

Blood and Body Fluid Exposure

There are three important things to think about if you have been exposed to blood or a bodily fluid.

- + What is the likelihood that the source person, whose fluid you have come in contact with, is infected?
- + What kind of fluid were you exposed to?
- + How were you exposed to that fluid?

LIKELIHOOD THE SOURCE PERSON IS INFECTED

There are three major viruses that could possibly be passed on from person to person through contact with blood or bodily fluids. These are:

- + Hepatitis B virus (HBV).
- + Hepatitis C virus (HCV).
- + Human Immunodeficiency Virus (HIV).

It is important to know the status of the person whose fluid you were exposed to. The person can be someone:

- + who you know do not have any infection or would be a low infectious risk (like your grandmother).
- + who you know are infected with HIV or Hepatitis B or C or are high risk because they are injection drug users, prostitutes or people receiving large blood transfusions.
- + who you have no idea what the status of the source patient is.

Only in very rare circumstances, the unknown source is considered to be negative. For instance, an exposure to discarded needle where the blood in the syringe is likely old and clotted and did not come in contact with you. It will stay in the syringe.

If you have been bitten there is an additional risk of bacterial infection and a much smaller but possible risk of tetanus. The physician will talk to you about these risks.

KINDS OF BODILY FLUIDS AND ROUTES OF TRANSMISSION

- + **High Risk Bodily Fluids:** Blood, semen, vaginal secretions, other internal fluids like peritoneal fluid or cerebrospinal fluid, breast milk or pus.
- + **Low or No Risk Bodily Fluids:** “Clear” body fluids such as tears, saliva, sweat, urine, and other fluids like vomit, and fecal material contain little or no virus and do not transmit HIV or Hepatitis C virus unless they are contaminated with blood.

The route of exposure is also important. Most of the cases of transmission of HIV and Hepatitis C occur from needle stick injuries. Exposure from a splash on your skin is usually not sufficient to spread these infections. Occasionally, if the splash is massive and/or you have a fresh cut on your skin, there is a theoretical risk of transmission. In addition splashes to your eyes or mouth may have a slightly higher risk of transmission. The physician will help you decide if you need further treatment.

RISKS OF INFECTION

These three viruses also have different risks of being transmitted. If the source is definitely positive for HIV the risk of you getting HIV from a needle-stick injury is less than about 2 - 3 in 1000 (99.7% of the time you would be fine). The risk of the same exposure for Hepatitis C is about 1 in 100 (99% of the time you would be fine) and the risk of Hepatitis B exposure is the highest at about 1 in 3 (33%). For a splash of blood where the source is definitely HIV positive your risk of infection is less than 1 in 1000 (more than 99.9% of the time you would be fine).

Hepatitis B carries the highest risk of infection. However, there is a vaccine that can be given against Hepatitis B. It is usually administered to all students in Grade 6 and it is also given to Health Care Workers. If you have received this vaccine you have virtually no risk of getting Hepatitis B from this exposure.

WHAT TO DO IF YOU ARE EXPOSED?

- + Wash your hands (or the area) immediately after exposure
- + If your eyes, nose or mouth (mucous membranes) have got splashed with bodily fluids, flush well with water
- + If you have got pricked by a needle then contact your doctor or the emergency department.

YOUR TREATMENT IN THE EMERGENCY DEPARTMENT

You will be asked about your hepatitis B and tetanus status. If you have not had a tetanus booster in the last 10 years you will be offered one. Likewise, if you have never been vaccinated for Hepatitis B you will have a first dose of the vaccine and a shot of Hepatitis B antibodies (immunoglobulin) that helps to decrease your risk of getting Hepatitis B. There are additional shots at 1 and 6 months that are required for life long Hepatitis B immunity.

Your physician will have talked with you to determine your risk of infection from your exposure. Even if your risk is high, most people do NOT get infected from these exposures. High risk patients will be offered medications called antiretrovirals to decrease the risk of becoming infected. In British Columbia, no person put on antiretroviral medications has become infected from a blood or body fluid exposure.

Some of the medicines used can cause side effects. The most common side effects are fatigue, diarrhea, nausea, and occasionally headaches. You will be given a 5 day course from the emergency department. After this, you or your family doctor will need to get in contact with the Centre for Excellence in HIV/AIDS to determine if you need to take the full 28 day course of medications. The phone number is provided with the medications.

The government provides the antiretroviral medications free of charge for occupational exposure only. If your exposure is the result of unprotected intercourse a prescription can be provided for you but you may have to pay for the medications yourself.

Blood and Body Fluid Exposure - Continued

Since there is only a minimal risk of transmission of infection you do not need to take special precautions with your partner to prevent infection unless specified by the treating physician.

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Find this information sheet on the BC Emergency Medicine Network website:
www.bcemn.ca/clinical_resource/blood-and-body-fluid-exposure/

WHEN TO GET HELP

Go to the nearest Emergency Department:

- + If you develop a painful red rash at the exposure site (skin infection)
- + If you develop a flu-like illness 2 - 4 after your exposure, this may represent a seroconversion (remember that this is very unlikely to occur) and you should seek medical attention at your **family doctor** and **NOT** in the emergency department. You should follow up with your family doctor to check the test results and to get additional Hepatitis vaccination should you require this.

TO LEARN MORE ASK

- + Your family doctor.
- + HealthLinkBC - call 8-1-1 (7-1-1 for deaf or hard of hearing) or go online to www.HealthLinkBC.ca

RECOMMENDED FOLLOW UP

- Follow up with your primary care provider in ___ days.

bcemn.ca

The information in this document is intended solely for the person to whom it was given by the health care team. This information does not replace the advice given to you by your health care provider.

