The Highly Sensitized Patient Program (HSP) for Kidney Transplant Recipients
The Highly Sensitized Patient Program (HSP) for Kidney Transplant Recipients

Why am I considered a highly sensitized patient?

• One of the ways that your body protects itself from infection is by destroying cells it does not recognize as its own. When your body does not recognize a cell, it produces an antibody.

• Antibodies destroy infections and transplanted tissues (like in a kidney transplant). You may develop antibodies from having a blood transfusion, pregnancy, or having a previous organ transplant.

• A highly sensitized patient has a high percentage of antibodies. These antibodies make them more likely to reject an organ after transplant.

How do I know I am sensitized?

• You will have a panel reactive antibody (PRA) test to measure antihuman antibodies in your blood. The PRA test checks how your cells respond to random cells from the donor population to estimate your risk of rejection.
• The test result is a percentage from 0% to 100%. It represents the amount of donors in the population that you will react to. For example, if you have a PRA of 20%, you will react to 20% of the donor population. If your PRA is 95% or higher, you are considered highly sensitized and can participate in the Highly Sensitized Patient Program.
• You will get this test done every month to make sure that you have not developed any new antibodies.

What is the Highly Sensitized Patient Program?
The Highly Sensitized Patient Program (HSP) was developed by Canadian Blood Services. It includes organ transplant programs across Canada. This increases kidney transplant opportunities for patients needing a very specific match from a deceased donor.

How does this increase my chance of finding a match?
When a deceased donor anywhere in Canada has 2 eligible kidneys, 1 kidney is offered to the HSP. The HSP will try to find a match with a recipient across Canada.
What happens if there is a possible match for me?

- If your name comes up as a possible match, the offer will be reviewed by our surgeon, nephrologist (kidney doctor), and tissue typing team to make sure that it is safe for you to receive the organ.

- Human Leukocyte Antigens (HLA) are proteins in the body. The tissue typing team will check to make sure you do not have any antibodies against the donor. This is called a virtual crossmatch.

- If your health care team feels that the organ is safe for you, you will be called in for transplant.

Is there a chance that I may not receive the organ once I am in hospital?

Yes, this is always a possibility with any transplant. This may be because:

- You are unwell. If you have a fever, you may be sent home. It is not safe to do a transplant if you have an active infection.
You have a positive crossmatch. The tissue typing team will do a final crossmatch by mixing your blood with the donor’s blood to make sure there is no reaction. If there is a reaction (positive crossmatch), your body will reject the organ. In this case, the transplant will not be done.

When the surgeon sees the donor kidney, they may decide that it is not safe.

We know that it is disappointing to get to the hospital and not receive your transplant. Remember, your health care team makes these decisions based on what is safest for you.

Will I receive more immunosuppression?

Highly sensitized patients have a higher risk of rejection after the transplant. For this reason, you may need a medication called anti-thymocyte globulin (ATG). This medication may lower your chances of rejection post-transplant.

Can I receive an organ from anywhere in Canada?

Your surgeon will decide this when a possible match is received. They must consider many things when making this decision. They must consider the distance and travel time for the organ.
If there is a possible match for me, will I need to travel?
No. The organ will be sent to the hospital where your transplant surgery is being done.

How many highly sensitized patients are there in Atlantic Canada? How often do patients get matched?
This information changes all the time, depending on how many patients are in the program and how sensitized they are. We work with Canadian Blood Services to keep track of these numbers. Please ask your transplant coordinator for more information.

Is it possible that I will not receive a match?
You may wait several years before receiving a match. This partly depends on how sensitized you are. We cannot predict when you will receive a match.
Can I do anything to increase my chances of getting a transplant?
Follow the advice of your health care providers. Stay healthy and tell your health care team if anything changes with your health (such as you have received a blood transfusion or developed an infection).

Resources

Canadian Blood Services
› https://blood.ca/en

Multi-Organ Transplant Program of Atlantic Canada (MOTP)
› www.motpatlantic.ca

Contact
If you have any questions, please contact your Kidney Recipient Transplant Coordinator.

Remember that your transplant team is here for you. Please talk with your Transplant Coordinator if you have any questions or concerns.