

hepatitis B

hepatitis C

HIV infection

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● **Screening tests AND PREVENTIVE INTERVENTIONS**

If the doctor considers that the exposure presents a risk of transmission, he or she may request that your child undergo blood tests to determine whether your child was already infected before the exposure; these tests should be done as soon as possible after the event. Other tests may be done later to establish whether or not there was transmission at the time of the exposure.

Interventions to prevent hepatitis B and HIV infection can be carried out; in addition, **prompt diagnosis of hepatitis C allows for early treatment, which has a cure rate of over 80%.**

Hepatitis B (HBV):

Antibodies (immunoglobulins) or vaccine can be administered, alone or in combination, to prevent hepatitis B after accidental exposure to the virus. These measures are known to be effective.

Ideally, immunoglobulins should be administered within 48 hours of exposure since their effectiveness decreases over time and is unknown if given beyond 7 days of exposure.

HIV infection:

Usually, HIV post-exposure prophylaxis is not recommended when the source individual's status is unknown. It should be given only in rare cases.

The decision to prescribe antiretroviral therapy is based on the risk associated with the exposure and on the time of exposure. Preventive treatment should start as soon as possible, ideally within 2 hours of exposure; it is probably ineffective if it is initiated more than 72 hours following exposure.

To be effective, medications must be taken for 28 days.

Antiretrovirals can have side effects, some of which can be major, especially at the beginning of the treatment. However, these drugs have been improved over time, and preventive treatments are increasingly well tolerated.

Preventive HIV treatment is known to be effective (around 80%) when administered rapidly.

● **Prevention for CLOSE CONTACTS**

If the doctor determines that your child may have contracted HBV, HCV or HIV, preventive measures must be taken to protect the people around him or her until all possibility of infection is eliminated.

This period can last **six months**, during which time you must

- ensure your child does not lend his or her toothbrush or borrow someone else's;
- wear gloves when you treat your child for an injury that causes bleeding, so as to avoid direct contact with the child's blood;
- wash your hands;
- immediately wash and disinfect any blood-stained object or surface using a solution of 1 part bleach to 9 parts water; the solution is effective for a week if kept in a sealed opaque container.

Note: Your child can continue to go to daycare and to school.

According to current recommendations, staff must apply basic preventive measures on a daily basis in daycare and school settings.

ACCIDENTAL EXPOSURE TO BLOOD OR OTHER BODY FLUIDS POTENTIALLY CONTAMINATED

- **WITH** hepatitis B virus (HBV)
- hepatitis C virus (HCV)
- **OR** human immunodeficiency virus (HIV)

● **INFORMATION FOR THE PARENTS OF AN EXPOSED CHILD**

● **For more information, call Info-Santé at 8-1-1 or contact your doctor.**

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Your child has been accidentally exposed to blood or another body fluid potentially contaminated with hepatitis B virus (HBV), hepatitis C virus (HCV) or human immunodeficiency virus (HIV).

● Risk associated WITH ACCIDENTAL EXPOSURE

Contact with blood or other body fluids carries the risk of contracting one of the blood-borne infections caused by HBV, HCV or HIV.

Such a risk exists when blood, sperm, serum, vaginal secretions, plasma or any other body fluid (tears, nasal secretions, urine) **visibly stained** with blood come into contact with a wound that hasn't healed or a mucous membrane (nose, mouth, eyes), or through broken skin (e.g. needle stick, bite, cut with a soiled instrument).

The level of risk varies with the type of exposure. For instance, the risk of HBV, HCV and HIV transmission is lower if contact is with a mucous membrane than if with broken skin (percutaneous exposure).

In the latter case, the depth of the wound the quantity of blood involved and the type of needle or instrument are all elements that affect the level of risk.

Healthy skin is a good barrier against HBV, HCV and HIV. Tears, nasal secretions, urine and saliva that are not soiled with blood do not pose a risk, except saliva during a dental procedure or in the case of a human bite.

● Effects OF HBV, HCV AND HIV

HBV attacks the liver and causes an infection that goes unnoticed in over half of persons affected. The others develop a variety of symptoms such as jaundice (yellowing of the skin and eyes), fever, abdominal discomfort, nausea, vomiting and diarrhoea. Most people recover completely and are then protected against hepatitis B for the rest of their lives.

Infected persons can pass on the virus for several weeks before they develop symptoms, and as long as the virus is in their blood. Up to 10% of people will stay infected for more than six months, and often for life; this is called a chronic infection. Infected

individuals can be healthy carriers of hepatitis B virus, that is, the disease will evolve quietly. Nonetheless, they can spread the virus and are at greater risk of developing cirrhosis or liver cancer. Regular medical check-ups are necessary.

HCV also attacks the liver and causes an infection which generally goes unnoticed. However, some people suffer from fatigue or nausea and, in rare cases, jaundice. Only about 20% of infected people recover spontaneously. In the remaining cases, the virus stays in the body; when the infection lasts over six months, it is then considered a chronic infection. Some chronic carriers will have no complications for decades, while others will develop cirrhosis of the liver. Nonetheless, all hepatitis C carriers can transmit the virus and must have regular medical check-ups.

HIV attacks the body's immune system. Signs and symptoms of acquired immunodeficiency syndrome (AIDS) appear when the immune system is very weak. There are drugs to control viremia (the quantity of virus in the blood) and prevent the immune system from deteriorating. These drugs can slow down the infection or prevent it from progressing to AIDS, and prolong the lives of people living with HIV.

● Risks of TRANSMISSION

The risk of contracting an infection as a result of exposure to blood or certain other body fluids varies depending on the virus involved.

Hepatitis B (HBV):

If the person exposed has not been vaccinated or has never been infected, the risk of transmission is 1% to 31%, depending on the type of exposure and the level of infection of the source individual.

Hepatitis (HCV):

The risk of transmission is approximately 0.5% (5 cases per 1,000) for percutaneous exposures (contaminated needlestick injury) in the context of a work-related injury. The risk can be higher following percutaneous exposure linked to needle sharing. Finally, HCV transmission following contact with a mucous membrane or resulting from a bite is much rarer.

HIV infection:

The risk of transmission is 0.3% (3 cases per 1,000) for percutaneous exposures. Generally, the risk is 10 times lower in the case of contact with a mucous membrane.

● Source PERSON

To determine the risk of infection, it is important to know if the source person (the person whose blood or body fluid is involved) is infected. The only reliable way to do this is to perform blood tests, which can only be done once the source individual has given free and informed consent.

If the person is unable to give consent, for instance, because of a psychiatric problem, then consent must be obtained from his or her legal representative.

No undue pressure can be put on the source person to obtain his or her consent to conduct laboratory analyses. Therefore it is incumbent upon health professionals to request the person's consent.

Some of the source person's behaviours, such as drug injection and risky sexual practices, should also be considered.

The doctor will decide on the follow-up measures your child requires, based on the information provided and the tests performed.