

PURPOSE

The purpose of this guide is to provide directions on the steps to be taken following an exposure to blood or bodily fluids. This guide is based on evidence-based practice recommendations and resources to provide guidance for the workers on required laboratory testing, guidelines for treatment and requirements for ongoing monitoring to be completed with their health care provider.

EXPOSURE TO BLOOD OR BODILY FLUIDS

People who have come into contact with the blood and/or body fluids of another person are at risk of acquiring blood borne infections, including:

- Hepatitis B
- Hepatitis C
- Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS)

Types of exposure include:

- Fluids into the mouth, nose and/or eyes.
- A human bite, breaking the skin.
- Skin puncture with a contaminated object (including used needles and other sharp objects).
- Fluids on the skin when the skin is in poor condition (e.g. open wounds, cuts and cracked hands).

RISKS ASSESSMENT

A health care provider will help determine the risk of acquiring infection based on their assessment. The risk depends on many factors, and as much information as possible should be provided to a health care provider. Considerations include the type of bodily fluid exposed to and the severity of the exposure, including any wounds. The health care provider would also be considering the risk of infection in the source person or the level of infection in the source person if known (viral loads).

Hepatitis B spreads easier than Hepatitis C and HIV, although all three viruses carry a risk of infection.

IMMEDIATE ACTIONS TO TAKE AFTER AN EXPOSURE

- 1. If there is a wound, let the wound bleed freely, do not apply direct pressure. Gently and thoroughly clean with soap and water.
- 2. If eyes, nose, and/or mouth (i.e., mucous membranes) have been exposed, the area should be flushed immediately with water or saline for 10 to 15 minutes.
- 3. Remove any clothing that is contaminated with body fluids.
- 4. Seek medical attention IMMEDIATELY from a healthcare provider, or by going to the emergency department.

REMINDERS

If the exposure happened while at work, complete an incident report and report the incident to the occupational health office (or designate).

INITIAL BLOOD TESTING

A health care provider will order a blood sample from the person exposed to establish their "baseline". This baseline identifies if the person already had Hepatitis B, C and/or HIV infections prior to the exposure. This blood work also helps determine if the person has immunity to Hepatitis B.

This baseline bloodwork becomes very important during the claims process if a person were to get an occupationally acquired infection of Hepatitis B, Hepatitis C, or HIV. Not doing this bloodwork can jeopardize future claims.

INITIAL MEDICAL TREATMENT

TETANUS

A tetanus vaccine may be recommended if a wound is present. Tetanus is not a blood borne infection.

HEPATITIS B

A health care provider will assess whether the exposed person has been previously vaccinated against Hepatitis B and if they developed immunity from these vaccines. If a person is immune to Hepatitis B, no further testing is required.

If the exposed person has never received the Hepatitis B vaccine, it may be recommended that they receive both the vaccine as well as Hepatitis B Immunoglobulin (HBIG).

HBIG is made from donated blood products. It gives immediate immunity to Hepatitis B, but it is a temporary measure. It is recommended that anyone not already fully vaccinated for Hepatitis B receive the vaccine series.

HEPATITIS C

The focus is on early detection and treatment as there is not a vaccine currently available for Hepatitis C. There is also no post exposure prophylaxis (PEP) medication or immunoglobulin for preventing Hepatitis C infection.

There are effective antiviral medications that are available to treat Hepatitis C infection.

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

There are antiviral medications a health care provider may order after an exposure to HIV to help prevent HIV infection, this is called Post Exposure Prophylaxis (PEP).

A health care provider will help determine the risk of infection based on their assessment. If PEP is ordered, it should be started as soon as possible to reduce infection, ideally within 2 hours. After 72 hours from exposure, HIV PEP is no longer recommended.

HIV PEP is a 28-day course. For it to be effective, the person taking PEP must comply with medication regimen (right doses at the right time for the prescribed amount of time). HIV PEP can be discontinued by a health care provider if additional information about the source changes the risk assessment. The current regimen of PEP is usually well tolerated. Most common side effects are nausea, diarrhea, and fatigue.

FOLLOW-UP CARE & BLOOD TESTING

A health care provider will order follow-up blood tests (after baseline blood work), monitor any symptoms and assist in filling out any forms required from Workplace Safety and Insurance Board (WSIB).

It is important to do all the blood tests the health care provider recommends for the future as certain infections may take longer to be detectable in the blood. Initial tests may be falsely negative and later blood tests positive. This timeframe is called a window period.

