

Getting a New Kidney

Information for patients and families

Read this booklet to learn:

- about kidney transplants
- who can be donors
- how to start the transplant process
- how long the process might take
- who to call if you have any questions

Note: Some information may change due to the COVID-19 pandemic. Please ask your health care team if you have any questions.



Is a kidney transplant right for me?

A kidney transplant is when a healthy kidney from another person is placed in your body. A kidney transplant may be the best way to treat you if you have kidney failure.

The benefits of having a kidney transplant include:

- no more dialysis treatments
- fewer rules for what you can eat and drink
- a lower risk of heart attack and stroke
- an improved quality of life

A kidney transplant is not suitable for everyone. Speak to your doctor to see if a kidney transplant is right for you.

Are there different types of kidney transplants?

There are 2 types of kidney transplants:

1. a transplant from a living donor (person giving their kidney)
2. a transplant from a deceased (non-living) donor

Transplant from a living donor

A living donor transplant uses a kidney from a living person. People who are not related to you may still be a suitable living donor.

How does donating a kidney affect the living donor?

A person who donates a kidney can live a normal life afterwards. They can do all their usual activities. They can have children.

The recovery time after the surgery is usually short. Donors can return to work in about 3 to 6 weeks. Speak to your doctor or nurse if you know someone who is interested in donating a kidney to you.

How is a suitable living donor found?

The donor and the patient are tested to see if the transplant could work. They are tested by different transplant teams. These teams are separate to make sure the donor and the patient both feel comfortable about doing the transplant (for example, they don't feel pushed or pressured to do it).

The teams also make sure both the donor and patient are healthy enough for the transplant. If the first donor doesn't work out, other interested donors will be tested.

What are the tests that check if the living donor kidney is a match?

The transplant teams do several blood tests. These tests make sure your body has the best chance of accepting the living donor kidney.

For any transplant, the blood group of the donor must be compatible with the blood group of the patient. Compatible means there will be no harmful interactions between two blood groups. You can only receive a kidney from a donor when your blood group is compatible with the donor's blood group.

This chart has information about which blood groups are compatible.

If your blood type is: (patient or donor)	You can receive a kidney from blood type:	You can donate a kidney to a patient with blood type:
O	Group O, or possibly A2 subgroup	Group O, A, B, AB
A	Group A, O	Group A, AB
B	Group B, O, or possibly A2 subgroup	Group B, AB
AB	Group O, A, B, AB	Group AB

If the donor's blood group is compatible with yours, blood tests called HLA typing and a crossmatch will be done.

HLA typing checks to see how similar your cells are to your donor's cells. HLA typing information helps your doctors make the best match. This will increase your chances of a successful transplant.

The crossmatch test checks to see how your immune system reacts to your donor's cells. A negative crossmatch means that your cells did not react with your donor's cells. This means that there is a lower chance that your body will reject the donor's kidney.

Unfortunately, there is no test that can make sure that the patient will not reject the donor kidney in the long-term.

Living donor kidney transplants are usually successful, but problems can happen. The kidney may be rejected by your body. The disease that caused your kidney failure may come back after your transplant. Talk to your doctor about the risks and benefits of living donor kidney transplants.

What if my living donor is not compatible with me?

Sometimes your living donor can't donate to you because your blood group doesn't match or your crossmatch test is positive. A positive crossmatch means that your body's cells are fighting the donor cells. This means that your body is more likely to reject the donor's kidney.

You may still be able to receive a kidney from a living donor. There are options available to make a transplant possible (including the National Kidney Paired Donation Program). Please talk with your transplant team for more information about these options.

What if my living donor changes their mind?

Donors should not be pressured into donating a kidney. The decision is theirs alone. After thinking about it, donors have the right to decide that kidney donation is not for them. That decision will be respected. Patients who have kidney failure also have the right to decide that they do not want a transplant.

Transplant from a deceased donor

A deceased donor transplant means a suitable kidney from someone who has died is placed in your body. The family of the donor must agree to the transplant. They would have to sign a consent (permission) form. If you had a deceased donor transplant, you would not be told who the donor is to respect the privacy of the donor and their family.

For this type of transplant, you would have the same tests done as those for a living donor kidney transplant. Then you would be put on a waiting list. You could only have the transplant when a kidney that matches your body becomes available from a deceased donor.

It's hard to know how long you would have to wait. It will depend on how easy you are to match and how many kidneys become available. The average waiting time ranges from 5 to 8 years from the day you started regular dialysis.

Is one kind of transplant better than the other?

A transplant from a living donor is better than a transplant from a deceased donor for these reasons:

- A living donor transplant can be done more quickly. They can sometimes be done within several months or even before starting dialysis.
- The transplant from a living donor can be scheduled ahead of time. This can't be done when the patient is waiting for a kidney from a deceased donor.
- Kidneys that come from living donors are more likely to work right away. Kidneys from deceased donors may take several days or weeks before they begin to function or work normally.
- In general, living donor kidney transplants last longer than deceased donor kidney transplants.

