

RISK OF DISEASE TRANSMISSION FROM ORGAN DONORS – PATIENT INFORMATION GUIDE

Receiving an organ transplant carries many risks, including the risk of getting a disease from the donor. This is true for every organ we transplant. **BC Transplant makes every effort to minimize these risks.**

Getting a disease from an organ donor is rare – it's estimated to happen in about **0.2%** of all transplants.

This guide will walk you through our screening process and answer some of the questions you may have about the risk of disease transmission from transplantation.

How are organs screened and tested for disease?

All organ transplants in Canada are regulated by Health Canada. Health Canada has strict screening requirements to minimize the risk of transmitting any disease from a donor. This screening and testing is similar to what is done for blood donation.

We do the following tests on all donors:

- A thorough review of the donor's past medical and social history.
- A physical exam of the donor and donor organs. We check for signs of intravenous (IV) drug use, evidence of infections and any other potential sign of risk.
- Screening of the blood for infection.

Limitations in screening and testing

Organ donors are extensively screened and tested, but there are still limitations:

- We don't have screening tests for every infection. For example, right now we do not have a good tuberculosis test for deceased donors.
- Testing is not 100% accurate. Although it's rare, sometimes a test will come back negative even though the person has an infection. This is most common when an infection first happens, because it takes time for the infection and the body's immune

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response to develop. The time when we can't detect these early infections is called the window period.

- Our risk assessment relies on a person other than the donor telling us a history about the donor. They may not know everything about the donor, so **it's impossible to know everything about an individual donor.**

What is an increased risk donor?

An increased risk donor is someone who has certain behaviours that are associated with a higher risk of transmitting infectious diseases to transplant recipients (see Table 1). These donors may test negative for infections, but there may still be a risk of transmission for HIV, hepatitis C virus, and hepatitis B virus to transplant patients in the period when the infection(s) cannot be detected by the tests (i.e. during the window period).

Organs are considered to come from an increased risk donor if the donor meets any of the identified criteria in the table below.

Table 1. Health Canada criteria for increased risk donors

- Injection drug user in the past five years
- A man who has had sex with another man in the past 12 months
- Person who has engaged in sex in exchange for money or drugs in the past five years
- Person who has had sex in the past 12 months with a person who meets any of the above three criteria, or with anyone known or suspected to have HIV, hepatitis C virus, or hepatitis B virus
- Exposure to these viruses in the past 12 months through percutaneous inoculation or open wound
- Prison, lock up, jail or juvenile detention for more than 72 consecutive hours in the past 12 months
- Non-sterile tattooing or piercings in the past 12 months
- Close contact with anyone with clinically active viral hepatitis (e.g. living in the same house where kitchen and bathroom are shared) in the past 12 months

Adapted from CSA standards 2017, Annex E

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Will I be told if a potential transplant comes from an increased risk donor?

You'll be informed if your donor is an increased risk donor when the organ is offered to you.

You'll only be offered an organ from an increased risk donor if your transplant doctor feels the benefit of getting a transplant outweighs the risk of getting an infection from the organ. The benefit will be that you're able to get a transplant right away instead of waiting longer.

The actual risk will vary by the type of organ you are receiving and the risk factor. If the current tests are negative, this risk will be very low (less than 1%).

The specific risk and benefits will be discussed in detail with you when an offer is made. The choice is yours.

Are there other types of increased risk donors?

In addition to the risks in Table 1, donors may also have had cancer or risk of having an infection such as tuberculosis. In certain circumstances when your benefit is high and the risk to you is felt to be low you may be offered an organ from a donor with one of these risks. This will be discussed with you when the organ is offered to you and the choice is yours.

What about a donor who has been exposed to hepatitis C?

It's possible that a donor may have been infected with hepatitis C virus but could have naturally fought off the infection or could have been treated and cured. In this situation, if current testing for the virus in the potential donor is negative, your risk of getting infected is very low (less than 1%). Your doctor will discuss this with you when the organ is offered to you, and you may decide not to take this risk. The choice is yours.

What's the difference between an organ from an increased risk donor and one from a standard organ donor?

If someone is an increased risk donor, it only means that they engaged in activities before their death that increase the chance they got an infection right before they died. All donors are screened for infectious diseases including HIV, hepatitis B, and hepatitis C. However, even with negative test results, there is still a very small chance that an organ from an increased risk donor has an infection that could be transmitted during transplant. The doctor offering you the organ will be able to explain the risk.

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The increased risk of infection from the donor does not affect how well the organ will work. In fact, on average, increased risk donors tend to be of younger age with better organ function.

Why would I think about accepting an organ from an increased risk donor?

Accepting an organ from an increased risk donor may increase your chance of getting a transplant. It can also mean you may get your transplant more quickly than if you wait for an organ from a donor without these risks.

These are the facts:

- **Organs are scarce.** There's a constant shortage of organs and tissue that can be used for transplant.
- There are more than 600 British Columbians waiting to get life-saving organ transplants.
- In 2018, 27 British Columbians died while on the transplant wait list.
- The waiting times for organ transplants can be up to several years depending on the organ.

Why would I be offered an increased risk organ?

You'll only be offered an organ from an increased risk donor if a transplant doctor at your hospital feels that the benefits of transplanting you with the organ are greater than the risk of getting an infection. Otherwise the organ will not be offered to you. When the organ is offered to you, a transplant doctor will speak with you about the risks and benefits of accepting the increased risk organ versus waiting for another organ.

How will I know if I develop an infection?

If you accept the organ, you'll be monitored after your transplant to make sure that you do not have an infection. In the unlikely case that you do get an infection, treatments are available. Specialists, such as infectious disease doctors, will treat you if needed.