PREVENTING INFECTION SPREAD

The person exposed may be advised by their Health Care Provider to take precautions to prevent spreading any possible infections. This is especially true if their exposure was high risk. This means taking precautions while waiting for any upcoming blood work results to check if they have the infections.

Precautions that may be recommended to prevent secondary transmission include:

- Using condoms with partners for intercourse.
- Deferring pregnancy and breastfeeding until having further consultation with their health care provider.
- Refraining from donating any blood, semen or organs.
- Avoid sharing razors, toothbrushes, or other personal items that may have trace amounts of bodily fluids on them.
- Clean any blood with a solution of 9 parts water to 1 part bleach.
- Keeping wounds covered until they are fully healed.
- Avoid sharing needles or other drug paraphernalia.

These precautions should be followed until the health care provider advises that they are no longer require.

SOURCE PERSON BLOOD TESTING

To help understand risk of infection, an important part of the health care provider's assessment will be to determine if the source person was infectious (i.e., positive blood test for HIV, Hepatitis B, Hepatitis C).

Health care providers can assist in this process by explaining to the source person that an exposure has occurred and by informing them why a blood test is needed. The source person will be asked to consent to the bloodwork and to consent to the results being shared with the exposed person.

The source person has the right to refuse bloodwork. In some instances, the exposed person is then eligible to apply through the Mandatory Blood Testing Act (MBTA). **This is a time sensitive matter.**

MANDATORY BLOOD TESTING ACT

The Mandatory Blood Testing Act, 2006 (MBTA) allows eligible persons (the "Applicant") who have come into contact with the blood and body fluids of another person to apply, within 30 days of exposure, to the Medical Officer of Health to have a blood sample of the person whose bodily substance they have come into contact with (the "Respondent") tested for HIV, Hepatitis B, and Hepatitis C.

The MBTA applies to persons who have come in contact with another's blood or body fluids in any of the following circumstances:

- As a result of being the victim of a crime.
- While providing emergency health care services or emergency first aid to the person, if the person was ill, injured, or unconscious as a result of an accident or other emergency.
- In the course of their duties, if the person belongs to the following groups:
- Persons working in a correctional institution, in a place of open custody, or place of secure custody.
- Police officers, employees of a police force who are not police officers,
 First Nations Constables, and auxiliary members of a police force.
- Special constables who are not employees of a police force.
- Firefighters (including volunteer firefighters).
- Paramedics and emergency medical attendants.
- Paramedic students in field training.
- Members of the College of Nurses of Ontario.
- Nursing students engaged in training.
- Members of the College of Physicians and Surgeons of Ontario.
- Medical students engaged in training.

MBTA APPLICATION PROCESS

Applications must be submitted to the Medical Officer of Health in the health unit where the Respondent lives.

Forms can be accessed via the Government of Ontario's Central Forms Repository (www.forms.mgcs.gov.on.ca) and are to be faxed to the WECHU - Infectious Disease Prevention Department at 226-783-2132.

FOR MORE INFORMATION

For more information on the application process, please visit the WECHU website at wechu.org/professionals/mandatory-blood-testing-act or call us at 519-258-2146 ext. 1420 to speak with a nurse.

CONTACT INFORMATION

ERIE SHORES HEALTHCARE

Emergency Department: 519-326-2373 ext. 4400

WINDSOR REGIONAL HOSPITAL

Emergency Department

Metropolitan Campus: 519-254-5577 ext. 52222 Ouellette Campus: 519-973-4444 ext. 34401

TECUMSEH BYNG CLINIC

HIV Care Program, PEP, Point of Care HIV Testing: 519-254-6115

WINDSOR-ESSEX COUNTY HEALTH UNIT

Infectious Disease Prevention Department: 519-258-2146 ext. 1420

REFERENCES

BC Centre for Disease Control (2021). Blood and Bodily Fluid Exposure Management. <u>www.bccdc.ca/resource-gallery</u>.

CATIE (2023). Post-exposure prophylaxis (PEP). https://www.catie.ca/post-exposure-prophylaxis-pep.

CATIE (2022). Hepatitis C Basics. https://www.catie.ca/essentials/hepatitis-c-basics#cure.

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Government of Canada (2024). Canadian Immunization Guide. https://www.canada.ca/en/public-health/services/canadian-immunization-guide.html.

Public Health Ontario (2024). Blood Borne Infections. https://www.publichealthontario.ca/en/Diseases-and-Conditions/Infectious-Diseases/Blood-Borne-Infections.

