Increased Risk Donors: What the Transplant Candidate Needs to Know

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If you or your loved one is considering getting an organ transplant, it is important for you to understand that infections can sometimes cause a problem after transplantation. Some of these infections come from the environment, like cold viruses. Some come from your own body and sometimes infections can actually come from the donor organ. As you probably already know, the gift of an organ for transplantation is often the only treatment for an otherwise incurable disease, or the only way to come off dialysis. Organ transplantation saves many lives each year.

However, there will always be some risks to having an organ transplant and one of those risks is getting an infection from the organ itself.

It is possible for any organ to spread an infection. Sometimes these infections are known before transplant and are expected. These infections include the “mono virus” called Epstein Barr virus (EBV) and a related virus called cytomegalovirus (CMV). Your doctors will use blood tests to check on these infections after transplant to help prevent them getting out of control. In addition, for some viruses your doctors will have medicines to treat or prevent disease from the infection. However, on rare occasions, infections are transmitted from the organ to you that are unexpected.

Organ donors who have risky behaviors or other risk factors for getting infected with HIV, hepatitis B and/or hepatitis C virus in the year before death are named Increased Risk Donors. You may also hear them called Public Health Service (PHS) Increased Risk Donors or inappropriately called CDC High Risk Donors.

This pamphlet will discuss the PHS increased Risk Donor to help you and your family better understand what it means.

WHAT IS HIV?

HIV (Human Immunodeficiency Virus) is an infection that can be spread by exposure to blood or sex or from mother to newborn. There are medicines to treat this infection, but there is no way to cure this infection. A person with HIV infection needs to take medicine to keep the disease from getting worse for the rest of his or her life.

WHAT IS HEPATITIS B VIRUS?

Hepatitis B is a virus that infects the liver. If not treated, it can often cause scarring of the liver (cirrhosis). It is spread through blood and sex or from mother to newborn. There is a vaccine available to protect people from getting infected with hepatitis B. You may be offered this vaccine prior to your transplant. Since 1991, all babies in the United States are vaccinated to protect them against hepatitis B. There are medicines to treat hepatitis B and prevent the infection from harming your liver. Hepatitis B is not curable.

WHAT IS HEPATITIS C VIRUS?

Hepatitis C is a virus that infects the liver. If not treated, it can often cause scarring of the liver (cirrhosis). It is mainly spread through blood and sex and from mother to newborn. There is also a very small risk of getting infected with hepatitis C while on hemodialysis. There are medicines that can cure hepatitis C (clear infection from your body).

WHAT IS AN INCREASED RISK DONOR?

The term Increased Risk Donor is vague and often misunderstood. Like all donors, these individuals are tested to exclude long standing HIV or hepatitis B or C. However, on review of their history with loved ones, these donors have an unusual or “risky” behavior identified in the past year that raises the chance they could have been recently infected with HIV, hepatitis B or hepatitis C virus. While the term PHS Increased Risk Donor refers to risks occurring in the last year, the testing to look for these three viruses should be able to detect infection if the risk occurred more than a few weeks before organ donation. On the other hand, if someone is infected with one of these viruses in the few weeks prior to death, then the blood tests we use to test for the infection in the donor might be negative even when the infection is present at low levels.

If a donor receives many blood transfusions and fluids when they are admitted to the hospital prior to death, the results of tests to screen for infections could be “diluted” and be negative even if the infection is present (false negative). Donors with “diluted” blood are also defined as Increased Risk Donors, as are donors where we cannot identify anyone who knows them well enough to give us an accurate behavioral history.

If a donor has one of the following reported in the past year, they will be called an Increased Risk Donor:

1. Patients on hemodialysis
2. People who were in prison
3. Sex workers or people that have sex for money or drugs
4. People who had sex with sex workers
5. Men who had sex with another man
6. Women who had sex with a man who had sex with another man
7. Injection drug users or people who had sex with injection drug users
8. People who were treated for syphilis, gonorrhea, chlamydia, or genital ulcers
9. Babies whose mothers were infected with HIV, Hepatitis B, and/or Hepatitis C
10. People who had sex with a person who had: HIV, Hepatitis B, and/or Hepatitis C

Increased Risk Donors have a very small risk of possibly transmitting HIV, hepatitis B or hepatitis C to the person accepting their organs for transplant. However, this classification says nothing about the organ quality. Increased Risk Donor organs will work just as well as other organs.

**HOW MANY DONORS ARE INCREASED RISK DONORS?**

The most recent estimates of the number of Increased Risk Donors from 2017 are that 1 of every 4 (or 25 in 100) donors are Increased Risk Donors. This number is expected to continue to rise given the current “opioid epidemic” and increase in the number of people injecting drugs. The number of people dying from injection drug overdose is continuing to increase across the United States. Since injection drug use is a behavior that would increase the risk that someone has a new infection with HIV, hepatitis B and/or hepatitis C, donors who have injected drugs in the past year are Increased Risk Donors. Throughout the United States there have been several organ transplant patients that have been infected with hepatitis C from donors dying from a drug overdose. The test results for hepatitis C infection were negative in these donors because the infection was very new. Therefore, these were unexpected infections. The numbers of HIV or Hepatitis B infections transmitted through organ transplant remains very low.

**WHAT IS THE RISK OF GETTING AN INFECTION FROM AN ORGAN FROM AN INCREASED RISK DONOR?**

The actual risk is unknown. But, there are estimates about the risk that show it is very low. The most likely infection to get from an Increased Risk Donor is hepatitis C, where the risk is estimated at 0.1% or 1 in 1000. The risk is greatest is from donors that die from a recent overdose from injecting drugs. If the risk behavior of the donor happened a long time ago, the risk of getting HIV, hepatitis B or hepatitis C is even lower and close to zero.

**HOW DOES THE RISK OF GETTING AN INFECTION FROM AN INCREASED RISK DONOR ORGAN COMPARE TO OTHER RISKS IN LIFE?**

![Risk of dying in your life from a traffic accident](image)
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The risk of getting infected with hepatitis C virus by staying on hemodialysis is the same as possibly getting this infection by an increased risk donor organ.

WHAT HAPPENS AFTER TRANSPLANTATION IF I ACCEPT AN ORGAN FROM AN INCREASED RISK DONOR?

You should discuss the plan with your transplant team. The team will do blood testing after your transplant to check for HIV, hepatitis B and hepatitis C.

If you are found to have an infection, this will be reported to the national transplant organization and you will be treated for the infection. If you become infected with hepatitis C, the treatment has a great chance of removing the infection from your system and curing you.

WHY WOULD I WANT TO ACCEPT AN ORGAN FROM AN INCREASED RISK DONOR?

In the end, you and your doctors and nurses should balance how long you can wait for your transplant with the risk of using an Increased Risk Donor for your transplant. Many times, depending on your individual situation, the risk of infection from an Increased Risk Donor organ is much less than the risk of waiting longer for an organ, or dying from your illness. In addition, Increased Risk Donors tend to be younger and otherwise healthy people with organs that work well. While older donors may be less risky to transmit one of these three infections, they may also have organs that do not work as well.

HIV, hepatitis B and hepatitis C are all treatable infections, and hepatitis C is curable. Therefore, in the rare case you are infected with one of these viruses after transplant, you will be put on appropriate medicines.