THE BENEFITS OF LIVING DONATION

It takes a special person to serve as a kidney donor for a family member or friend. At Stanford Hospital & Clinics, we look at donors as heroes, and we treat you like one.

Living donation offers significant advantages, including improved transplant-kidney and patient survival rates (compared with kidneys from deceased donors) and shorter waiting time to transplantation for the recipient. However, it’s important that you fully understand the process and the potential risks involved.

This information booklet will provide you with an overview of the evaluation process and the donor procedure. It will also address frequently asked questions, including questions about recovery, medical costs, and follow-up care. Please write down any questions or concerns so that you can be sure to discuss them with your living donor coordinator. We are here to support you every step of the way.

Donating a kidney is a completely voluntary decision. It is your right to withdraw from this process at any time.
Located toward the back of your abdomen, kidneys play an important role in maintaining healthy body function.

THE HIGHEST QUALITY CARE

Stanford Hospital’s Kidney Transplant Program has repeatedly achieved statistically higher-than-expected patient and transplant-kidney survival rates at the one- and three-year marks after transplantation.

To see current outcomes from the Scientific Registry of Transplant Recipients Program Reports, please visit stanfordhospital.org/kidneytx (click on “Making a Difference/Quality”) or visit the Scientific Registry of Transplant Recipients at ustransplant.org.
THE KIDNEYS

Your kidneys filter your blood and remove waste products from your body as urine (which travels from your kidneys through your ureters to your bladder). They also regulate your body’s fluid balance, release hormones that control your blood pressure and stimulate the production of red blood cells, and break down insulin.

If a person’s kidneys stop working, their doctor may recommend dialysis or transplant:

DIALYSIS
Dialysis is a procedure that removes waste products from your body that are normally eliminated by the kidneys. There are two types of dialysis: hemodialysis and peritoneal dialysis. Hemodialysis is performed multiple times a week and takes three to five hours each session, while peritoneal dialysis must be done daily. People on dialysis may experience discomfort, fatigue, and other complications of kidney failure and dialysis.

TRANSPLANT
A kidney transplant is a surgical procedure performed to replace the diseased kidneys with a healthy kidney from another person. While transplant may provide better quality of life and greater life expectancy for a recipient (compared to dialysis), it’s essential that both donors and recipients understand the procedure and are aware of the risks.

Remember: dialysis and transplant are treatment options for kidney failure, not cures.

PATIENT SURVIVAL RATES

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<thead>
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<th></th>
<th>One Year</th>
<th>Three Years</th>
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<tbody>
<tr>
<td>Stanford Hospital</td>
<td>98.81%</td>
<td>97.00%</td>
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<tr>
<td>National</td>
<td>96.87%</td>
<td>92.29%</td>
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KIDNEY SURVIVAL RATES

<table>
<thead>
<tr>
<th></th>
<th>One Year</th>
<th>Three Years</th>
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</thead>
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<td>Stanford Hospital</td>
<td>97.56%</td>
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<td>93.81%</td>
<td>85.75%</td>
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Source: SRTR Program Reports-July 2012
CONSIDERING LIVING KIDNEY DONATION

The number of people on the kidney transplant waitlist continues to grow, with more than 90,000 Americans awaiting a compatible donor at any given time. More than 10 percent of those on the U.S. transplant waitlist reside in the Bay Area. Nearly 17,000 transplants are performed each year in the U.S., with approximately 10,000 deceased donor transplants and 6,000 living donor transplants occurring annually.

CONFIDENTIALITY • Stanford respects your privacy and the privacy of the intended recipient. Each of you will be assigned separate transplant coordinators and social workers, and your medical information will not be shared.

POTENTIAL LIVING DONORS MUST BE:

- in an established relationship with the recipient: sibling, parent, child, spouse, relative, or close friend
- competent and freely willing to donate, without coercion or financial gain
- 18 years of age or older
- a compatible match with the recipient
  - compatible blood type
  - compatible body and organ size
- able and willing to comply with follow-up care
- in good physical and mental health
  - no HIV infection
  - no chronic viral hepatitis
  - not an active alcoholic or heavy alcohol user
  - no history of IV substance abuse
  - not under treatment for psychiatric illness
  - no active malignancy
  - no heart or lung disease that requires medication
  - no history of diabetes mellitus
  - no serious chronic medical illness
  - Body Mass Index (BMI) less than 30
Even though being a match is an odds-defying result, at no time did anyone on the staff put any pressure on me to donate. In fact, I was respectfully reminded that I had the choice to change my mind at any time. —Christine, kidney donor
CROSSMATCH

As part of your screening, we’ll conduct a crossmatch, a blood test that determines compatibility between donor and recipient. A positive crossmatch indicates incompatibility. A negative crossmatch indicates compatibility.
If you would like to become a donor, you’ll need to complete an evaluation process to make sure you are a good match and to ensure the safety of both you and the intended recipient. There are four primary steps to the process, which can take up to several months.

