregulated premises

#### Hepatitis B

The risk of developing HBV infection following exposure is extremely low. Approximately 95% of immune competent adults who acquire an initial HBV infection will spontaneously clear the infection within 6 months. The majority of BC's population under the age of 35 has been vaccinated since the introduction of a grade 6 hepatitis B immunization program in 1992 and a universal hepatitis B infant program in 2001. Most HCW's have undergone HBV testing and vaccination related to workplace screening. If not fully immunized, hepatitis B vaccine and [HBV Ig](#) (if indicated) are very effective HBV PEP.

HBV can be spread through percutaneous or permucosal contact with infected BBFs. Acquisition risk factors for HBV include:

- Immigration from an HBV endemic country
- Potential exposure to a person known to be infected with HBV
- History of multiple transfusions of blood or blood products prior to January 1970
- A sexual partner of a person who injects drugs (PWID) or who has a HBV infection

If the exposed person has documentation of immunity after completion of a full hepatitis B vaccine series, the risk of HBV from a bloodborne exposure is virtually zero. In unvaccinated individuals, the risk of sexual or needlestick transmission is increased if the source has HBV DNA > 1000-2000 IU/mL.



## Hepatitis C

Immunization and PEP for HCV are not available. If an exposure leads to HCV infection, approximately 25% of infections clear spontaneously and > 95% of people can be cured with HCV treatment. HCV antibodies (anti-HCV) are not protective. It is possible to get reinfected after clearing an initial infection spontaneously or after HCV treatment.

HCV is mainly spread by percutaneous contact with infected blood. Acquisition risk factors for HCV include:

- Sharing of injection drug use equipment (sharing of equipment used to smoke/snort is lower risk)
- A history of multiple transfusions of blood or blood products in Canada prior to May 1992
- Sexual transmission is rare. The risk increases where blood may be present when engaging in activities with a partner who is a person who injects drugs and/or has HCV infection, and/or where blood may be present (e.g., receptive anal sex, group sex)

**Table 3-1. Blood and Body Fluids capable of transmitting bloodborne pathogens**

Fluid	HIV	HBV	HCV
Blood and body fluids visibly contaminated with blood	Yes	Yes	Yes
Semen	Yes	Yes	Yes, if blood is present
Vaginal/rectal secretions	Yes	Yes	Yes, if blood is present
Pleural, amniotic, pericardial, peritoneal, synovial and cerebrospinal fluids and inflammatory exudates (e.g., wound)	Yes	Yes	Yes
Saliva	No, unless contaminated with blood	Extremely low risk unless blood is present*	No, unless contaminated with blood
Transplanted tissue or organs	Yes	Yes	Yes
Breast milk	Yes, breastfeeding is <b>not</b> recommended	Plausible, if nipples are cracked or bleeding. Neonates given HBIg and hepatitis B vaccine are not at risk.	Plausible if nipples are cracked or bleeding, but the risk of transmission is very low. Breastfeeding is still recommended by HCV infected mothers.
Faeces, nasal secretions, sputum, sweat, tears, urine vomitus	No, unless they contain visible blood		

\* HBV transmission via **casual** mucosal contact to saliva that is not visibly contaminated with blood is uncommon. Although HBV has been detected in saliva, reports involving HBV transmission when a person with HBV infection bites (i.e., percutaneous) someone who was unvaccinated for hepatitis B, have involved bloody saliva. Blood was more likely the means of transmission, not the saliva.



## HIV

Adherence to antiretroviral therapy (ART) can successfully suppress replication of the HIV virus, resulting in an undetectable viral load and likely negligible risk of transmission to others through bloodborne or sexual exposures. Viral loads are highest early in the acute stage of HIV infection, or in later stages of advanced HIV disease or AIDS.

Prompt administration of [PEP](#) in the exposed person can significantly reduce the risk of infection if the source person has a detectable viral load.

HIV can be spread through specific contact with certain infected blood and body fluids. Acquisition risk factors for HIV include:

- History of multiple blood transfusions or blood products prior to November 1985
- A sexual partner who engages in IDU, is HIV-infected, and/or has a history of multiple transfusions of blood or blood products prior to November 1985
- A diagnosis of sexually transmitted infection(s)
- Exposure to a person known to be living with HIV infection, particularly when the viral load is high

For estimated risk of HIV transmission by exposure type, see the [BC-CfE HIV PEP Guidelines](#), the [BCCDC Guidelines for Medical Health Officers: approach to people with HIV/AIDS who may pose a risk of harm to others \(Appendix II\)](#), and the [BCCDC HIV Guidelines for Testing, Follow-up and Prevention](#) (Refer to table 1.1).

### 3.2.2 Needlestick injuries in a healthcare setting

The risk will vary depending on the site, the type, and the source of exposure (refer to [Table 3-2](#)). Transmission risk is increased with:

- Deep punctures
- Large, hollow bore needles containing blood
- High viral load of the source patient

For further information on occupational needlestick injuries and risk for HIV transmission, see the [Risk Assessment Stratification Protocol](#).

**Table 3-2: Risk of transmission from needlestick injuries where the source has detectable virus**

Source has detectable virus		Theoretical risk for transmission
HBV	HBsAg positive/ HBeAg positive	<ul style="list-style-type: none"> <li>• Virtually zero if exposed person previously vaccinated</li> <li>• 30% if the exposed person has not been previously vaccinated</li> </ul>
	HBsAg positive/ HBeAg negative	<ul style="list-style-type: none"> <li>• Virtually zero if exposed person previously vaccinated</li> <li>• 5-10% if the exposed person has not been previously vaccinated</li> </ul>
HCV		<ul style="list-style-type: none"> <li>• 2% (20 in 1000)</li> </ul>
HIV		<ul style="list-style-type: none"> <li>• 0.2% (2 per 1000 exposures)</li> </ul>



### 3.2.3 Consent

Positive test results for HBV and HCV will be reported to both the person's ordering provider and public health for follow-up.

Informed consent for HIV testing refers to the process of obtaining voluntary agreement for proposed care, treatment, or research. Conditions for consent include:

- The client has been adequately informed.
- The client is capable of giving or refusing consent.
- Consent is given voluntarily without coercion, fraud, or misrepresentation.

In BC, informed consent for HIV testing is the same as for any other diagnostic test. There is no requirement for written consent for HIV testing in BC. If a client is unable to provide consent and HIV testing is clinically indicated, usual clinical practices for ordering all necessary testing, including the use of Substitute Decision Makers, should be applied. Refer to the [BCCDC HIV Guidelines](#) for further information on testing and reporting.

### Refusal to provide consent

If the source person refuses to provide consent for testing, the following options are available:

- The source person's physician may be able to provide information.
- The [Emergency Intervention Disclosure Act of BC](#) allows for the application for a court order for testing if a person has come into contact with a person's bodily substance in any of the following circumstances:
  - While providing emergency health services.
  - While performing their duties as a fire fighter, emergency medical assistant or police or other peace officer.
  - When they have reason to believe that they have been the victim of an alleged offence under the Criminal Code of Canada, and have reported the matter to a law enforcement agency.

Do not delay the management of an exposed person if waiting to obtain a court order. Consult with local public health and/or the Medical Health Officer for your region for further guidance.

### 3.2.2 Assessment of exposed person

Assess for prior hepatitis B vaccine history and immune status. Confidentiality of information on the source and/or exposed person(s) must conform to current laws. Obtain verbal informed consent for:

- HBsAg, anti-HBs, anti-HBc Total, anti-HCV (or HCV RNA where appropriate) and HIV Ag/Ab.
- Disclosure of results to their follow-up healthcare provider, and if applicable, worksite occupational health department and WorkSafeBC.

For occupational health exposures:

- Complete the [HLTH 2339, Management of Percutaneous or Permucosal Exposure to Blood and Body Fluid/Laboratory Requisition](#) that includes information related to exposure, post-exposure treatment and laboratory testing.
- Arrange follow-up with the exposed person's physician or the physician designated by the healthcare facility, using the [HLTH 2340, Management of Percutaneous or Permucosal Exposure to Blood or Body Fluid Letter for Follow-Up Physician Form](#).

For triplicate copies of HLTH 2339 and 2340 forms, email the Distribution Centre Victoria, Warehousing and Asset Management Services, for an order form: [WAMS@gov.bc.ca](mailto:WAMS@gov.bc.ca).



### 3.2.4 Assessment of source person

Confidentiality of information on the source and/or exposed person(s) must conform to current laws. Obtain verbal informed consent for:

- HBsAg, anti-HBs, anti-HBc Total, anti-HCV (or HCV RNA where appropriate) and HIV Ag/Ab.
- Disclosure of results to their follow-up healthcare provider, and if applicable, worksite occupational health department and WorkSafeBC

Assessment of the source person includes hepatitis B vaccine history and immune status, and personal risks for HCV and/or HIV. If risk factors are present and/or they are infected with one or more of these viruses, post-exposure management for the exposed person should be considered.

Establish how the source individual will be contacted if any of their test results are positive. Encourage follow-up with their physician for results of baseline tests and if indicated, to obtain HBV vaccine.

Refer to [Section 3.2.1](#) for further information on transmission risk.

### 3.2.5 Source person is unknown

Assess the nature of the exposure to determine the risk of transmission. Refer to [table 3-1](#).

## 3.3 Laboratory testing

Baseline bloods should be collected from the exposed and source persons as soon as possible. Recommend pregnancy testing for people of childbearing age where appropriate.

The [HLTH 2339, Management of Percutaneous or Permucosal Exposure to Blood and Body Fluid/Laboratory Requisition](#) should be used as the lab requisition for all occupational health exposures. The [BCCDC PHL serology lab requisition](#) can be used for non-occupational health exposures. Refer to [Appendix 4](#) for annotated guidance on how to complete the lab requisition.