If I want to go ahead, how do I start the transplant process?

1. Ask your kidney doctor to refer you to the Transplant Assessment Office at UHN.
2. Your kidney doctor or nurse will schedule you for baseline transplant workup tests at your kidney care centre. Baseline transplant workup tests check to see if you are suitable for a kidney transplant.
3. When the test results are ready, your kidney care centre will send your Patient Referral Package to the Transplant Assessment Office at UHN.
4. The Transplant Assessment Office will review your referral to ensure it is complete. Once it is complete, you will be booked for your first set of appointments at UHN. This includes attending a transplant information meeting and having the tissue typing blood work test. You will be assigned a transplant coordinator who will review your file throughout the evaluation.

5. The transplant doctor will meet with you to talk about the benefits and the risks of having a transplant. This doctor will talk to you about your medical history and tests.
6. Once you have completed the first phase you will go on to meet the transplant surgeon, anesthesia doctor, and the social worker. More tests or appointments may be needed to help the kidney transplant team determine if you are suitable for a kidney transplant.
7. If all your tests show you are OK to have a transplant, you will be put on the Transplant Waiting List. This list is for a kidney from a deceased donor. Your place on that list will be based on the date you began dialysis. How long you wait for a kidney offer also depends on your blood group and the level of immunity or antibodies you have against possible donors (also known as “sensitization”).
8. If a living donor comes forward, you will be considered for a living donor transplant.

What kind of transplant workup tests can I expect?

If you are interested in a kidney transplant, you will first have to have a lot of medical tests. The Transplant Assessment Office will request a complete referral package from your kidney care centre (including blood tests, x-rays, and other information).

Baseline transplant workup tests include:

- Kidney care centre blood work, liver function studies, and an antibody test. You will also have tests for viruses such as:
 - HIV
 - Hepatitis B and C
 - Cytomegalovirus (CMV)
 - Epstein-Barr virus (EBV)
 - Varicella zoster (chicken pox) virus

It is important to test for these viruses. They may be dormant (causing no symptoms) in your body. After the transplant, they may be awakened and cause illness. Having one of these viruses does not mean you can't get a transplant, but they must be monitored.

- Chest x-ray (front, back and side views)
- Abdominal ultrasound
- Iliac doppler ultrasound. This measures blood flow in arteries and veins in your lower abdomen and upper legs. For most patients, this test will be done at UHN.
- Electrocardiogram-ECG (electric recording of the heartbeat).
- 2D echocardiogram (heart ultrasound)
- Cardiac (heart) stress test
- An assessment by a social worker to help you plan for your transplant. They will also talk to you about the Ontario Drug Benefits programs. These programs help pay for medicines that are used after transplant.

Some of these tests may show that you need further, more complex tests or that you need to meet with a specialist. This is common, so don't worry if this happens.

Important: Your place on the Transplant Waiting List will be based on the date you began dialysis, not the date you completed the transplant workup.

While you wait for a kidney, your transplant workup tests will be updated as needed by the transplant team. Blood tests for antibodies (a protein in your body that might reject a new kidney) called PRA or "panel reactive antibody" will be updated 4 times a year. This blood test must be done by your kidney care centre and sent to UHN or you will be placed on hold on the transplant waiting list and you may miss a chance to receive a kidney.

Why do my transplant workup tests have to be updated?

Your transplant chart must have current (within 1 to 2 years) results. This will show the Transplant Team that you are still a suitable candidate. Remember, your health can change over time.

If I've had cancer, could I still be suitable for a kidney transplant?

You may still be suitable for a kidney transplant if you have been in remission for 2 years or longer depending on the type of cancer that you had. Your transplant workup results must show that you are suitable to be put on the waiting list.

You can be on the waiting list as long as the cancer does not come back. Your transplant doctor will talk to you about this and answer your questions.

I have diabetes and am on dialysis. I've heard about a "double transplant" (kidney and pancreas). Could I have this type of transplant?

If you are on insulin, you may be suitable, but you must first do all of the transplant workup tests. These are done by a separate transplant team that specializes in kidney/pancreas transplants.

If you are taking oral diabetes medicines (pills) you might be suitable for a kidney and pancreas transplant, but the kidney/pancreas team will need to review your medical and diabetes history first before you would do all of the transplant workup tests.

If the results show you are not suitable for this double transplant, you will be referred to the kidney transplant team. You may still be suitable for a kidney transplant.

Who can I call if I have more questions?

The Nephrology and Dialysis Teams at the University Health Network are here to help you. We care about what you think and we want to hear your suggestions or concerns. Your team will be happy to answer any questions that you may have.

For more information on kidney transplant or living donation, go to our website at www.uhnTransplant.ca



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