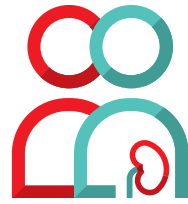




**Canadian
Blood
Services**

BLOOD
PLASMA
STEM CELLS
ORGANS
& TISSUES

Living kidney donation

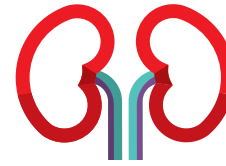


What is living kidney donation?

Most of us are born with two kidneys. However, a healthy person can live a normal, healthy life with just one kidney. This means that a healthy person can give (donate) a kidney to someone whose kidneys aren't working. This gift is living kidney donation. A person who donates a kidney to someone in need is called a "living donor," and a person who needs a kidney is called a "transplant candidate."

Any adult who is in good health can be assessed to become a living donor. Every potential donor must have a complete medical checkup to make sure they are healthy enough to donate a kidney to a person in need.

The kidney donation process involves an operation to remove one kidney from the donor and another surgery to place the kidney into the transplant candidate. After the donation, the donor's remaining kidney starts to work harder, to make up for the removed kidney. The donor should have a checkup with a doctor every year to make sure their remaining kidney is still working correctly.



Why do some patients need a kidney transplant?

The kidneys remove waste products from our blood. They also control the levels of salt and fluid in our bodies. Sometimes an illness or a disease, such as high blood pressure or diabetes, can cause the kidneys to fail. When this happens, it is called "end-stage kidney disease", because the kidneys are nearing the end of their ability to work correctly. When the kidneys stop working, the patient must have some type of treatment to remove the waste products from the blood. One option is a kidney transplant. The kidney can come from a healthy living person (living donor) or from someone who has recently died (deceased donor). Dialysis is another option. Dialysis uses a machine to remove waste products from the blood. For those who are eligible, transplant from a living donor is the best option.

Canadian Blood Services is a not-for-profit charitable organization. Regulated by Health Canada as a biologics manufacturer and primarily funded by the provincial and territorial ministries of health, Canadian Blood Services operates with a national scope, infrastructure and governance that makes it unique within Canadian health care. In the domain of blood, plasma and stem cells, we provide services for patients on behalf of all provincial and territorial governments except Quebec. In the domain of organs and tissues we operate the national waitlist and interprovincial organ-sharing registries and work in collaboration with provincial programs to improve our system.

www.blood.ca/organs-tissues



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What are the advantages of living kidney donation?

- For patients who have end-stage kidney disease and are eligible for a kidney transplant, a kidney from a living donor is the best treatment.
- A kidney from a living donor usually lasts longer than a kidney from a deceased donor.
- A living kidney donation can reduce or even prevent the patient's need for dialysis.
- Every patient who receives a transplant from a living donor comes off the wait-list for a kidney from a deceased donor. This shortens the wait-time for other patients on the transplant waitlist.
- The donation and transplant operations can be planned for a time when both the potential donor and the transplant candidate are in the best possible health. Being in good health improves the recovery after surgery.

- Many people who have donated a kidney say that helping someone in need is a positive personal experience.

Can anyone donate a kidney?

Any healthy adult can be considered for living kidney donation. A potential donor could be a family member, friend, neighbour, or acquaintance of the transplant candidate. The potential donor does not have to be the same age, sex or ethnicity as the transplant candidate. In fact, it can be anyone who is willing to donate.

Both the potential donor and the transplant candidate must complete medical tests and evaluations before they can go ahead with donation and transplantation. For example, the potential donor must be healthy enough to have surgery and to remain healthy with only one kidney. Likewise, even though the transplant candidate has end-stage kidney disease and needs a new kidney, this person must be healthy enough to have the surgery and be able to handle the antirejection treatment afterwards. Special blood tests are done to see if the donor's blood and tissue type match the transplant candidate. If these factors match, the potential donor and the candidate are called a "compatible pair" and the candidate can receive a kidney from that donor. The medical tests and evaluations will require daytime medical appointments.

After the donation, it is expected that the donor will remain in good health. Staying healthy includes getting regular checkups and health care from their family doctor.

What if the potential donor and transplant candidate are not a match?

If the blood tests show that the potential donor and the transplant candidate do not match, they are called an "incompatible pair." This could happen if the donor's blood type is not compatible with the transplant candidate's blood type. Or, it could mean that the transplant candidate has proteins in their blood (known as antibodies) that will reject a kidney from that donor.

If the potential donor is not compatible with the transplant candidate, they can still try to find a suitable kidney for the transplant candidate through the Kidney Paired Donation program. This program tries to match kidney donors with transplant candidates who need a kidney. Ask your living kidney donation program or transplant centre for more information or visit blood.ca/organs-tissues.

Types of living donation

Directed Donation: This type of donation occurs when a potential donor knows a transplant candidate and is a match to that person. Directed donors can be biologically related to the transplant candidate (for example, parents, children, brothers and sisters, grandparents) or unrelated (for example, spouse, friend, co-worker).

Non-directed Anonymous Donation (NDAD): This type of donation occurs when a person offers to donate a kidney that could go to anyone they match who needs a kidney transplant. A donation like this can help one

transplant candidate if the kidney is given to someone on the waitlist. Alternatively, this type of donation might help several people through the Kidney Paired Donation program. In this program, a kidney donation from one NDAD can kick-start a chain of donor exchanges.

A living donation program in your province can give you more information about the Kidney Paired Donation program. You can also find information online, at blood.ca/organs-tissues.

How do I get started?

If you know a person who is waiting for a kidney transplant, you can talk to them. Or, you can contact a living donation program in your province. If you would like to become a non-directed anonymous donor, a living donation program in your province can give you more information. Contact information for the living donation programs in Canada is available online, at blood.ca/organs-tissues.