#### *Practitioner Alert!*

The use of HIV [PEP](#), [HBIg](#), hepatitis B vaccine, or a positive baseline result will alter recommendations and timelines for testing. Refer to the HBV, HCV and HIV guidelines in the [BCCDC CD manual](#).

Table 3-3: Summary of recommended lab testing if testing negative at baseline

Time since exposure	Exposed person at risk for			Rationale for testing
	HIV	HCV	HBV	
Baseline, ASAP	HIV Ag/Ab	Anti-HCV Collect both SST & EDTA tubes	HBsAg, anti-HBs & anti-HBc Total	To check baseline status. Negative test results suggest no prior infection and are essential in informing possible PEP follow-up.
3 weeks	HIV Ag/Ab	HCV RNA	Refer to <a href="#">Appendix 2</a> for follow-up testing recommendations	Early identification can prevent further transmission and encourage engagement into care
6 weeks	HIV Ag/Ab			
3 months	HIV Ag/Ab	Anti-HCV		



See [Table 3-3](#) for recommended lab testing, and [Appendices 1, 2 and 3](#) for recommended sequence of lab testing and PEP administration. If test results return positive at any point, refer individuals to health care providers with experience in infectious diseases or specialists for further testing and follow-up care.

Refer to [Table 3-4](#) for [window periods](#) for BBF exposure testing and [Table 3-5](#) for laboratory contact information.

**Table 3-4: Window Periods for HBV, HCV and HIV**

Virus	Test	Window Period
Hepatitis B	HBV Surface Antigen (HBsAg)	4 to 12 weeks
Hepatitis C	HCV antibody (Anti-HCV)	5 to 10 weeks
	HCV RNA	1 to 3 weeks
HIV	HIV Ag/Ab (Serology)	2 to 3 weeks
	HIV Point-of-Care (POC)	3 to 4 weeks

**Table 3-5 Laboratory contact information**

Lab contact	Telephone number
BCCDC Public Health Laboratory Client Services	1-877-747-2522 (daytime)
On-call BCCDC PHL Medical Microbiologist, available after-hours to facilitate shipment, testing and reporting of results	604-661-7033 (after-hours)
Providence Health Care (PHC) Diagnostic and Virology Reference Laboratory	604-806-8420
Victoria General Hospital Laboratory	250-727-4212

### 3.3.1 HIV Point-of-care Testing

A point-of-care HIV (HIV POC) test can be used to obtain preliminary results. This can be useful in when testing persons at [high risk](#) for HIV infection, who have not been tested within the prior 3 months.

- Even if the HIV POC test is negative for the **exposed** person, [PEP](#) should be given in a [high-risk](#) exposure situation until confirmatory testing is completed.
- If the HIV POC result for the **source** person is:
  - **Negative** (and testing is not within the [window period](#)): PEP is not required
  - **Positive**: PEP should be provided until confirmatory testing is done
- Positive HIV POC test results are considered preliminary positive results. A blood sample by venipuncture on the source person is required for confirmation by the BCCDC PHL

For further information on HIV POC testing, refer to the [BCCDC CDC Manual – Chapter 5: HIV Guidelines for Testing, Follow-up and Prevention, Appendix C: Point of Care HIV Test Guidelines for Health Care Settings](#) and the [BCCDC POC HIV Testing Program website](#).



### 3.4 Record Processing

For occupational health exposures, there are multiple copies of the [HLTH 2339](#) and [2340](#) forms (refer to [tables 3-5](#) and [3-6](#)). Risk assessment and management documentation should be recorded in the exposed person's chart, the emergency record, or the electronic charting system used by Public Health.

#### 1. Management of Percutaneous or Permucosal Exposure to Blood and Body Fluid/Laboratory Requisition Form ([HLTH 2339](#))

Table 3-6. Record processing for HLTH 2339

HLTH 2339 copy	Destination
White (page 1)	The laboratory performing the testing on the source and/or exposed person(s)
Yellow (page 2)	Exposed person's worksite Occupational Health
Pink (page 3)	WorkSafe BC for occupational exposures <a href="#">WorkSafeBC guidelines</a> for injury reporting must be followed. <b>Fax numbers: (604) 276-3195</b> [lower mainland] <b>1-888-922-3299</b> [toll-free]
Golden (page 4)	Attach to the exposed person's record

#### 2. Management of Percutaneous or Permucosal Exposure to Blood or Body Fluid Letter for Follow-Up Physician Form ([HLTH 2340](#))

Table 3-7. Record processing for HLTH 2340

HLTH 2340 copy	Destination
White (page 1)	Client
Yellow (page 2)	Exposed person's worksite Occupational Health
Pink (page 3)	Attach to the exposed person's record

## 4.0 POST EXPOSURE PROPHYLAXIS

### 4.1 HBV

There are many variables to consider when determining whether HBV PEP is indicated. In addition to the infection status of the source person and nature of possible transmission, check the exposed person's file and local electronic laboratory reporting systems for prior results and immunization history. This information will determine the need for HBIg, hepatitis B vaccine and the type of laboratory tests as outlined in [Appendix 1](#).

[HBIg](#) is indicated if the source person is HBsAg positive or tests positive within 48 hours of exposure, and in the case of higher risk sexual assault. HBIg is preferably administered **within 48 hours**, but may be given up to **7 days** after [percutaneous exposure](#) and **14 days** after [permucosal exposure](#).

For more information, see the [BC Immunization Manual, Part 4-Biological Products](#).



## 4.2 HCV

[PEP](#) for HCV does not currently exist. Where possible, check for past HCV test results so that the correct test can be ordered. Test for anti-HCV at baseline. If anti-HCV reactive previously, test for HCV RNA. For BBFEs it is recommended to collect both SST and EDTA tubes at baseline, to avoid recalling the individual if the incorrect test is ordered.

If test results are negative at baseline, test for HCV RNA **3 weeks** post-exposure and anti-HCV at **3 months** post-exposure. Refer to the flowchart in [Appendix 2](#) for details.

As of January 13, 2020, the BCCDC PHL automatically performs serologic HCV RNA testing on all:

- **First time** anti-HCV reactive results
- Previously reactive anti-HCV results, where HCV RNA testing has **never** been done before

The HCV RNA will **not** be reflexed if a sample tests positive for HCV antibodies and there is already a prior HCV RNA result in the system.

If HCV RNA results are detectable at any point, refer to a healthcare provider experienced with HCV management and treatment (e.g., gastroenterologist, hepatologist, infectious disease specialist or MD/NP with HCV experience) for further assessment and treatment consideration.

Around 25% of initial infections spontaneously clear. Test for anti-HCV 3 months post-exposure to rule out an initial false positive HCV RNA result. Consider repeating HCV RNA in 6 months to establish chronic infection. See the [BCCDC Hepatitis C Guidelines](#) for further information on treatment.

## 4.3 HIV

For [high-risk exposures](#) to HIV, [PEP](#) should be initiated **within 72 hours** of exposure, preferably within **2 hours**, to be most effective. Consult with [BC-CfE](#) as soon as possible: **1-888-511-6222**

- PEP may reduce the impact of the disease if administered up to **72 hours** post-exposure by decreasing the viral load, reducing the risk of transmission to others and potentially decreasing the risk of developing advanced disease in the long-term
- PEP may vary if the source person is known to have a drug resistant HIV infection
- 5-day starter kits are available in PEP in all emergency rooms in BC, outpost nursing stations, provincial prisons, and several Vancouver primary care and sexual health clinics. See the [BC-CfE website](#) for a current list of sites.
- Do not delay treatment to wait for test results, unless they can be available **within 2 hours**
- Arrange follow-up of the exposed person **within 3 days** with their primary care provider or the designated physician to review results and assess the need to continue PEP for 28 days.
- PEP will vary for children and pregnant women. Consult with [Oak Tree Clinic at BC Women's Hospital](#): **(604) 875-2212** or **1-888-711-3030**

Refer to [Appendix 3](#) and the [BC CfE PEP Guidelines](#) for more information.

## 4.4 Other interventions

Tetanus vaccine should be considered with a percutaneous injury. Refer to the [BC Immunization Manual, Part 4-Biological Products, Tetanus Prophylaxis in Wound Management](#).



## 5.0 COUNSELING GUIDELINES

Initial post-exposure counselling can be provided in the health facility. More information will be provided by the family physician, designated physician or public health nurse at a follow-up visit.

For estimated risk assessments when [PEP](#) is implemented, refer to the [BC Centre for Excellence in HIV/AIDS Therapeutic Guidelines Accidental Exposure Guidelines](#).

### 5.1 Reduce potential transmission to contacts

Exposed persons may be anxious when initially assessed and may not remember all the information provided in initial counselling. It is important to emphasize key points and provide educational resources where appropriate.

#### **While waiting for test results, advise (if appropriate):**

- To use latex condoms during intercourse
- Not to donate blood
- Not to share toothbrushes, razors, needles or items potentially contaminated with body fluids
- Keep cuts and abrasions covered until fully healed
- Package any blood containing items separately before disposal
- Clean any blood contamination with a 9 parts water to 1 part bleach
- Avoid sharing recreational drug paraphernalia (used to smoke, snort or inject)
- Defer pregnancy

### 5.2 Breastfeeding

#### **HBV:**

If the exposure is to a high-risk HBV source, breastfeeding can continue in circumstances where:

- the mother is immune to HBV
- the mother and infant are vaccinated and treated with HBV Ig immediately post-exposure

Mothers that suspend breastfeeding can preserve breast milk by pumping and freezing the milk until they are cleared of infection risk.

