

Kidney Transplant

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Some people with [kidney failure](#) may be able to have a kidney transplant. During transplant surgery, a healthy [kidney](#) from a [donor](#) is placed into your body. The new, donated kidney does the work that your two kidneys used to do.

The donated kidney can come from someone you don't know who has recently died (deceased donor), or from a living person—a relative, spouse, or friend. Due to the shortage of kidneys, patients on the waiting list for a deceased donor kidney may wait many years.

A kidney transplant is a treatment for kidney failure; it's not a cure. You will need to take medicines every day to make sure your [immune system](#) doesn't [reject the new kidney](#) [↗](#). You will also need to see your health care provider regularly.

A working transplanted kidney does a better job of filtering wastes and keeping you healthy than [dialysis](#). However, a kidney transplant isn't for everyone. Your doctor may tell you that you're not healthy enough for transplant surgery.

[Watch a video about kidney transplant.](#) [↗](#)

What is the process for getting a kidney transplant?

If you want a kidney transplant, the process includes these steps:

- Tell your doctor or nurse you want to have a kidney transplant.

<https://www.niddk.nih.gov/health-information/kidney-disease/kidney-failure/kidney-transplant>

- Your doctor will refer you to a [transplant center](#) for tests to see if you're healthy enough to receive a transplant. Living donors need to be tested to make sure they're healthy enough to donate a kidney.
- If you don't have a living donor, you'll be [placed on a waiting list](#) to receive a kidney. You'll [have monthly blood tests](#) while you wait for a kidney.
- You must go to the hospital to [have your transplant](#) as soon as you learn a kidney is available. If you have a living donor, you can schedule the transplant in advance.

Talk with your doctor

The first step is to talk with your doctor to find out whether you're a candidate for a transplant. If you're on dialysis, your dialysis team will also be part of the process. If you and your doctor think a kidney transplant is right for you, your doctor will refer you to a transplant center.

Talk with your doctor to find out whether you're a candidate for a kidney transplant.

Get tested at a transplant center

At the transplant center, you'll meet members of your [transplant team](#). You'll have tests to make sure you're a good candidate for transplant.

Tests will include blood tests and tests to check your heart and other organs—to make sure you're healthy enough for surgery. Some conditions or illnesses could make a transplant less likely to succeed, such as cancer that is not in [remission](#), or current substance abuse.

You'll also have tests to check your mental and emotional health. The transplant team must be sure you're prepared to [care for a transplanted kidney](#). You'll need to be able to understand and follow a schedule for taking the medicines you need after surgery.

In a process called cross-matching, the transplant team tests the donor's blood against your blood to help predict whether your body's immune system will accept or reject the new kidney.

If a family member or friend wants to donate a kidney and is a good match, that person will need a health exam to make sure he or she is healthy enough to be a donor. If you have a living donor, you don't need to be on a waiting list for a kidney and can schedule the surgery when it's best for you, your donor, and your surgeon.

Testing and evaluation at the transplant center may take several visits over weeks to months.

Get on the waiting list


If your tests show you can have a transplant, your transplant center will add your name to the waiting list. Wait times can range from a few months to years. Most transplant centers give preference to people who've been on the waiting list the longest. Other factors, such as your age, where you live, and your blood type, may make your wait longer or shorter.

A transplant center can place you on the waiting list for a donor kidney if your [kidney function is 20 or less](#)—even if you aren't on dialysis. While you wait for a kidney transplant, you may need to start dialysis.

Have monthly blood tests

While you wait for a kidney, you'll need monthly blood tests. The center must have a recent sample of your blood to match with any kidney that becomes available.

Have your kidney transplant

During kidney transplant surgery, a surgeon places a healthy kidney into your body. You'll receive general [anesthesia](#)  before the surgery. The surgery usually takes 3 or 4 hours. Unless your damaged kidneys cause infections or high blood pressure or are cancerous, they can stay in your body. Surgeons usually transplant a kidney into the lower [abdomen](#) near the groin.

If you're on a waiting list for a donor kidney, you must go to the hospital to have your transplant surgery as soon as you learn that a kidney is available.

If a family member or friend is donating the kidney, you'll schedule the surgery in advance. Your surgical team will operate on you and your donor at the same time, usually in side-by-side rooms. One surgeon will remove the kidney from the donor, while another prepares you to receive the donated kidney.

Your surgeon connects the transplanted kidney to your blood vessels and your bladder. Your blood flows through an artery into the transplanted kidney, and a vein takes filtered blood out. Your urine flows through a transplanted ureter to your bladder.

Who is on my transplant team?

A successful transplant involves working closely with your transplant team. Members of the team include:

- You—you are an important part of your transplant team.
- Your family members—this may include your spouse, parents, children or any other family member you would like to involve.
- Transplant surgeon—the doctor who places the kidney in your body.
- Nephrologist—a doctor who specializes in kidney health and may work closely with a nurse practitioner or a physician's assistant.
- Transplant coordinator—a specially trained nurse who will be your point of contact, arrange your appointments, and teach you what to do before and after the transplant.
- Pharmacist—a person who tells you about all your medicines, fills your prescriptions, and helps you avoid unsafe medicine combinations and side effects.
- Social worker—a person trained to help you solve problems in your daily life and coordinate care needs after your transplant.

