Living Donor Kidney Transplant

Questions, Answers and Information for Donors

What is a living donor kidney transplant?

During a living donor kidney transplant, a healthy kidney is taken out of a living person. It is used to replace the unhealthy kidney of another person.

Organ donation is an important gift that can extend the life and health of another. Studies show that most donors feel glad about their decision to donate and help someone in need.

Why not use a kidney from someone who has died?

There is a shortage of donor organs from people who have died, so many patients must wait a long time for a transplant. To expand the donor pool, the University of Minnesota Medical Center (UMMC) offers living donor transplants.

How common are living donor transplants?

Kidney transplant is the most common of living donor transplants. Surgeons at UMMC have been transplanting kidneys from living donors since the early 1960s. We are one of the largest programs in the country. Almost half of the kidneys we transplant each year come from living donors.

What are the results for living donor kidney transplants?

A kidney from a living donor offers better results than a kidney from someone who has died. The recipient is less likely to reject the kidney, and the kidney may last longer. The kidney often starts working in the operating room.

An organ from someone who has died may not work right away—sometimes dialysis is needed for a few weeks after the transplant.
What are the benefits of using a living donor?

- The person with unhealthy kidneys does not need to wait for an organ from the transplant list. This can take five years or longer. Many people die before they receive an organ from the waiting list.

- A living donor transplant takes the patient off the transplant waiting list. This shortens the wait for everyone else on the list.

- The person with kidney disease may get a transplant before having to go on dialysis. Dialysis harms the patient’s health, restricts his or her diet and causes the family a lot of stress.

- The kidney is placed in the patient as soon as it is removed from the living donor. The kidney goes without a blood supply for only a short time. This improves the chances that it will work the way it should. A kidney from someone who has died must be stored for several hours before it is transplanted.

- The transplant can be done when both the donor and the patient are in the best physical and emotional health possible. If patients have surgery when they are very sick, the transplant is less likely to work.

Who can become a living donor?

Donors must be at least 18 years old and in good health. Tests must not show:

- High blood pressure (untreated)
- HIV or AIDS
- Viral infection (like active Hepatitis B or C)
- Heavy alcohol use
- IV drug use
- Mental health concerns
- Heart or lung disease
- Diabetes
- Obesity (being very overweight—BMI over 32).

Not every medical condition will stop you from being a donor. The donor team will screen you and tell you if you qualify.

Donating a kidney is a major decision. It is very important to understand how it will affect your life and the lives of those around you. We will be with you every step of the way to answer your questions.

A kidney must be given of your own free will. You should decide to donate only after you consider the risks, benefits and possible complications. You should not be pressured or feel compelled in any way. You may change your mind at any time during the process.

It is illegal to make a profit or receive payment for your donation.
How can I become a living donor?

The process starts with an on-line health screening. If you pass the health screening, you will next have a series of tests. The first tests will tell us if your kidney is compatible with the recipient. Further tests will tell us if you are healthy enough to have the surgery.

You will work with a donor team at the transplant center. The donor team is separate from the kidney patient’s team. Your information will not be shared with anyone, including the kidney patient.

Must I have the same blood type as the recipient?

You don’t have to have the same blood type, but your type must be compatible with the recipient’s. The chart below shows compatible blood types.

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<tr>
<th>Your blood type is:</th>
<th>The recipient’s blood type is:</th>
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<tr>
<td>O</td>
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It doesn’t matter if your blood type is positive or negative.

You will need to have the blood test at your local clinic, hospital or blood bank. Send a copy of the report to The Transplant Center at UMMC.

If your blood types are not compatible, you and the recipient may enter our exchange program.

If my blood type is a good match, does that mean my kidney is a good match, too?

No. We also need to do tissue typing. You will do a mouth swab for tissue typing. The typing tells us if you are compatible with the patient. We will give you a kit for doing the swab and mailing it to the transplant center.

Your results will be ready 3 to 4 days after we receive your sample. If we do not call you with your test results, please call The Transplant Center at 800-328-5465. We will tell you if your kidney is a good match. We do not share this information with the recipient.

Blood type testing will be repeated after the donor is approved and the transplant is scheduled.

We advise possible donors to think about their decision before telling the recipient about any of the test results.

What other tests do I need?

The first tests will be blood and urine tests, as well as a series of blood pressures. These tests can be done at your clinic. Depending on the results of these tests, you may need further testing.

During the full evaluation you will have more blood tests, X-rays and a full exam. The exam will tell us whether you are at risk for kidney disease and can safely have surgery. If your exam shows that donation carries a risk, you cannot be a donor.