#### **HCV:**

If the exposure is to an anti-HCV positive source, breastfeeding is recommended. If the nipples become cracked or bleed, mothers are to abstain from breastfeeding until they are healed. To prevent cessation of milk supply if breastfeeding is temporarily stopped, consider expressing and discarding breast milk until the nipples are healed



## HIV:

If the source is infected with HIV, breastfeeding is **not** recommended, irrespective of HIV viral load and use of ART. If the HIV status of the source is unknown, breastfeeding should be temporarily discontinued. During this time, the mother may pump and freeze breast milk while awaiting source test results.

If a source person has baseline HIV-negative test results and has no recent [high-risk](#) behaviors, then breastfeeding can be resumed and the frozen milk used.

Breastfeeding is contraindicated if the mother is receiving PEP due to a [high-risk](#) exposure. Breastfeeding can be resumed when PEP has been stopped.

## 5.3 Healthcare workers

Exposed healthcare workers can continue to practice, if:

- Follow-up testing is completed
- Counseling from occupational health, infection control or the Public Health Unit is provided with regard to the use of routine precautions
- Based on their risk exposure, that there is virtually no risk to the public
- They seek immediate assessment if symptoms or signs of infection develop

Refer to [Section 3.2.2](#) and [Section 3.4](#) for information on needlestick injuries and WCB claims. Follow agency occupational health and safety guidelines.

## 5.4 Sexual Assault

Certain regions have specially trained nurse examiners, physicians, counsellors and mobile services, who can see anyone who has been sexually assaulted within the past 7 days. Refer to local sexual assault care services where appropriate:

- [BC Women's Hospital and Health Centre](#)
- [Fraser Health](#)
- [Interior Health](#)
- [Island Health](#)
- [Surrey Mobile Assault Response Team \(SMART\)](#)
- [Sexual Assault Service \(SAS\) – UBC Hospital Urgent Care Centre, Vancouver General Hospital](#)

If the exposed person is under 12 years of age, consult with emergency services (e.g., [BC Children's Hospital](#)).



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## 5.5 Counselling

A [BBF exposure](#) can cause a significant amount of anxiety, fear, embarrassment or anger. Providing reassurance around confidentiality and the follow-up process, and accurate information and resources, in a nonjudgmental way. An approach should be taken that does not stigmatize or negatively judge individuals' lifestyle choices. Gender identity, sexual orientation, and sexual and drug-use behaviours should be respected following principles of equity, cultural safety and trauma informed practice. Professional counselling may be appropriate.

### Resources

[BC Society for Male Survivors of Sexual Abuse](#)

[BC Women's Hospital Sexual Assault Service resources](#)

[Ending Violence Association of BC](#)

[Family Services of Greater Vancouver](#)

[Ministry of Children and Family Development, Healing Families, Helping Systems: A Trauma-Informed Practice Guide for Working with Children, Youth and Families](#)

[Qmunity – BC's Queer Resource Centre](#)

[Immigrant Services Society of BC](#)

[PHSA Trans Care BC](#)

[VictimlinkBC](#)

[WAVAW rape crisis centre, includes an Aboriginal Women's Program](#)



## Appendix 1: Exposed person at risk of HBV infection

[HBIG](#) is indicated in the case of higher risk sexual assault or if one of the individuals is known to be HBsAg positive or tests positive within 48 hours of exposure. In unvaccinated individuals, the risk of sexual or needlestick transmission is increased if the source has HBV DNA > 1000-2000 IU/mL.

HBIG is preferably given **within 48 hrs**, but may be given up to **7 days** after **percutaneous exposures** and up to **14 days** after **permucosal exposures**. If HBIG is indicated, contact your local Public Health or Hospital Emergency Department to arrange for administration.

If the individual tests HBsAg or anti-HBc Total positive at any point, refer to the [BCCDC HBV Guidelines](#). If the individual is immunocompromised, consult with an infectious disease specialist.

Vaccination history of exposed person	Test for HBsAg, anti-HBc Total and anti-HBs <sup>^</sup>	Source is HBsAg positive or tests positive within 48 hrs of exposure, and cases of higher risk sexual assault <sup>^</sup>	Source is unknown, not tested, or tests HBsAg negative within 48 hrs of exposure	Re-test HBsAg, anti-HBc Total and anti-HBs <sup>**</sup> . Offer 2nd hepatitis B vaccine series to non-responders.
Documented prior anti-HBs ≥ 10 IU/L	No follow-up			
No documentation/ unvaccinated <sup>Ω</sup>	Yes	Give HBIG and 1 complete hepatitis B vaccine series	Initiate hepatitis B vaccine series	Yes
Non-responder to 1 hepatitis B vaccine series*			Complete 2nd hepatitis B vaccine series	Re-test only
1 dose of hepatitis B vaccine, anti-HBs status unknown	Yes	Give HBIG and complete hepatitis B vaccine series	Complete hepatitis B vaccine series	Yes
2 doses of a 3 dose hepatitis B vaccine series and anti-HBs status unknown	Yes. If anti-HBs < 10 IU/L,	Give HBIG and 3rd dose of hepatitis B vaccine. Repeat 3rd dose if given too early in the series.	Give 1 dose of hepatitis B vaccine. In 4 wks, retest anti-HBs; if < 10 IU/L, complete 2nd hepatitis B vaccine series.	Yes
	Yes. If anti-HBs ≥ 10 IU/L,	Complete hepatitis B vaccine series	Complete hepatitis B vaccine series	No
1 complete hepatitis B vaccine series (2 or 3 dose) and anti-HBs status unknown	Yes. If anti-HBs < 10 IU/L,	Give HBIG and 1 dose of hepatitis B vaccine	Give 1 dose of hepatitis B vaccine. Retest anti-HBs in 4 wks; if < 10 IU/L, complete 2nd hepatitis B vaccine series.	Yes
	Yes. If anti-HBs ≥ 10 IU/L,	No follow-up		
2-series non-responder to hepatitis B vaccine <sup>Φ</sup>	HBsAg and anti-HBc Total only	Give HBIG. In 4 weeks give a 2nd dose of HBIG.	No follow-up	Re-test HBsAg and anti-HBc Total only

<sup>^</sup> One dose of hepatitis B vaccine may be given while waiting for serology results, regardless of prior immunization history.

<sup>Ω</sup> A verbal history of past immunizations is generally not considered acceptable. See [BCCDC Immunization Manual](#).

\* After one complete primary hepatitis B series, when anti-HBs < 10 IU/L measured at 1 to 6 months post-vaccination

<sup>▲</sup> Examples of higher risk sexual assault: assailant is a PWID or is from a HBV endemic country. Evaluate on a case-by-case basis.

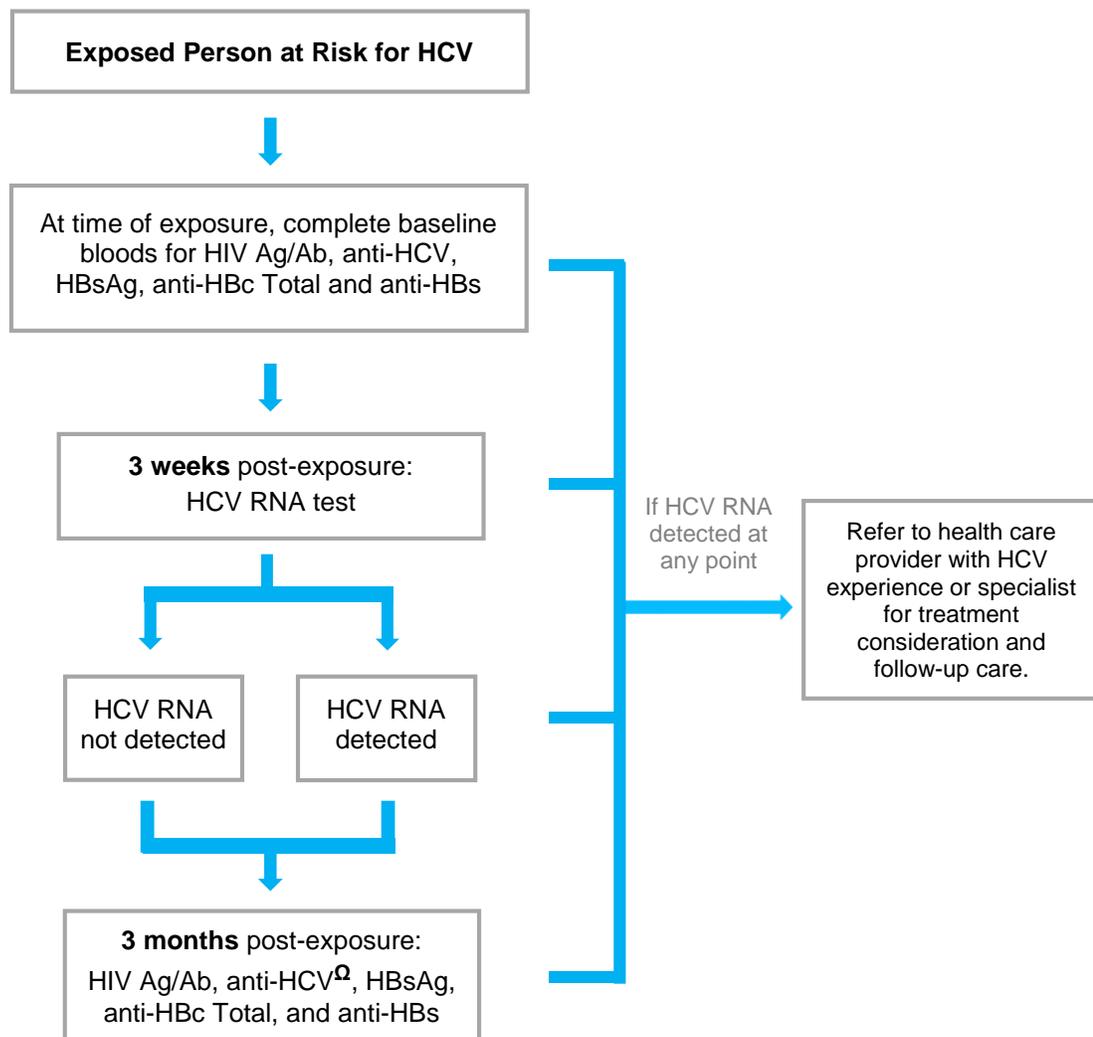
<sup>\*\*</sup> Repeat serology at least **1 month** after last vaccine dose or **6 months** after HBIG, whichever is longer

<sup>Φ</sup> After 2 complete hepatitis B series, when anti-HBs < 10 IU/L, measured at 1 to 6 months post-vaccination. Individual considered susceptible to HBV and will require prophylaxis in post-exposure scenarios.

