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# Getting A New Kidney: Facts About Kidney Transplants

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# Getting a New Kidney

## WHAT IS KIDNEY FAILURE AND WHAT CAUSES IT?

Kidney failure is when one or both of your kidneys are no longer working as they should. Kidney failure can be caused by many different diseases. These diseases include:

- diabetes
- high blood pressure
- diseases that filter waste and excess fluids from your blood (referred to as glomerular disease)
- a disease where many growths develop in the kidneys (referred to as polycystic kidney disease)
- an abnormal condition that was present when you were born

Some of these diseases can cause harm in just a few days or weeks. Other diseases can take years to cause harm. If your kidneys fail, both usually fail at the same time.

### What are signs that you may have a kidney that is no longer working as it should?

When you start to have kidney problems, you may feel fine at first. As your kidneys get worse, you may begin to:

- tire easily
- have trouble sleeping
- feel itchy
- feel sick to your stomach
- be short of breath
- have difficulty making urine
- notice swelling in your body
- have high blood pressure

### How is kidney failure treated?

When your kidneys fail, you will need to have one or both of these treatments:

**Dialysis** is a procedure that removes waste products from your blood. This is required because one or both of your kidneys can no longer do it. With dialysis, either a machine or a flexible tube, called a catheter, does part of the work that the kidneys can no longer do.

There are two forms of dialysis: hemodialysis and peritoneal dialysis.

- **Hemodialysis** uses a machine and a filter to remove waste and water from the blood.
- **Peritoneal dialysis** uses a tube (catheter) with special solutions to remove waste and water from the blood.

**Kidney transplantation** is a procedure where a kidney that is failing is replaced by a kidney that is working as it should. The new kidney can come from a person who has died (deceased donor) or from a healthy living person (living donor).

The decision about whether dialysis or transplantation is the best choice for you depends on many things. These include your past and current health, and your personal situation. Some people have a kidney transplant after starting dialysis. Others get a kidney transplant without ever having dialysis. It is best to make this important decision by working together with your medical team.

## FACTS ABOUT KIDNEY TRANSPLANTS

A kidney transplant is an operation where a healthy kidney from someone else is placed in your body to replace your kidney that is failing.

- A kidney transplant is the treatment chosen most often by people whose kidneys are no longer working as they should.
- Most people who have a kidney transplant live longer than those who choose dialysis. They will not have the inconvenience of dialysis several times a week that is very disruptive to work and normal daily activities. Dialysis is a procedure that removes waste products from your blood when your kidneys cannot.
- A kidney given by a living person typically lasts 15 years.
- If the person giving the kidney has died, the kidney typically lasts 10 years.
- By seeing your doctor regularly and taking medicines as prescribed, some kidneys last for more than 30 years.
- The chance of dying in the first year after receiving a kidney is less than 5 out of 100.
- There can be problems both during and after the kidney transplant operation.
- Not everyone who needs a kidney receives one. There are simply not enough organ donors to meet the demand of people waiting for a kidney transplant.

Your medical, surgical, and personal history must be carefully checked before the operation can take place. Your transplant team will do many studies. These studies will require many visits that may take a long time. After the operation, you will also need to make many visits to the clinic to make sure your kidney keeps working well.

You, the transplant team, your family, and caregivers will work together to keep you healthy.

## WHAT HAPPENS WHEN YOU GET A NEW KIDNEY?

There are four steps to get a new kidney. Your transplant team:

1. Decides if you are healthy enough to have the operation.
2. Finds a new kidney.
3. Performs the operation.
4. Helps you stay healthy after the operation.

### Step 1: Find out if you are healthy enough to receive a new kidney

Your doctor who is an expert in kidney operations refers you to a transplant center to see if you are healthy enough to receive a new kidney. The center invites you to come to a class that gives you information about the operation. The center also schedules an appointment for you to meet with the medical team that evaluates you before the operation takes place.

There are four parts to Step 1.

#### 1. First, you need to visit a transplant center.

You, your doctor, a nurse, or a social worker can make the appointment to schedule this visit. Your medical records are sent to the transplant center before your appointment. Your medical records and other information are used to determine if you qualify to get a new kidney. During this visit, the medical team confirms that you are able to follow all their instructions.

#### 2. Second, your health is evaluated.

Operations to get a new kidney save lives. But, these operations are complicated and have risks.

There are seven questions that need to be answered "yes" to get a new kidney.

- a. Is your heart strong enough to make it through the operation?
- b. Is your heart strong enough to make it through the time after the operation where you need to be watched closely by your medical team?