We will schedule the evaluation at UMMC. This allows you to get to know the donor care team.

What happens after the tests are done?

If you are approved and you choose to donate, we will schedule the surgery. You will meet the surgeon before surgery.

We suggest that you stop smoking, eat well and take care of your health. This will help you heal faster after surgery.
It takes time to recover from major surgery. Please arrange for someone to care for those who depend on you, such as children, other family members and pets. You will also need someone to help you in the early days of your recovery.

You will receive a booklet called *Financial Information for Living Donors*. This will answer questions you may have about expenses, insurance, and time off work. Feel free to discuss your financial concerns with your care team.

**What happens the day before surgery?**

8 hours before surgery, stop all food, milk and chewing tobacco.

Keep drinking clear liquids until 2 hours before surgery. Clear liquids include water, clear juice, black coffee or clear tea without milk, gatorade, clear soda. Do not drink alcohol for 24 hours before your surgery.

We will give you a bottle of anti-bacterial (germ-killing) soap. Use this to scrub the front of your body from your chest to your knees. Do this on the evening before surgery and twice in the morning before you come to the hospital. This makes infection less likely in the incisions (wounds). If you are allergic to this type of soap, please let us know.

**Where can my family members stay overnight?**

Some hotels have reduced rates for families. Call Accommodations at 612-273-3695 or 800-328-5576.

**What happens the day of surgery?**

On the morning of surgery, come to the Same Day Admissions (3C). We will give you the details when you come for your pre-op visit. Your family may wait with you until it is time for surgery. After that, they can stay in the waiting area on the third floor.

You will wear only a hospital gown to surgery. You must take off all glasses, nail polish, lipstick, makeup, jewelry, hairpins and dentures. Leave your valuables with your family for safekeeping.

**What is the surgery like?**

The doctor will cut the blood vessels to one kidney and ureter (the structure that drains the urine). Then, the kidney and ureter will be removed and placed into the recipient. The surgery takes about three to four hours.

Up until 1999, most kidney donors had open surgery. Today at UMMC, most of the living donor kidney transplants are done with laparoscopic surgery. This means less pain, smaller scars, faster healing and less time in the hospital.

To get ready for surgery, we will place a needle with a tube (called an IV) in your hand or arm. We will give you medicine through this tube. The medicine will help you relax, then put you to sleep.
When you are asleep:

- We will put a breathing tube down your throat. If the tube is still in place when you wake up, you will not be able to talk. When you are fully awake, we will take out the tube.

- We will insert a thin tube (catheter) in your bladder to drain urine.

- The doctor will make several cuts (less than 1 inch each) in your belly. We will then insert a small camera, called a laparoscope, through one of the cuts. This lets the doctor view the kidney. Next, the doctor will insert special surgical tools through the other cuts. A 2-to-3-inch incision is made to remove the kidney.

We will pump air into your belly to make room for the camera and other tools. At the end of your surgery, we will suck out most of the air. Your body will absorb any air that is left.

**Where will I wake up after surgery?**

You will wake up in a special care unit (PACU). Nurses will check your pulse and blood pressure often. You will breathe air through an oxygen mask. When we will remove the mask, you will breathe air through small tubes that run into your nose. We will take the oxygen tubes off the next day.

Once you are fully awake, we will move you to your hospital room.

**What will my incisions (wounds) look like?**

You will have several small cuts and one larger cut, closed with surgical glue. The excess glue will come off as you shower.

Your incisions will be red at first, but fade in about six to 12 months. Do not try to cover your incisions with makeup. If your scars feel uneven, they will flatten over time.

*Incisions for Laparoscopic Surgery*

- **Pure laparoscopic surgery**
- **Left kidney** (hand-assisted surgery)
- **Right kidney** (hand-assisted surgery)
How much pain will I have?

Some pain is normal with any surgery. The doctor must cut through stomach muscles to get to the kidney. Also, we pump the belly full of air to make room for the camera and surgical tools. This can cause shoulder pain.

Pain can usually be controlled with medicine. If you still have pain, tell your nurse or doctor.

You may be able to control the pain yourself by pushing a button that sends pain medicine into your body through an IV. You can give yourself as much medicine as you need, but not too much at one time. Visitors may not touch this button.

Most patients use the pump for the first day. Once the IV is taken out and you are able to drink liquids, you can take pain medicine by mouth.

What else should I expect after surgery?