## Appendix 2: Exposed person at risk for HCV infection

Collect both SST and EDTA tubes when anti-HCV is recommended. As of January 13, 2020, the BCCDC PHL automatically tests for HCV RNA on first-time anti-HCV reactive specimens. If the initial reflexed HCV RNA result is negative, a confirmatory HCV RNA will automatically be done on the EDTA sample. If HCV RNA is detected at any time refer for HCV treatment consideration.

After exposure, anti-HCV usually remains present for life even if after an initial infection has been cleared spontaneously or after HCV treatment. After testing anti-HCV reactive, order HCV RNA when testing for HCV. Refer to the [BCCDC HCV Guidelines](#) for further information.



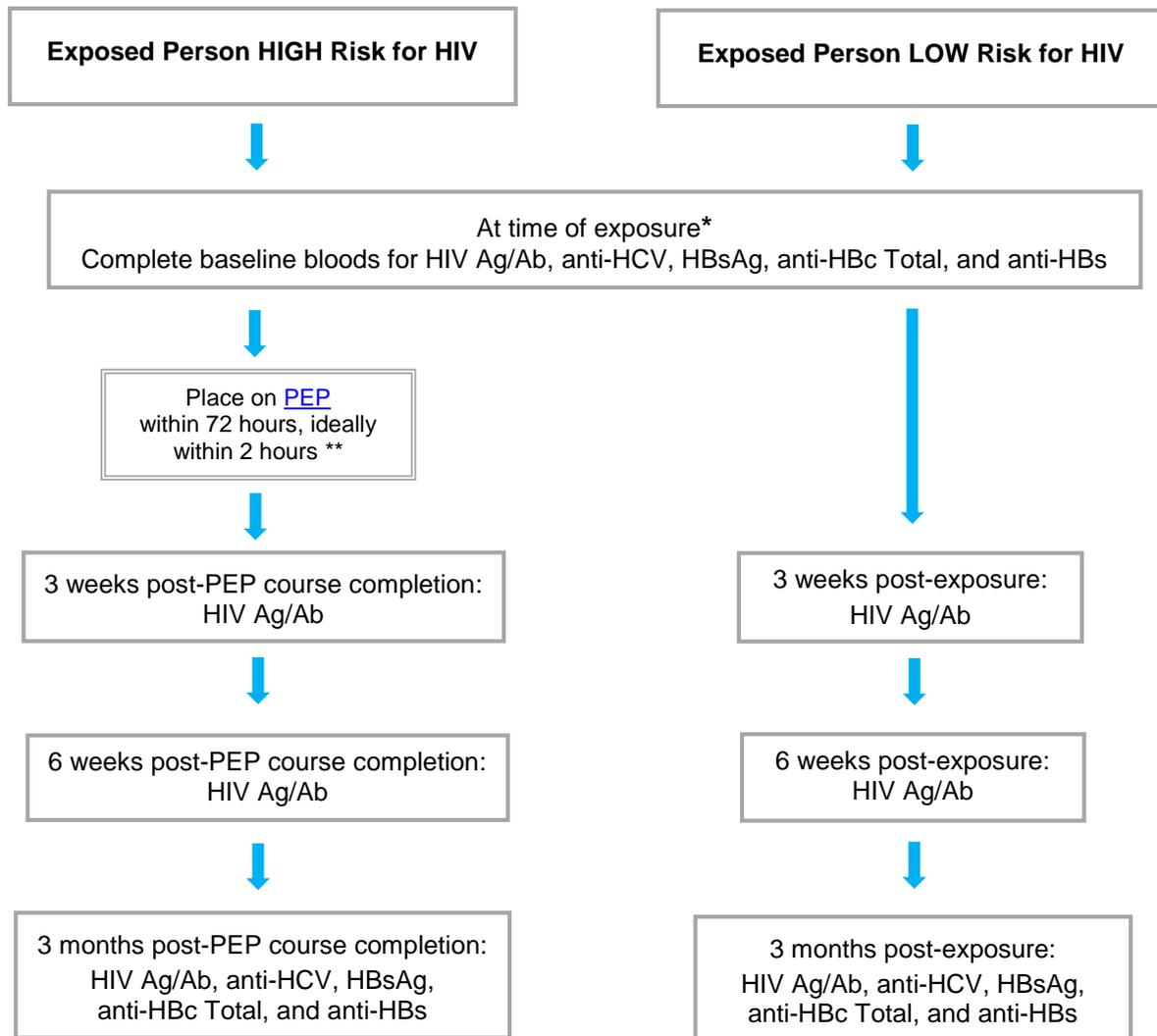
<sup>Ω</sup> To confirm HCV infection, rule out false positive HCV RNA results, and to prompt Public Health follow-up.



### Appendix 3: Exposed person at risk for HIV infection

For reactive HIV Ag/Ab test results the BCCDC Public Health Laboratory will automatically do an immunoblot test to provide confirmation of HIV diagnosis. HIV RNA may also be done to rule out acute infection or to resolve indeterminate results.

If the individual tests positive at any point, refer to the [BCCDC HIV Guidelines](#) and the [BC-CfE guidelines](#).



\* HIV infection can be detected after a HIV Ag/Ab blood test around 2-3 weeks after infection. HIV RNA testing is not routinely recommended unless clinical history and presentation suggest acute infection within the prior 2 weeks of exposure (see [BCCDC HIV Guidelines](#), consult with BCCDC Microbiologist).

\*\* HIV PEP 5 day starter kit or 28 day full course. Consult with the BC Centre for Excellence in HIV/AIDS (BC-CfE) as soon as possible (1-888-511-6222).



BC Centre for Disease Control

## Appendix 4: BCCDC Lab Requisitions

Use [HLTH 2339/2340](#) for healthcare setting exposures, otherwise the [BCCDC PHL Serology Screening Requisition](#) as below can be used. The examples below outline recommended testing sequence. If someone tests positive for HBV, HCV or HIV at any point, refer to [Section 3.3](#) and [Appendices 1-3](#).



**Public Health Laboratory**  
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 www.bccdc.ca/publichealthlab

### Serology Screening Requisition



#### Section 1 - Patient/Provider Information (Two matching unique patient identifiers on sample container and requisition are required for sample processing)

<b>PERSONAL HEALTH NUMBER</b> (or out-of-province Health Number and province)		<b>ORDERING PRACTITIONER</b> Name and MSC#		<b>DATE RECEIVED</b>
<b>PATIENT SURNAME</b>		Address of report delivery		
<b>PATIENT FIRST AND MIDDLE NAME</b>		<input type="checkbox"/> I do not require a copy of the report <input type="checkbox"/> I am a Locum* <small>*If Locum, include name of Practitioner you are covering for</small>		
<b>DOB</b> (DD/MMM/YYYY)		<b>SEX</b> <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> X <input type="checkbox"/> U (UNK)		
<b>PATIENT ADDRESS</b>				<b>LABORATORY USE ONLY</b>
<b>CITY</b>				
<b>PROVINCE</b>		<b>POSTAL CODE</b>		
<b>ADDITIONAL COPIES TO PRACTITIONER / CLINIC:</b> (Name, Address / MSC#/ PHSA Client#) (Limit of 3 copies available)				<b>OUTBREAK ID</b>
1.				<b>SAMPLE REF. NO.</b>
2.				<b>DATE COLLECTED</b> (DD/MMM/YYYY)
3.				<b>TIME COLLECTED</b> (HH:MM)

#### Section 2 - Clinical Information

<b>Reason for Test</b>	<b>Clinical Information</b>
<input type="checkbox"/> NEEDLESTICK <input type="checkbox"/> Prenatal <input type="checkbox"/> Outbreak/Cluster/Event <input checked="" type="checkbox"/> Other, specify: <b>Acute BBFE</b> <b>Baseline testing</b>	<input type="checkbox"/> Rash symptoms <input type="checkbox"/> STI contact <input type="checkbox"/> STI symptoms <b>Recent Travel History</b> (Date/Location) <b>Onset Date</b> (DD/MMM/YYYY)

