

Becoming a Living Kidney Donor

What you need to know

The pathway to live kidney donation can be long, and occasionally frustrating, but it can bring great rewards for the donor, and excellent medical results for the recipient.

Live kidney donation is an operation where there is no chance at all that you will end up healthier than you were before the operation. It is therefore very important that the risks are kept low.

Who can become a living kidney donor?

- To be considered as a live kidney donor you must be over 18 years of age, and great care needs to be considered for very young donors.
- Living kidney donors need to be in very good mental and physical health and preferably for females have had their family.
- There is no upper age limit to donation but the older you get, the harder it is to get through the testing needs.

The relationship between the donor and recipient would usually be close and continue over a period of time. It is not necessary for the donor to be a “blood relative”, and indeed the most common donor relationship that we see is the spouse or partner of the recipient.

What are the advantages of living kidney donation?

There are several possible advantages for a patient who needs a kidney transplant and is lucky enough to have a suitable living donor. Firstly, they do not need to go onto the deceased donor waiting list. This can allow for an earlier transplant, sometimes even before they need to start on dialysis. Secondly, it is a planned operation, so you have time to organise your work and family arrangements.

Finally, the outcomes of kidney transplants from living donors are generally better than those from deceased donors. The kidney will usually work straight away and you can avoid dialysis.



What medical issues might stop me from donating?

The Transplant Team will want to make sure that donation is as safe as possible before they consider removing your kidney. They particularly want to make sure that you have 2 well functioning kidneys, that you do not have a high risk of kidney disease in the future, and that your anaesthetic risks are low. The following are some of the common barriers to donation. If any of these apply to you, they should be discussed with the assessment team early:

- Any history of heart problems
- High blood pressure
- Obesity
- Gestational diabetes or a family history of diabetes
- Donors must be current non smokers including vaping

Donors will need to stop the contraceptive pill or hormone replacement therapy (HRT), 6 weeks before surgery.

Am I compatible with the recipient?

There are 3 main tests for compatibility.

1. **Blood group**, should ideally be the same however, can sometimes be managed if the blood group is different to the recipient. Please refer to the blood group incompatible fact sheet for further discussions around this topic.
2. **Tissue typing or matching**, it is an advantage for the recipient to have a good tissue match with their donor, however we still get very good results, even if there is no tissue match at all.
3. **Cross-matching**, determines if the recipient has antibodies in their blood which will attack donor cells. If this happens, the transplant is not likely to go ahead.

What testing will I need?

The Queensland Kidney Transplant Service (QKTS) strongly recommends that a living donor be assessed and tested by a different specialist than the one who looks after the recipient. Sometimes what is best for the recipient may be different from what is best for the donor, and it is important that they receive good independent advice.

Before you start any testing, it is important that your friend or relative's kidney specialist agrees that the recipient is suitable to have a kidney transplant. There are a lot of tests for a live donor. It can take up to 3 to 6 months, or even longer, to go through all the tests and assessments. The assessments will happen in stages, beginning with your medical history and physical examination with your General Practitioner (GP), as well as blood and urine tests, chest X-ray, ECG and renal ultrasound. It is important that you keep up to date with all of your age appropriate health checks including mammogram, cervical screening, prostate checks and bowel screening.

If these initial investigations are satisfactory, the next stage in the workup process is a blood test for tissue matching. Possible cardiac exercise stress test, followed by a special CT scan of your kidneys involving dye. You will need to come to the Princess Alexandra Hospital (PAH) in Brisbane to be assessed face to face by the kidney specialist (Nephrologist), surgeon (Urologist), psychiatrist and social worker after these test are complete.

What are the risks of donating a kidney?

It is important to consider the possibility of both short term and long term problems.

Short term problems are the main risks of having a major operation. These risks include bleeding, infections, especially in the wound or chest, or blood clots. Blood clots usually start in the legs, where they can be very uncomfortable. If they break off into the circulation and travel to the lungs, they can be very dangerous and even cause death.

It is estimated that the risk of dying because of a kidney donation is about 1 in 3,000. This is very low, but however careful we are, we cannot make the risk zero. There is likely to be some pain and discomfort afterwards. This will usually be short lived, and easily managed. A small number of patients can get longer term wound problems, including pain or hernias.

Long term problems are the result of only having one kidney for the rest of your life. There are a number of studies that have followed people who have lost a kidney, either through donation or other causes. If the donor is perfectly healthy the risk of serious kidney disease after 20 to 30 years does not seem to be any higher than it is for the general community.

The operation

The operation is performed under general anaesthetic and takes about 2 to 3 hours. Almost all of the donor operations are now done by keyhole or Laparoscopic surgery. There is a small chance that the keyhole method may not be successful and for your safety an operation through a larger cut may be needed. With keyhole surgery, the surgeon will need to perform a bikini line cut, about 10 to 12 cm to remove the kidney.

This cut is less painful and less obvious than most scars.



Where can I get more information?

Kidney donor information seminars are held 3 times a year and are coordinated by the QKTS coordinators at the PAH. You will be sent an invitation to attend once you have made contact with the service.

Please contact the QKTS coordinators at the PAH for more personalised information.

Contact details:

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