- c. Are you free of cancer?
- d. Is your chance to get cancer in the future low?
- e. Are you free of infection?
- f. Is your chance to get an infection in the future low?
- g. Are you healthy enough to receive a new kidney safely?

There are several reasons for these concerns.

- a. Heart disease is the main reason people have complications that may cause death during and after surgery.
- b. After you receive your new kidney, you will be given medicines to weaken your body's defense system. These medicines slightly increase your chances of getting cancer. Also, any cancer that you had before the operation can grow very fast.
- c. After you receive your new kidney, the medicines you take to weaken your body's defense system also increase your chance of getting infections. These medicines increase the chance of allowing "old" infections to "wake-up" and be active again. Two examples of these infections that can "wake-up" are tuberculosis (TB) and shingles.
- d. The bodies of some people are not right for the transplant operation. For example, a person may have old blood vessels that are plugged up with calcium. This makes a transplant impossible. Another person may have scarring because of many operations in the belly. This may also make it hard to perform the operation. Other individuals may not be right for the operation because of being very obese and having a high chance of infections.

To help evaluate your health, your medical team may take blood samples and do certain tests. The transplant team chooses the specific tests you need to evaluate your health. The tests will also depend on your age, sex, and medical history.

#### 3. Third, you need to see a social worker and counselor (psychologist or psychiatrist).

The reason you need to see these specialists is to make sure you are not abusing alcohol or recreational drugs. These specialists identify if there are any emotional conditions that could affect your recovery or threaten the success of your operation. These specialists also make sure that you have support to help you take care of yourself when you first leave the hospital after your surgery.

#### 4. Fourth, you need to see an insurance specialist.

An insurance specialist reviews your insurance to make sure your policy covers the transplant operation and clinic visits. This specialist also checks if your insurance pays for the medicines you need to keep your new kidney healthy. If you do not have the right medicines, your new kidney is likely to fail.

### Step 2: Find someone who is willing to give a kidney

There are two main kinds of kidney transplants. You can get a kidney from a person who is still alive (living donor kidney transplant) or from someone who has just died (deceased donor kidney transplant).

#### Facts about a living donor transplant

- Kidneys from someone who is alive work the best and last the longest.
- This is usually the fastest way to find a new kidney.

The person who is willing to give you a kidney can be someone in your family, a friend or even a stranger. The person is usually older than 18 and needs to be in acceptable health.

- **Anyone interested in giving a kidney should be evaluated.**
- The person willing to give a kidney must have a thorough medical, surgical and psychosocial exam. This exam is to find out if the donor is likely to make it through the operation safely. The donor must also have a good chance to live a long healthy life after the procedure.
- Some donor candidates will not be able to give a kidney because of medical, surgical, emotional, or social reasons.
- Learn more about living kidney donation [here](#), or refer to the living kidney donor education brochure. This brochure provides ideas to use when discussing the topic with potential donors, and can dispel myths about live donation ([www.unos.org/living-donation/kidney](http://www.unos.org/living-donation/kidney)).

Your body accepts the new kidney from someone only if you and the person who gives you the kidney have similar blood types. This is called matching. Even if the person you find is willing to give a kidney is not a match for you, the kidney can be used by someone else. You could then get a matching kidney from someone you do not know.

After you complete all these tests and meetings, a team of doctors decides if you are a good candidate for the operation. The team adds you to the United Network for Organ Sharing (UNOS) list to receive a new kidney. While you are waiting for your new kidney they work with you to keep you active and healthy.

While you are waiting there are ways you can help.

- Be sure to send in your monthly blood samples. These samples are used by the medical team to keep your "matching" up-to-date. This helps find the best kidney for you.
- Be sure to let your transplant center know if you were in the hospital, have a surgery or receive a blood transfusion.

If you get a kidney from a person who just died, this is referred to as a **deceased donor** kidney transplant.