#### Section 3 - Test(s) Requested (Note: Codes for PHSA Labs Use Only)

<b>PRENATAL SCREENING (PRENAT)</b>	<b>HEPATITIS SEROLOGY (Serum)</b>	<b>OTHER SEROLOGY</b>
HIV <input type="checkbox"/> HIVCC HIV Non-Nominal Reporting <input type="checkbox"/> HIVCC HBsAg <input type="checkbox"/> HBVP Rubella IgG <input type="checkbox"/> RUBEB Syphilis Antibody (1st Trimester) <input type="checkbox"/> TPE Other Tests, specify:	<b>Acute - undefined etiology</b> HBsAg, Anti-HBc Total, Anti-HBc, Anti-HCV, Anti-HAV IgM <input type="checkbox"/> HEP5B <b>Chronic - undefined etiology</b> HBsAg, Anti-HBc Total, Anti-HBc, Anti-HCV <input type="checkbox"/> DHEPCH <b>Hepatitis B Screen Panel</b> <input checked="" type="checkbox"/> HBSAG HBsAg, Anti-HBc, Anti-HBc Total Anti-hepatitis A Total (Immune Status) <input type="checkbox"/> HAAT Anti-hepatitis A IgM (Acute Infection) <input type="checkbox"/> HAVMB HBsAg Only <input type="checkbox"/> HBVSA Anti-HBs (Immune Status) <input type="checkbox"/> HBSAB HBeAg (Therapeutic Monitoring) <input type="checkbox"/> HBXEA Anti-HBe (Therapeutic Monitoring) <input type="checkbox"/> HBXEB Anti-HCV <input checked="" type="checkbox"/> HEP5B	<b>Immunity</b> <b>Acute</b> CMV IgG <input type="checkbox"/> CMVIGB    CMV IgM <input type="checkbox"/> CMVSP EBV IgG <input type="checkbox"/> EBGSB    EBV IgM <input type="checkbox"/> EBVSP MEASP MUMPS PARVP RUBP H. pylori IgG <input type="checkbox"/> HELIB    HSV Type Specific IgG <input type="checkbox"/> HSVTSS HTLV I / II <input type="checkbox"/> HTLVB
Client can choose nominal or non-nominal HIV reporting. See BCCDC HIV Guidelines for more info. <b>SYPHILIS ANTIBODY</b> Routine (Non Prenatal) <input type="checkbox"/> TPE <b>HIV (Non Prenatal)</b> HIV <input type="checkbox"/> HIVCC Note: Patient has the legal right to choose not to have their name reported to public health = non-nominal reporting Non-Nominal Reporting Requested <input type="checkbox"/> HIVCC	<b>HEPATITIS C PCR (EDTA Plasma)</b> HCV RNA Quantitative (For diagnosis and monitoring) <input type="checkbox"/> HPCRBB HCV Genotyping (For treatment) <input type="checkbox"/> HPCRBB	<b>OTHER TESTS (Specify)</b> <input checked="" type="checkbox"/> Collect 1 x SST tube and 1 x EDTA tube For other available tests and sample collection information, consult the Public Health Laboratory's eLab Handbook at <a href="http://www.elabhandbook.info/PHSA/Default.aspx">www.elabhandbook.info/PHSA/Default.aspx</a>

**Not required if prior documented anti-HBs ≥ 10 mIU/mL**  
**If 2-series non-responder to hepatitis B vaccine, anti-HBs not required.**

**If prior anti-HCV positive and previously cleared HCV infection, order HCV RNA only.**



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Public Health Laboratory

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Serology Screening Requisition



SER  
LABS

Section 1 - Patient/Provider Information (Two matching unique patient identifiers on sample container and requisition are required for sample processing)

PERSONAL HEALTH NUMBER <small>(or out-of-province Health Number and province)</small>		ORDERING PRACTITIONER <small>Name and MSC#</small>		DATE RECEIVED
PATIENT SURNAME		Address of report delivery		
PATIENT FIRST AND MIDDLE NAME		<input type="checkbox"/> I do not require a copy of the report <input type="checkbox"/> I am a Locum <small>*If Locum, include name of Practitioner you are covering for</small>		
DOB <small>(DD/MMM/YYYY)</small>	SEX <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> X <input type="checkbox"/> U (Unk)	ADDITIONAL COPIES TO PRACTITIONER / CLINIC: <small>(Name, Address / MSC# / PHSA Client#) (Limit of 3 copies available)</small>		
PATIENT ADDRESS		1.		LABORATORY USE ONLY
CITY		2.		
PROVINCE	POSTAL CODE	3.		
				OUTBREAK ID
				SAMPLE REF. NO.
				DATE COLLECTED <small>(DD/MMM/YYYY)</small>
				TIME COLLECTED <small>(HH:MM)</small>

Section 2 - Clinical Information

Reason for Test	Clinical Information
<input type="checkbox"/> NEEDLESTICK <input type="checkbox"/> Prenatal <input type="checkbox"/> Outbreak/Cluster Event <input checked="" type="checkbox"/> Other, specify: <b>Acute BBFE</b> <b>3 wks post-exposure</b>	<input type="checkbox"/> Rash symptoms <input type="checkbox"/> STI contact <input type="checkbox"/> STI symptoms Recent Travel History (Date/Location)    Onset Date (DD/MMM/YYYY)

Section 3 - Test(s) Requested (Note: Codes for PHSA Labs Use Only)

<b>PRENATAL SCREENING</b> <small>(PRENAT)</small> HIV <input type="checkbox"/> HIVCC HIV Non-Nominal Reporting <input type="checkbox"/> HIVCC HBsAg <input type="checkbox"/> HBVP Rubella IgG <input type="checkbox"/> RUBEB Syphilis Antibody (1st Trimester) <input type="checkbox"/> TPE Other Tests, specify:	<b>HEPATITIS SEROLOGY</b> <small>(Serum)</small> <b>Acute - undefined etiology</b> HBsAg, Anti-HBc Total, Anti-HBs, Anti-HCV, Anti-HAV IgM <input type="checkbox"/> HEPSB <b>Chronic - undefined etiology</b> HBsAg, Anti-HBc Total, Anti-HBs, Anti-HCV <input type="checkbox"/> DHEPCB <b>Hepatitis B Screen Panel</b> HBsAg, Anti-HBs, Anti-HBc Total <input type="checkbox"/> HBSAG Anti-hepatitis A Total (Immune Status) <input type="checkbox"/> HAAT Anti-hepatitis A IgM (Acute Infection) <input type="checkbox"/> HAVMB HBsAg Only <input type="checkbox"/> HBVSA Anti-HBs (Immune Status) <input type="checkbox"/> HBSAB HBeAg (Therapeutic Monitoring) <input type="checkbox"/> HBXEA Anti-HBe (Therapeutic Monitoring) <input type="checkbox"/> HBXEB Anti-HCV <input type="checkbox"/> HEPCB <b>HEPATITIS C PCR</b> <small>(EDTA Plasma)</small> HCV RNA Quantitative (For diagnosis and monitoring) <input checked="" type="checkbox"/> HPCRBB HCV Genotyping (For treatment) <input type="checkbox"/> HEPCRB	<b>OTHER SEROLOGY</b> <table border="0"> <tr> <td><b>Immunity</b></td> <td></td> <td><b>Acute</b></td> <td></td> </tr> <tr> <td>CMV IgG <input type="checkbox"/> CMVGB</td> <td>CMV IgM <input type="checkbox"/> CMVSP</td> <td></td> <td></td> </tr> <tr> <td>EBV IgG <input type="checkbox"/> EBG5B</td> <td>EBV IgM <input type="checkbox"/> EBVSP</td> <td></td> <td></td> </tr> <tr> <td>Measles IgG (Rubella) <input type="checkbox"/> MIGB</td> <td>Measles IgM (Rubella) <input type="checkbox"/> MEASP</td> <td></td> <td></td> </tr> <tr> <td>Mumps IgG <input type="checkbox"/> MUIGB</td> <td>Mumps IgM <input type="checkbox"/> MUMPS</td> <td></td> <td></td> </tr> <tr> <td>Parvo B19 IgG <input type="checkbox"/> PARVGB</td> <td>Parvo B19 IgM <input type="checkbox"/> PARVP</td> <td></td> <td></td> </tr> <tr> <td>Rubella IgG <input type="checkbox"/> RUBEB</td> <td>Rubella IgM <input type="checkbox"/> RUBP</td> <td></td> <td></td> </tr> <tr> <td>Varicella IgG <input type="checkbox"/> VZIGB</td> <td></td> <td></td> <td></td> </tr> <tr> <td><i>H. pylori</i> IgG <input type="checkbox"/> HELIB</td> <td>HSV Type Specific IgG <input type="checkbox"/> HSVTSS</td> <td></td> <td></td> </tr> <tr> <td>HTLV I / II <input type="checkbox"/> HTLVB</td> <td></td> <td></td> <td></td> </tr> </table>	<b>Immunity</b>		<b>Acute</b>		CMV IgG <input type="checkbox"/> CMVGB	CMV IgM <input type="checkbox"/> CMVSP			EBV IgG <input type="checkbox"/> EBG5B	EBV IgM <input type="checkbox"/> EBVSP			Measles IgG (Rubella) <input type="checkbox"/> MIGB	Measles IgM (Rubella) <input type="checkbox"/> MEASP			Mumps IgG <input type="checkbox"/> MUIGB	Mumps IgM <input type="checkbox"/> MUMPS			Parvo B19 IgG <input type="checkbox"/> PARVGB	Parvo B19 IgM <input type="checkbox"/> PARVP			Rubella IgG <input type="checkbox"/> RUBEB	Rubella IgM <input type="checkbox"/> RUBP			Varicella IgG <input type="checkbox"/> VZIGB				<i>H. pylori</i> IgG <input type="checkbox"/> HELIB	HSV Type Specific IgG <input type="checkbox"/> HSVTSS			HTLV I / II <input type="checkbox"/> HTLVB			
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Serology Screening Requisition



Section 1 - Patient/Provider Information (Two matching unique patient identifiers on sample container and requisition are required for sample processing)