- Dietitian—an expert in food and nutrition who teaches you about the foods you should eat and avoid, and how to plan healthy meals.

Your transplant team will be able to provide the support and encouragement you need throughout the transplant process.

You will need to have blood drawn once per month while you wait for a kidney.

How will I feel after my transplant?

Many people report feeling much better right after having transplant surgery. For some people, it takes a few days for the new kidney to start working. You probably will need to stay in the hospital several days to recover from surgery—longer if you have any problems after the transplant. You'll have regular follow-up visits with your nephrologist after leaving the hospital.

If you have a living donor, the donor will probably also stay in the hospital for several days. However, a new technique for removing a kidney for donation that uses a smaller cut may make it possible for the donor to leave the hospital in 2 to 3 days.

Before you leave the hospital, you need to learn how to stay healthy and take care of your donor kidney. You will have to take one or more anti-rejection medicines—also called [immunosuppressants](#). Without medicine, your immune system may treat your donor kidney as foreign, or not your own, and attack your new kidney. [Anti-rejection medicines may have side effects](#).

You may also need to take other medicines—for example, [antibiotics](#) to protect against infections. Your transplant team will teach you what each medicine is for and when to take each one. **Be sure you understand the instructions for taking your medicines before you leave the hospital.**

Talk to your health care provider or pharmacist about the medicines you need to take after your transplant. Make sure you understand what each medicine is for and when to take it.

How do I know my new kidney is working?

Blood tests help you know your donor kidney is working. Before you leave the hospital, you'll schedule an appointment at the transplant center to test your blood. The tests show how well your kidneys are removing wastes from your blood.

At first, you'll need regular checkups and blood tests at the transplant center or from your doctor. As time goes on, you'll have fewer checkups.

Your blood tests may show that your kidney is not removing wastes from your blood as well as it should. You also may have other [symptoms that your body is rejecting your donor kidney](#). If you have these problems, your transplant surgeon or nephrologist may order a [kidney biopsy](#).

What are the possible problems after a kidney transplant?

The donated kidney may start working right away or may take up to a few weeks to make urine. If the new kidney doesn't start working right away, you'll need dialysis treatments to filter wastes and extra salt and fluid from your body until it starts working.

Other problems following kidney transplant are similar to other [pelvic](#) surgeries and may include

- bleeding
- infection, especially a [bladder infection](#)
- [hernia](#)
- pain or numbness along the inner thigh that usually goes away without treatment

Transplant rejection is rare right after surgery and can take days or weeks to occur. Rejection is less common when the new kidney is from a living donor than when it's from a deceased donor.

What are the symptoms of transplant rejection?

Transplant rejection often begins before you feel any changes. The routine blood tests that you have at the transplant center will reveal early signs of rejection. You may develop [high blood pressure](#) or notice swelling because your kidney isn't getting rid of extra salt and fluid in your body.

Your health care provider will treat early signs of rejection by adjusting your medicines to help keep your body from rejecting your new kidney.

Transplant rejection is becoming less common. However, your body may still reject the donor kidney, even if you do everything you should. If that happens, you may need to go on dialysis and go back on the waiting list for another kidney. Some people are able to get a second kidney transplant.

Seek medical care right away

When you're taking anti-rejection medicines, you're at a greater risk for infection. Anti-rejection medicines can dull symptoms of problems such as infection. Call your transplant center right away if you aren't feeling well or have

- a fever of more than 100 degrees
- drainage from your surgical scar
- burning when you pass urine
- a cold or cough that won't go away

What are the side effects of anti-rejection medicines?

Some anti-rejection medicines may change your appearance. Your face may get fuller, you may gain weight, or you may develop acne or facial hair. Not all people have these side effects.

Anti-rejection medicines weaken your immune system, which can lead to infections. In some people over long periods of time, a weakened immune system can increase their risk of developing [cancer](#) [NIH](#) [↗](#). Some anti-rejection medicines cause [cataracts](#), [diabetes](#), extra stomach acid, high blood pressure, and [bone disease](#).

When used over time, these medicines may also cause [liver](#) or kidney damage in some people. Your transplant team will order regular tests to monitor the levels of anti-rejection medicines in your blood and to measure your liver and kidney function.

What should I eat or avoid eating with a kidney transplant?

You have more choices about what to eat after you receive a kidney transplant than you would if you were on dialysis. However, you will need to work with a dietitian to develop an eating plan that can change in response to your medicines, test results, weight, and blood pressure.

[Read more about kidney failure and eating, diet, and nutrition.](#)

How do I pay for my transplant?

[Medicare](#) [↗](#), the Federal Government health insurance program, will pay for transplant and care for 3 years after the transplant. Medicare will also pay for your donor's surgery and his or her care. [Watch a video about Medicare and kidney transplant](#) [↗](#).

Paying for medicines

Medicare and private insurance may help pay for your medicines. Additionally, drug companies give discounts to people who can show that they can't afford to pay for their prescriptions. Talk with your transplant social worker to find out what resources may be available to help you pay for your transplant.

[Read more about resources that may help pay for your kidney failure treatment.](#)

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Contact Us

The National Institute of Diabetes and Digestive and Kidney Diseases
Health Information Center

Phone: 1-800-860-8747

Email: healthinfo@niddk.nih.gov

TTY: 1-866-569-1162

Hours: 8:30 a.m. to 5 p.m. eastern time, M-F