#### Facts about a deceased donor transplant

- Getting a kidney from a living donor is not always possible. If this happens it is possible to get a kidney from a person who has recently died. These kidneys also work well.
- In the United States, the average waiting time for a kidney from a donor who is dead is about five years longer than if the person is alive.
- The longer a person waits for a kidney, the greater the chances are that there will be complications from kidney disease.
- Instead of trying to find a kidney from someone who is alive, it may be faster to consider accepting a kidney from other types of donors who have just died.
  - You may not have to wait as long to get a kidney from an older person with medical problems. This kind of kidney may not last as long, but may help you live longer than if you stayed on dialysis.
  - Kidneys can be transplanted after heart death (rather than brain death). This improves the chances of getting a kidney.
  - Based upon their behavior of the donor, Public Health Service (PHS) increased risk donors may carry a very, very small risk of exposure to certain viruses, such as hepatitis B (HBV), hepatitis C (HCV), and Human Immunodeficiency Virus (HIV). The benefit of kidneys from these donors is usually much greater than the risk of continuing to wait for a kidney. PHS increased risk kidneys are now more commonly transplanted and can provide excellent outcomes. In rare cases you may become infected with hepatitis or HIV after receiving a new kidney from an increased risk donor. These infections can be treated with recent improvements in medicines. These infections often carry less risk to the person receiving the new kidney than remaining on dialysis for a long time waiting for a kidney.

- Consider getting evaluated and listed for transplant at multiple transplant centers. This improves your chances for getting a kidney from someone who has just died.

### Step 3: Perform a Kidney Transplant Operation

Two things need to happen before the operation can take place:

1. The medical team needs to confirm you can benefit medically.
2. A kidney from a living or deceased donor is available.

The operation normally takes three to five hours.

Your new kidney is usually placed on the right or left side of the lower part of your belly, just above the front of your hip bone. This location is different from the place where your kidneys are currently.

After the operation, you are taken directly to the recovery room. Later you are moved to a regular hospital bed. The length of time you spend in the hospital depends on how well the new kidney is working. Most people spend from 3 to 6 days in the hospital. The time you spend in the hospital will also depend on your overall health and ability to care for yourself after you leave the hospital.

### Step 4: Help You Stay Healthy After the Operation

It is very important that you keep yourself healthy after your operation. The success of your kidney transplant depends on many things.

Here are a few tips to remember.

#### Your appointments

- After you leave the hospital, go to your scheduled visits at the transplant center.
- Tell the staff at the transplant center if you have problems keeping your appointments or taking your medicines. They will help you find a time that is better for your schedule.
- Follow your transplant team's advice. If you have questions, always ask your medical team.
- Follow the recommended schedule for lab tests. This will help to make sure that your kidney is working the way it should.
- Take your medicines as instructed by your doctor.
- Bring a list of medications that you are taking to each clinic visit.

#### The medicines

After your operation, your body's defense system will detect that the kidney came from another person. To help your body accept the new kidney **you need to take special medicines every day for as long as you have the transplant.** These medicines, called immunosuppressants or anti-rejection medicines, keep your body from rejecting the new kidney.

If your body begins to reject your new kidney, **you may not know it.** There may be signals of rejection in some patients, but **most patients do not spot them.** If your body is rejecting the new kidney, your doctors and nurses will know it. **This is why it is so important to go to all your medical appointments.** Your medical team watches closely for signs of rejection and side effects from the medicines. But, they must examine you and test your blood to know for sure.

Most people who take these medicines have very few problems. But, some people have side effects. If needed, your transplant doctors will work with you to change these medicines to find the combination with the fewest side effects.

Call your transplant team right away if any of these things happen. Do not wait until your next clinic visit.

- You have any side effects that prevent you from taking the medicines
- You miss taking your medicine when you were supposed to take it
- You run out of medicine
- You cannot pay for the medicine

If you stop taking your medicines, even for a short period of time, your body can reject your new kidney. For more information on transplant medicines, please visit: [https://power2save.org/wp-content/uploads/2019/01/02\\_AST-19-EB-02-Medicines-For-Keeping-Transplant-Healthy-FINAL-1.pdf](https://power2save.org/wp-content/uploads/2019/01/02_AST-19-EB-02-Medicines-For-Keeping-Transplant-Healthy-FINAL-1.pdf).

Your doctor and transplant staff will watch for these signs:

#### 1. Rejection

The risk of rejection never goes away. You will always need anti-rejection drugs. Your doctor may decrease the strength of medicines you take, but you should never skip or stop taking them.

To prevent your body from rejecting the new kidney, you must take the anti-rejection medicines exactly as your doctor tells you. Any symptom such as pain over the kidney, decrease in how much urine you produce or other symptoms should be reported to your transplant team right away.

Here are a few helpful hints to avoid rejection:

- Take your medicine as part of your daily routine
- Use digital alarms and alerts to remember when to take your medicine. It is easy to forget, especially when you are not feeling well.
- Know each medicine by its name and how much of it you take
- Ask for written instructions for any change to when or how much medicine you take
- Review any changes with your doctor or pharmacist
- Tell your transplant team of problems and concerns about medicines during every clinic visit
- If a doctor other than a member of your transplant team gives you a prescription, notify the transplant team before taking it. Certain medicines can interfere with your anti-rejection medicines and keep them from working.