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PATIENT SURNAME		Address of report delivery		
PATIENT FIRST AND MIDDLE NAME		<input type="checkbox"/> I do not require a copy of the report <input type="checkbox"/> I am a Locum <small>If Locum, include name of Practitioner you are covering for</small>		
DOB <small>(DD/MM/YYYY)</small>	SEX <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> X <input type="checkbox"/> U (Unk)	ADDITIONAL COPIES TO PRACTITIONER / CLINIC: <small>(Name, Address / MSC# / PHSA Client#) (Limit of 3 copies available)</small>		
PATIENT ADDRESS		1.		OUTBREAK ID
CITY		2.		SAMPLE REF. NO.
PROVINCE	POSTAL CODE	3.		DATE COLLECTED <small>(DD/MM/YYYY)</small>
				TIME COLLECTED <small>(HHMM)</small>

Section 2 - Clinical Information

Reason for Test	Clinical Information
<input type="checkbox"/> NEEDLESTICK <input type="checkbox"/> Prenatal <input checked="" type="checkbox"/> Other, specify: <b>Acute BBFE</b> <b>6 weeks post-exposure</b>	<input type="checkbox"/> Rash symptoms <input type="checkbox"/> STI contact <input type="checkbox"/> STI symptoms Recent Travel History (Date/Location)    Onset Date (DD/MM/YYYY)

Section 3 - Test(s) Requested (Note: Codes for PHSA Labs Use Only)

<b>PRENATAL SCREENING</b> <small>(PRENAT)</small> HIV <input type="checkbox"/> HIVCC HIV Non-Nominal Reporting <input type="checkbox"/> HIVCC HBsAg <input type="checkbox"/> HBVP Rubella IgG <input type="checkbox"/> RUBEB Syphilis Antibody (1st Trimester) <input type="checkbox"/> TPE Other Tests, specify: <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">           Client can choose nominal or non-nominal HIV reporting. See BCCDC HIV Guidelines for more info.         </div> <b>SYPHILIS ANTIBODY</b> Routine (Non Prenatal) <input type="checkbox"/> TPE <div style="border: 1px solid red; padding: 5px; margin-top: 10px;"> <b>HIV (Non Prenatal)</b>          HIV <input type="checkbox"/> HIVCC  <small>Note: Patient has the legal right to choose not to have their name reported to public health = non-nominal reporting</small>          Non-Nominal Reporting Requested <input type="checkbox"/> HIVCC       </div>	<b>HEPATITIS SEROLOGY</b> <small>(Serum)</small> <b>Acute - undefined etiology</b> HBsAg, Anti-HBc Total, Anti-HBs, Anti-HCV, Anti-HAV IgM <input type="checkbox"/> HEP5B <b>Chronic - undefined etiology</b> HBsAg, Anti-HBc Total, Anti-HBs, Anti-HCV <input type="checkbox"/> DHEPCH <b>Hepatitis B Screen Panel</b> HBsAg, Anti-HBs, Anti-HBc Total <input type="checkbox"/> HBSAG Anti-hepatitis A Total (Immune Status) <input type="checkbox"/> HAAT Anti-hepatitis A IgM (Acute Infection) <input type="checkbox"/> HAVMB HBsAg Only <input type="checkbox"/> HBVSA Anti-HBs (Immune Status) <input type="checkbox"/> HBSAB HBeAg (Therapeutic Monitoring) <input type="checkbox"/> HBXEA Anti-HBe (Therapeutic Monitoring) <input type="checkbox"/> HBXEB Anti-HCV <input type="checkbox"/> HEP5B <b>HEPATITIS C PCR</b> <small>(EDTA Plasma)</small> HCV RNA Quantitative (For diagnosis and monitoring) <input type="checkbox"/> HPCRBB HCV Genotyping (For treatment) <input type="checkbox"/> HPCRBB	<b>OTHER SEROLOGY</b> <table border="0"> <tr> <th>Immunity</th> <th>Acute</th> </tr> <tr> <td>CMV IgG <input type="checkbox"/> CMVIGB</td> <td>CMV IgM <input type="checkbox"/> CMVSP</td> </tr> <tr> <td>EBV IgG <input type="checkbox"/> EBG5B</td> <td>EBV IgM <input type="checkbox"/> EBVSP</td> </tr> <tr> <td>Measles IgG (Rubeola) <input type="checkbox"/> MIGB</td> <td>Measles IgM (Rubeola) <input type="checkbox"/> MEASP</td> </tr> <tr> <td>Mumps IgG <input type="checkbox"/> MUIGB</td> <td>Mumps IgM <input type="checkbox"/> MUMPS</td> </tr> <tr> <td>Parvo B19 IgG <input type="checkbox"/> PARVGB</td> <td>Parvo B19 IgM <input type="checkbox"/> PARVP</td> </tr> <tr> <td>Rubella IgG <input type="checkbox"/> RUBEB</td> <td>Rubella IgM <input type="checkbox"/> RUBP</td> </tr> <tr> <td>Varicella IgG <input type="checkbox"/> VZIGB</td> <td></td> </tr> <tr> <td><i>H. pylori</i> IgG <input type="checkbox"/> HELIB</td> <td>HSV Type Specific IgG <input type="checkbox"/> HSVTSS</td> </tr> <tr> <td>HTLV I / II <input type="checkbox"/> HTLVB</td> <td></td> </tr> </table>	Immunity	Acute	CMV IgG <input type="checkbox"/> CMVIGB	CMV IgM <input type="checkbox"/> CMVSP	EBV IgG <input type="checkbox"/> EBG5B	EBV IgM <input type="checkbox"/> EBVSP	Measles IgG (Rubeola) <input type="checkbox"/> MIGB	Measles IgM (Rubeola) <input type="checkbox"/> MEASP	Mumps IgG <input type="checkbox"/> MUIGB	Mumps IgM <input type="checkbox"/> MUMPS	Parvo B19 IgG <input type="checkbox"/> PARVGB	Parvo B19 IgM <input type="checkbox"/> PARVP	Rubella IgG <input type="checkbox"/> RUBEB	Rubella IgM <input type="checkbox"/> RUBP	Varicella IgG <input type="checkbox"/> VZIGB		<i>H. pylori</i> IgG <input type="checkbox"/> HELIB	HSV Type Specific IgG <input type="checkbox"/> HSVTSS	HTLV I / II <input type="checkbox"/> HTLVB	
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CMV IgG <input type="checkbox"/> CMVIGB	CMV IgM <input type="checkbox"/> CMVSP																					
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<b>OTHER TESTS (Specify)</b> <b>Collect 1 x SST tube</b>																						
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<small>The personal information collected on this form is collected under the authority of the Personal Information Protection Act. The personal information is used to provide medical services requested on this requisition. The information collected is used for quality assurance management and disclosed to healthcare practitioners involved in providing care or when required by law. Personal information is protected from unauthorized use and disclosure in accordance with the Personal Information Protection Act and when applicable the Freedom of Information and Protection of Privacy Act and may be used and disclosed only as provided by those Acts.</small>																						



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Serology Screening Requisition



Section 1 - Patient/Provider Information (Two matching unique patient identifiers on sample container and requisition are required for sample processing)

PERSONAL HEALTH NUMBER <small>(or out-of-province Health Number and provincial)</small>		ORDERING PRACTITIONER <small>Name and MDC#</small>		DATE RECEIVED
PATIENT SURNAME		Address of report delivery		
PATIENT FIRST AND MIDDLE NAME		<input type="checkbox"/> I do not require a copy of the report <input type="checkbox"/> I am a Locum <small>*If Locum, include name of Practitioner you are covering for</small>		
DOB <small>(DD/MM/YYYY)</small>	SEX <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> X <input type="checkbox"/> U (link)	ADDITIONAL COPIES TO PRACTITIONER / CLINIC: <small>(Name, Address / MDC# / PPSA Client#) (Limit of 3 copies available)</small>		
PATIENT ADDRESS		1.		LABORATORY USE ONLY
CITY		2.		
PROVINCE		3.		
POSTAL CODE				OUTBREAK ID
				SAMPLE REF. NO.
				DATE COLLECTED <small>(DD/MM/YYYY)</small>
				TIME COLLECTED <small>(HH:MM)</small>

Section 2 - Clinical Information

Reason for Test <input type="checkbox"/> NEEDLESTICK <input type="checkbox"/> Prenatal <input checked="" type="checkbox"/> Other, specify: <b>Acute BBE</b> <b>3 months post-exposure</b>	Clinical Information <input type="checkbox"/> Rash symptoms <input type="checkbox"/> STI contact <input type="checkbox"/> STI symptoms Recent Travel History (Date/Location) Onset Date (DD/MM/YYYY)
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Section 3 - Test(s) Requested (Note: Codes for PHSA Labs Use Only)