Many people have a dry mouth and sore throat from the breathing tube. You can rinse your mouth or suck on ice chips until you’re ready to drink liquids. If your throat hurts too much to eat and drink, tell you nurse.

You may also feel sick to your stomach the first few days. Medicine can help you feel better. We will take out the bladder tube one to two days after surgery.

You will need to wear special stockings (pneumoboots) on your lower legs. These stockings apply pressure by filling with air and then emptying. This helps prevent blood clots. You can take off these stockings once you are up and walking around.

You will have a device to help you do breathing exercises. You should use it every one to two hours while you are awake. This will help prevent pneumonia, but the best way to prevent it is to walk several times a day.

When can I sit up and walk?

In the evening after surgery, we may ask you to sit up in bed and dangle your feet. Tell the nurse if you feel dizzy. You may feel well enough to stand beside your bed with help.

The morning after surgery, a nurse will help you sit and walk. This will be easier if you take some pain medicine first. Walking will help your lungs and bowels to work normally again.

When can I start drinking and eating again?

You can drink clear liquids once your bowels begin to work again. Over time, you will be able to drink and eat more foods.

You may have gas pain or constipation (hard stools). Walking and drinking plenty of fluids will help with these problems.

How long will I need to stay in the hospital?

Most donors are in the hospital for two to three days.

How should I care for myself at home?

You will need someone to help you after you leave the hospital. After major surgery, there will be limits to what you can do.

- You should be able to shower, dress and do simple daily activities.
- Try to eat small meals several times a day. To get your bowels working, eat fruits, vegetables and whole grains and drink water.
- Shower every day to keep your wounds clean.
- Do not lift anything over 10 pounds for at least six weeks. If you lift too much, you could hurt yourself and need more surgery.
- You may drive 14 days after surgery. Do not drive while taking prescribed pain medicine.
• Check your temperature at least once a day for one week.

• You may tire more easily for a few weeks. Ask family members and friends for help with chores, meals, errands and child care. You can become more active as you feel able.

• The skin along your scars may feel numb because nerves are cut during surgery. As the nerves grow back, you may feel tiny shooting pains for 6 to 12 months.

When should I call for help?

• Call the transplant center if you have a temperature above 100°F (37.8°C). This may be a sign of an infection.

• Call right away if you see signs of swelling, redness or tenderness around your incisions.

When can I go back to work?

You may feel ready to return to work in 2 to 6 weeks. This will depend on the amount of physical effort your job requires.

Talk to your employer and your doctor about when you can go back to work. It’s important to take as much time as you need to heal.

Will I need checkups after I leave the hospital?

Yes. The transplant program will follow you closely for two years after donation. You will need to have your incision checked two weeks after surgery. At 6 weeks, 6 months, 12 months and 24 months after surgery, you will need to have some tests done to make sure your kidney is working well. At those times, we will also send a short survey about your general health.

You may have these checkups at The Transplant Center, or you may see your family doctor. It is important that you see your doctor for a yearly health exam.

What are the risks and complications?

As with any surgery, there is a risk of bleeding and infection. You may also have problems with your bowels (such as blockage). Please talk to your doctor to be sure you understand these and other risks from surgery.

The risk of death from donating a kidney is very low. Nationally, it is less than 3 out of 10,000 donors. In more than 4,000 living donor surgeries, it has never occurred at the University of Minnesota Medical Center.
Will I later wish I had two kidneys?

The risks to your remaining kidney are kidney disease, injury or cancer.

We check your risk for kidney disease before approving you as a donor. In the future, if you did get kidney disease, having one kidney would not make a difference. Kidney disease usually attacks both kidneys at the same time.

There would be an advantage to having two kidneys if one kidney were badly injured in an accident or you developed kidney cancer.

Are there any long-term effects from the surgery?

No. After you have healed, there should be no change in:

- how much energy you have.
- your ability to do your job.
- how long you will live.
- how often you get sick.
- your ability to have sex or bear children.
- your general feeling of health.

You will not need to change how you live or what you eat, and you will not need any special medicine.

Should I receive any bills after surgery?

You should not receive any bills. But if you do, send the bills to:

The Transplant Center
MMC 482
516 Delaware Street SE
Minneapolis, MN 55455

Where can I get more information?

The Transplant Center website offers information on living kidney donation, as well as links to other helpful sites. Go to [https://www.mhealth.org/Care/Overarching-Care/Transplant-Services-Adult](https://www.mhealth.org/Care/Overarching-Care/Transplant-Services-Adult).