## 2. Infections

Medicines that help your body receive a new kidney can increase the chance of getting infections. These infections can be treated.

You will take medicines to prevent infections for 3-12 months after getting your new kidney.

Tell your doctor if you have a fever, unusual pain, or other new feelings. Finding and treating infections as early as possible is the best way to keep you and your new kidney healthy. Your transplant team may also recommend you get certain vaccinations to help you stay healthy. If you are around anyone with a disease like the flu or pneumonia, this can make you very sick.

To avoid getting infections you should:

- Wash your hands regularly
- Maintain good hygiene habits especially around pets
- Avoid close contact with people who have contagious illnesses
- Avoid close contact with children recently vaccinated with live vaccines (see section on Vaccines)
- Practice safe food handling. For more information on safe food handling go to [USDA: Basics for Handling Food Safely](#)
- Inform your doctor well in advance of any travel plans

No one in your home should get the nasal influenza vaccine.

## 3. High blood pressure

High blood pressure is a common problem after receiving a new kidney. It can damage your new kidney, and cause strokes and heart attacks. If you have high blood pressure, your doctor will put you on medicine to lower your blood pressure. Keeping a healthy weight, exercising regularly and eating food low in salt diet will help you avoid high blood pressure..

## 4. Diabetes Mellitus

Anti-rejection medicines can cause diabetes. If you had diabetes before your transplant, you may find it harder to keep your blood sugar level where it should be after your transplant. If necessary, your doctor may refer you to a diabetic specialist. You can also help by following a special diet and exercising regularly.

## 5. High cholesterol

Medicines to help your body accept the new kidney can also cause high cholesterol. High cholesterol can lead to clogged blood vessels that can increase your risk of heart disease and stroke. Eating a healthy diet, exercising, and taking certain medicines are the ways to keep your cholesterol where it should be.

## 6. Kidney disease

Some kinds of kidney disease can come back in the new kidney. Your doctor and transplant team will test your blood and urine to watch for this problem.

## 7. Cancer

Patients with kidney failure have a greater chance of getting certain types of cancer. Medicines to help your body accept the new kidney can also increase the chance of getting cancer.

Skin cancer is the most common type of cancer after transplant. To lower your chances of getting skin cancer, you should:

- avoid direct sunlight and tanning booths
- wear strong sunscreen
- follow the advice of your transplant team

## 8. Bone disease

People who received a new kidney and are taking steroids have a higher chance of getting osteoporosis, a condition that causes your bones to thin and weaken. Your doctor may order a bone test and put you on medicine to help prevent this condition. These people taking steroids may also get osteonecrosis, a condition that causes pain in the hips or other joints. You can lower your chances of having bone disease by doing exercises that strengthen bones and muscles.

Examples are

- Walking
- Biking
- Lifting weights
- Using stair-step machines

Your transplant team may also recommend taking vitamin D supplements.

#### 9. **Pregnancy**

If you have a kidney transplant and are a woman of childbearing age, you are likely to have regular periods and good general health. So, getting pregnant and having a child is possible. But you should not become pregnant for at least one year after your transplant, even when your new kidney is working well.

Some medicines that you take after getting a new kidney can cause problems to a baby. Certain women may be advised not to get pregnant. This is because there is a big chance of having problems for the mother or the baby. Another reason is if there is a chance that the new kidney will fail.

Talk with your doctor if you have a new kidney and are thinking about getting pregnant. You may need to change your medicines so that it is safe for you to become pregnant. It is very important to use birth control until you and your doctor agree that it is safe for you to become pregnant.

## SOME TESTS YOU MIGHT NEED TO HAVE AFTER THE OPERATION

### Transplant ultrasound

With an ultrasound, doctors can see your new kidney, ureter, and blood vessels on a screen. This helps your doctors determine that everything is working well.

### Transplant biopsy

Your doctors may need to use a needle to take a tiny piece from your new kidney to see if it is working as well as it should be. They then examine it under a microscope. By looking at the cells, your doctors can diagnose problems like rejection. This test also provides important information that will help the transplant team decide the best treatment for you. Sometimes transplant centers perform this procedure on all transplanted kidneys to make sure there are no hidden problems that are not detected by blood tests.

## GENERAL ADVICE

- Follow a healthy lifestyle.
  - Eat healthy foods
  - Exercise
  - Lose weight if needed
  - Do not smoke cigarettes or marijuana
- Notify your transplant team of any new prescriptions or medicines.