<b>PRENATAL SCREENING (PRENAT)</b> HIV <input type="checkbox"/> HIVCC HIV Non-Nominal Reporting <input type="checkbox"/> HIVCC HBsAg <input type="checkbox"/> HBVP Rubella IgG <input type="checkbox"/> RUBEB Syphilis Antibody (1st Trimester) <input type="checkbox"/> TPE Other Tests, specify: Client can choose nominal or non-nominal HIV reporting. See BCCDC HIV Guidelines for more info.	<b>HEPATITIS SEROLOGY (Serum)</b> <b>Acute - undefined etiology</b> HBsAg, Anti-HBc Total, Anti-HBc, Anti-HCV, Anti-HAV IgM <input type="checkbox"/> HEP5B <b>Chronic - undefined etiology</b> HBsAg, Anti-HBc Total, Anti-HBc, Anti-HCV <input type="checkbox"/> DHEPCH <b>Hepatitis B Screen Panel</b> HBsAg, Anti-HBc, Anti-HBc Total <input type="checkbox"/> HBSAG Anti-hepatitis A Total (Immune Status) <input type="checkbox"/> HAAT Anti-hepatitis A IgM (Acute Infection) <input type="checkbox"/> HAVMB HBsAg Only <input type="checkbox"/> HBVSA Anti-HBc (Immune Status) <input type="checkbox"/> HBSAB HBeAg (Therapeutic Monitoring) <input type="checkbox"/> HBEA Anti-HBe (Therapeutic Monitoring) <input type="checkbox"/> HBXEB Anti-HCV <input checked="" type="checkbox"/> HEP5C	<b>OTHER SEROLOGY</b> <table border="0"> <tr> <th>Immunity</th> <th>Acute</th> </tr> <tr> <td>CMV IgG <input type="checkbox"/> CMVIGB</td> <td>CMV IgM <input type="checkbox"/> CMVSP</td> </tr> <tr> <td>EBV IgG <input type="checkbox"/> EBIGSB</td> <td>EBV IgM <input type="checkbox"/> EBVSP</td> </tr> <tr> <td>Mumps IgG <input type="checkbox"/> MIBGR</td> <td>Mumps IgM <input type="checkbox"/> MEASP</td> </tr> <tr> <td></td> <td><input type="checkbox"/> MUMPS</td> </tr> <tr> <td></td> <td><input type="checkbox"/> PARVP</td> </tr> <tr> <td></td> <td><input type="checkbox"/> RUBP</td> </tr> <tr> <td><i>H. pylori</i> IgG <input type="checkbox"/> HELIB</td> <td>HSV Type Specific IgG <input type="checkbox"/> HSVTSS</td> </tr> <tr> <td>HTLV I / II <input type="checkbox"/> HTLVB</td> <td></td> </tr> </table>	Immunity	Acute	CMV IgG <input type="checkbox"/> CMVIGB	CMV IgM <input type="checkbox"/> CMVSP	EBV IgG <input type="checkbox"/> EBIGSB	EBV IgM <input type="checkbox"/> EBVSP	Mumps IgG <input type="checkbox"/> MIBGR	Mumps IgM <input type="checkbox"/> MEASP		<input type="checkbox"/> MUMPS		<input type="checkbox"/> PARVP		<input type="checkbox"/> RUBP	<i>H. pylori</i> IgG <input type="checkbox"/> HELIB	HSV Type Specific IgG <input type="checkbox"/> HSVTSS	HTLV I / II <input type="checkbox"/> HTLVB	
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<b>SYPHILIS ANTIBODY</b> Routine (Non Prenatal) <input type="checkbox"/> TPE <b>HIV (Non Prenatal)</b> HIV <input type="checkbox"/> HIVCC Note: Patient has the legal right to choose not to have their name reported to public health = non-nominal reporting Non-Nominal Reporting Requested <input type="checkbox"/> HIVCC	<b>HEPATITIS C PCR (EDTA Plasma)</b> HCV RNA Quantitative (For diagnosis and monitoring) <input type="checkbox"/> HPCRBB HCV Genotyping (For treatment) <input type="checkbox"/> HPCRBB	<b>OTHER TESTS (Specify)</b> <b>Collect 1 x SST tube and 1 x EDTA tube</b> For other available tests and sample collection information, consult the Public Health Laboratory's eLab Handbook at <a href="http://www.elabhandbook.info/PHSA/Default.aspx">www.elabhandbook.info/PHSA/Default.aspx</a> The personal information collected on this form is collected under the authority of the Personal Information Protection Act. The personal information is used to provide medical services requested on this requisition. The information collected is used for quality assurance management and disclosed to healthcare practitioners involved in providing care or when required by law. Personal information is protected from unauthorized use and disclosure in accordance with the Personal Information Protection Act and when applicable the Freedom of Information and Protection of Privacy Act and may be used and disclosed only as provided by those Acts.																		



## Appendix 5: A Fact Sheet for Exposed Individuals

### Blood & Body Fluid Contact

#### *I think I have been exposed to blood and body fluids. What should I do?*

This fact sheet provides answers to common questions that people have regarding three viruses that can be spread by exposure to blood and/or body fluids:

- [Human immunodeficiency virus \(HIV\)](#)
- [Hepatitis B virus \(HBV\)](#), and
- [Hepatitis C virus \(HCV\)](#)

If you are a health care worker and have had contact with blood or body fluids in a healthcare setting, review and follow the protocol at your own agency for follow-up care. Go to your local emergency department, health unit or occupational health clinic as soon as possible (if HIV PEP is indicated, ideally it should be started within 2 hours of exposure).

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### Hepatitis B Virus (HBV)

#### *I have been exposed to blood and body fluids infected with hepatitis B virus. What should I do?*

If you have been previously vaccinated for hepatitis B and have blood work to confirm protection, you are likely protected against hepatitis B, however, it is recommended that you get assessed to determine your risk of other infections.

Go immediately to your local urgent care or PEP consultation site, or occupational health clinic if work related. Bring any prior hepatitis B immunization records or related blood test results. They will assess your risk and may give you immunizations to protect against infection. This needs to be given as soon as possible after the exposure, sometimes within 48 hours.

#### *What is hepatitis B virus and how can it affect me?*

Hepatitis B is a virus that attacks the liver and can cause progressive liver damage and liver cancer. Many people who get hepatitis B show no symptoms and may not know they have the disease. Hepatitis B is spread from one infected person to another by contact with blood or body fluids. Whether there are signs of illness or not, you can still pass the virus on to others. Symptoms may include fever, fatigue, jaundice (yellow skin or eyes), abdominal pain, dark urine, loss of appetite and nausea.

#### *I think I have been exposed to blood and body fluids infected with hepatitis B virus. What are the chances that I have been infected?*

If you have been vaccinated against hepatitis B, your risk of infection is very low. For those who are unvaccinated, treatment with hepatitis B immune globulin (HBIG) and/or vaccine is highly effective at preventing infection.

#### *Is there a vaccination for hepatitis B?*

Yes. BC has a universal childhood hepatitis B immunization program. Most people born in 1980 or later in BC have been immunized against hepatitis B. In addition, most healthcare workers and first responders have been vaccinated.

#### *How can hepatitis B be treated?*



The treatments for hepatitis B can suppress the infection but cannot cure it. The goal of treatment is to reduce the risk of serious complications such as cirrhosis and liver cancer.

***Can I receive treatment for hepatitis B after an exposure?***

Depending on your prior hepatitis B vaccine history and testing results, you may be given a hepatitis B vaccine booster and HBIG (immediate, short-term protection) to help protect you from being infected.

***Where do I get tested?***

Immediately following exposure (within **2 hours**, related to a possible need to start HIV post-exposure prophylaxis within that time), it is recommended to go to your local urgent care or PEP consultation site, or occupational health clinic if work related, to receive a risk assessment and have a baseline blood test. This timeframe for having a risk assessment is especially relevant for a high-risk HIV exposure.

If you are a healthcare worker who has acquired a needlestick injury in a healthcare setting, review and follow the protocol at your own agency for follow-up care.

***What are the tests and when will I need to have them completed?***

If you have contact with blood or body fluids, there are certain blood tests that will need to be done over the next three months. Your health care provider will let you know when to return for testing. The testing schedule allows for the time between when a person has become infected and when the blood test can reliably detect that infection is in the person's blood, referred to as the "window period". The window period is important because during this time, an infected person cannot be detected as infected but may still be able to infect others.

***More Information:***

HealthLinkBC Files (<https://www.healthlinkbc.ca/healthlinkbc-files/hepatitis-c-virus>)

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## Hepatitis C Virus (HCV)

***I think I have been exposed to blood and body fluids infected with hepatitis C. What should I do?***

There is no recommended post-exposure treatment for HCV, however, it is recommended that you go immediately (within **2 hours** of exposure, related to a possible need to start HIV post-exposure prophylaxis within that time), it is recommended to go to your local urgent care or PEP consultation site, or occupational health clinic if work related, to have a baseline blood test.

***What is hepatitis C virus and how can it affect me?***

Hepatitis C is a disease that attacks the liver and can cause progressive liver damage and liver cancer. Many people who get hepatitis C show no symptoms and may not know they have the disease. People can live for 20-30 years without symptoms; however, the hepatitis virus can damage their liver and result in cirrhosis, liver cancer or end stage liver disease.

Hepatitis C is spread when the blood of an individual with hepatitis C infection enters the body of someone who is not infected. Sexual transmission is very rare. People can be completely symptom-free or display fever, fatigue, jaundice (yellow skin or eyes), abdominal pain, dark urine, loss of appetite and nausea (sick to your stomach).

***I think I have been exposed to blood and body fluids infected with hepatitis C virus. What are the chances that I have been infected?***

The risk of getting hepatitis C after an exposure depends on the amount of blood or body fluid at the time and the type of exposure. During your assessment, your health professional will be able to tell you



whether exposure has put you at risk of infection. The risk of hepatitis C transmission is around 1.8% (range is 0 to 7%) after a needlestick injury acquired in a healthcare setting.

***Is there a vaccination for hepatitis C?***

No.

***Can I receive treatment for hepatitis C after an exposure? Can hepatitis C be treated?***

There is no vaccine or medications to prevent infection with hepatitis C after an exposure. If your blood test done 3 weeks after exposure (looking for the HCV DNA) is positive, you should be referred to a specialist or your primary care provider to discuss possibly taking HCV treatment. Current treatments can cure more than 95% of infections

As approximately 25% of infections will clear spontaneously on their own, this test may be repeated in 6 months to determine if you have developed chronic infection before starting treatment.

***Where do I get tested?***

Immediately following exposure (within **2 hours**, related to a possible need to start HIV post-exposure prophylaxis within that time), it is recommended to go to your local urgent care or PEP consultation site, or occupational health clinic if work related, to receive a risk assessment and have a baseline blood test. This timeframe for having a risk assessment is especially relevant for a high-risk HIV exposure.

If you are a healthcare worker who has acquired a needlestick injury in a healthcare setting, review and follow the protocol at your own agency for follow-up care.

***What are the tests and when will I need to have them completed?***

If you have contact with blood or body fluids, there are certain blood tests that will need to be done over the next three months. The testing schedule allows for the time between when a person has become infected and when the blood test can reliably detect that infection is in the person's blood, referred to as the "window period". The window period is important during this time, because an infected person cannot be detected as infected, but may still be able to infect others.

***More Information:***

HealthLinkBC Files (<https://www.healthlinkbc.ca/healthlinkbc-files/hepatitis-c-virus>)

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## **Human Immunodeficiency Virus (HIV)**

***I think I have been exposed to blood and body fluids infected with HIV. What should I do?***

Go immediately, preferably **within 2 hours**, to the nearest emergency department or local health unit. They will assess your risk and may give you medications to protect against infection. This needs to be given as soon as possible after the exposure, **within 72 hours** to be most effective.

***What is HIV and how can it affect me?***

Human Immunodeficiency Virus (HIV) is a virus that attacks cells and results in damage to the immune system. It can be spread from an individual with HIV infection by contact with blood and/or body fluids. The most common types of contact are sexual exposure, needle sharing injection drug use, blood transfusion, perinatal (mother-to-child) and needlestick injuries in a healthcare setting.



***I think I have been exposed to blood and body fluids infected with HIV. What are the chances that I have been infected?***

The risk of becoming infected with HIV after an exposure depends on the amount of virus in the blood or body fluid of the source individual at the time and the type of exposure. During your assessment, your health professional will be able to tell you whether your exposure has put you at risk of infection.

***Is there a vaccination for HIV?***

No.

***How can HIV be treated?***

There is no cure for HIV, but medications can help people live to their normal expected lifespan. In BC, HIV treatment is provided at no cost to patients. The BC Center for Excellence in HIV/AIDS has shown that people who are living with HIV and are taking regular treatment can lower the amount of virus in their blood to an undetectable level.

***Can I receive treatment for HIV after an exposure?***

You may be given medication to protect you against HIV if you have come into contact with blood or body fluids. These medications are publically funded if the exposure is considered high-risk. These medications are most effective at preventing HIV infection if taken as soon as possible after exposure (**up to 72 hours**, preferably **within 2 hours**).

***Where do I get tested?***

Immediately following exposure (**within 2 hours**), it is recommended to go to your local emergency department, health unit or occupational health clinic to receive a risk assessment and have a blood test.

If you are a healthcare worker who has acquired a needlestick injury in a healthcare setting, review and follow the protocol at your own agency for follow-up care.

***What are the tests and when will I need to have them completed?***

If you have had an exposure, certain blood tests will need to be done over the next three months. The testing schedule allows for the time between when a person has become infected and when the blood test can reliably detect that infection is in the person's blood, referred to as the "window period". The window period is important because during this time, an infected person cannot be detected as infected but may still be able to infect others.

***More Information:***

HealthLinkBC Files (<https://www.healthlinkbc.ca/healthlinkbc-files/hiv>)



## References

1. BC Centre for Disease Control (BCCDC). Communicable Disease Control: Chapter 1 – Management of Specific Diseases Hepatitis B. 2018. Available from: <http://www.bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual/communicable-disease-control>
2. BCCDC. Communicable Disease Control: Chapter 1 – Management of Specific Diseases Hepatitis C. 2021. Available from: <http://www.bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual/communicable-disease-control>
3. BCCDC. Communicable Disease Control: Chapter 2 – Immunization. 2017. Available from: <http://www.bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual>
4. BCCDC. Communicable Disease Control: Chapter 5 – Sexually Transmitted Infections, Section 2: HIV/AIDS, HIV Guidelines for Testing, Follow-up and Prevention. 2016. Available from: <http://www.bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual/sexually-transmitted-infections>
5. BCCDC Public Health Laboratory. BCCDC Public Health Laboratory Update: Hepatitis C reflex testing Vancouver, BC: SmartSexResource; January 16, 2020 [cited 2021 Jan.19]. Available from: <https://smartsexresource.com/health-providers/blog/202001/bccdc-public-health-laboratory-update-hepatitis-c-reflex-testing>.
6. BC-CfE in HIV/AIDS. BC-CfE HIV Post-Exposure Prophylaxis (PEP) Guidelines. 2017 (Updated March 2020). Available from: <http://cfenet.ubc.ca/publications/centre-documents>
7. BC Ministry of Health. Management of Percutaneous or Permucosal Exposure to Blood and Body Fluid Laboratory Requisition. 2016. Available from: <http://www2.gov.bc.ca/assets/gov/health/forms/2339fil.pdf>
8. BC Ministry of Health. Management of Percutaneous or Permucosal Exposure to Blood and Body Fluid Letter for Follow-Up Physician. 2016. Available from: <http://www2.gov.bc.ca/assets/gov/health/forms/2340fil.pdf>
9. Beekmann SE, Henderson DK. Protection of healthcare workers from bloodborne pathogens. Current Opinion in Infectious Diseases, 2005; 18(4): 331-336.
10. Canadian AIDS Society. HIV Transmission: Guidelines for Assessing Risk. 2004. Available from: [www.cdnaids.ca/web/repguide.nsf/Pages/cas-rep-0307](http://www.cdnaids.ca/web/repguide.nsf/Pages/cas-rep-0307)
11. Canadian Blood Services. Background: Donor Testing – Human Immunodeficiency Virus (HIV). Accessed November 17, 2020. Available from: <https://www.blood.ca/en/about-us/media/hiv/background-donor-testing-human-immunodeficiency-virus-hiv>
12. Centers for Disease Control and Prevention (CDC). CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management. MMWR 2013; 62(RR-10):1-19. Available from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6210a1.htm>



13. CDC. HIV Risk Behaviors. Available from:  
[https://www.cdc.gov/hiv/risk/estimates/riskbehaviors.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhiv%2Fpolicies%2Flaw%2Frisk.html](https://www.cdc.gov/hiv/risk/estimates/riskbehaviors.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhiv%2Fpolicies%2Flaw%2Frisk.html)
14. CDC. Immunization of Health-Care Personnel. MMWR. 2011; 60(RR-07):1-45. Available from:  
<https://www.cdc.gov/mmwr/pdf/rr/rr6007.pdf>
15. CDC. Updated CDC Recommendations for the Management of Hepatitis B Virus–Infected Health-Care Providers and Students. CDC MMWR. 2012;61(3):16. Available from:  
<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6103a1.htm>
16. CDC. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis. CDC MMWR. 2001;50(RR11);1-42. Available from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm>
17. Coffin CS, Fung SK, Alvarez F, Cooper CL, Doucette KE, Fournier C, et al. Management of Hepatitis B Virus Infection: 2018 Guidelines from the Canadian Association for the Study of the Liver and Association of Medical Microbiology and Infectious Disease Canada. Canadian Liver Journal. 2018;1(4):156-217. Available from: <https://canlivj.utpjournals.press/doi/citedby/10.3138/canlivj.2018-0008>
18. Egro FM, Nwaiwu CA, Smith S, Harper JD, Spiess AM. Seroconversion rates among health care workers exposed to hepatitis C virus-contaminated body fluids: The University of Pittsburgh 13-year experience. American journal of infection control [Internet]. 2017 Sep 1 [cited 2021 Jan 9];45(9):1001–5.
19. FitzSimons, D., Francois, G., De Carli, G., Shouval, D., Pruss-Ustun, A., Puro, V., Williams, I., Lavanchy, D., De Schryver, A., Kopka, A., Ncube, F., Ippolito, G., & Van Damme, P. Hepatitis B virus, hepatitis C virus and other blood borne infections in healthcare workers: Guidelines for prevention and management in industrialized countries. Occup Environ Med, 2008;65:446-451. Available from: <http://oem.bmj.com/content/65/7/446.long>
20. Kuhar D, Henderson D, Struble K, Heneine W, Thomas V, Cheever L, Gomaa A, Panlilio A. Updated U.S. Public health service guidelines for the management of occupational exposures to HIV and recommendations for postexposure prophylaxis. Atlanta: U.S. National Center for Emerging and Zoonotic Infectious Diseases. 2013. Available from:  
<https://pdfs.semanticscholar.org/823f/9ea965c844e377a2d5353037387a0cfaba6d.pdf>
21. Ogunremi T, Defalco K, Johnston BL, Boucoiran I, Cividino M, Cleghorn B, et al. 1208. Preventing Transmission of Bloodborne Viruses from infected Healthcare Workers to Patients in Canadian Healthcare Settings: A National Guideline. Open Forum Infectious Disease [Internet]. 2019;Oct2;6:S434. Available from: [https://www.canada.ca/content/dam/phac-aspc/documents/services/infectious-diseases/nosocomial-occupational-infections/prevention-transmission-bloodborne-viruses-healthcare-workers/guideline\\_accessible\\_aug-2-2019.pdf](https://www.canada.ca/content/dam/phac-aspc/documents/services/infectious-diseases/nosocomial-occupational-infections/prevention-transmission-bloodborne-viruses-healthcare-workers/guideline_accessible_aug-2-2019.pdf)
22. Patel P, Borkowf CB, Brooks JT, Lasry A, Lansky A, Mermin J. Estimating per-act HIV transmission risk: a systematic review. AIDS. 2014 Jun 19;28(10):1509-19. Available from:  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6195215/>