**PHONE SCREENING**

It’s up to you to initiate the process. The first step is to contact our living donor coordinator at 650.736.0795 and let us know you’re interested in becoming a donor. We will conduct a phone screening to ask you about your demographic information and medical history. If there is a history of diabetes in your family, you will also be asked to undergo testing for diabetes. Otherwise, you will proceed with compatibility testing.

**PSYCHOSOCIAL EVALUATION**

The next step is a psychosocial evaluation with a transplant social worker. At this meeting, we will assess your emotional wellness and ensure that you are confident in your decision to become a donor. This step is essential to help determine if you and your family will be able to withstand the emotional, physical, and financial stress that transplantation and major surgery present, as well as the possibility of an adverse event occurring. You may also be asked to undergo a psychosocial evaluation with a transplant psychiatrist.

**MEDICAL EVALUATION**

After results from compatibility testing have been received, we will contact you to schedule a medical evaluation at our clinic. At this visit, you’ll undergo a physical exam and a few routine studies, including a urine and blood sample, a chest X-ray, and an EKG.

**SURGICAL EVALUATION**

Once step two and step three are complete, we will need to perform an ultrasound and a CT scan. These tests allow us to view your kidneys and the blood vessels in that area of your body, so we can identify which kidney is better to donate and assess whether conventional or laparoscopic surgery is appropriate for your anatomy.
OPTIONS FOR INCOMPATIBLE DONORS

Sometimes people who wish to become a living donor aren’t compatible with the intended recipient. For instance, a donor may have blood type A, while the recipient is blood type B. Depending on your incompatibility, additional programs are available.

PAIRED EXCHANGE
With paired-organ donation, a donor exchanges his or her kidney with the living donor from another incompatible donor/recipient pair to create two compatible pairs. While it’s true that the donor will not directly donate his or her kidney to the intended recipient, exchanging with another incompatible pair will allow for two compatible transplants.

CHAIN TRANSPLANTS
Donor chains work similarly to paired kidney donations in that they take advantage of healthy and willing—but incompatible—donors. The chain is initiated by what is called a non-directed donor. A non-directed donor is someone who offers to donate a kidney without a designated recipient, but with the explicit wish to donate to someone in need of a transplant.
I feel so positive about this experience even though I was not able to donate directly to a loved one. In some ways it’s better because this way I was able to help multiple people.

—Josephine, kidney donor
The whole team did a great job, from the lowest level to the highest. God bless every person at Stanford.

—Fred, kidney recipient
INNOVATIVE NEW APPROACHES

Stanford Hospital’s Kidney Transplant Program is pioneering new treatment options and is one of the few centers in the nation to offer advanced procedures that reduce the waiting time for recipients and make transplant possible.

DESENSITIZATION
Patients are said to be sensitized when they have developed organ-rejecting antibodies after transfusion, previous transplant, or pregnancy. Prior to surgery, an intravenous immunoglobulin (IVIG) infusion can help highly sensitized patients accept a new kidney. Stanford is one of the transplant centers in the US with an active desensitization program.

ABO INCOMPATIBLE TRANSPLANTS
Ordinarily, if a person receives a kidney from a person with a different blood type, his or her immune system will recognize the organ as foreign and attack it. A process called plasmapheresis is used to remove the antibodies against the different blood type. Stanford offers a protocol that allows some recipients with incompatible blood type donors to undergo this procedure so the transplant can take place.

LIVING DONOR MENTORS
If you would like to talk to someone who can share his or her experience as a donor, please let us know. We would be happy to connect you. You can also read kidney donor and recipient stories online: visit stanfordhospital.org/kidneytx and click on “Making a Difference/Patient Stories.”
THE INDEPENDENT DONOR ADVOCATE

Living donor transplant programs must provide an Independent Donor Advocate (IDA) whose responsibilities include but are not limited to the following:

1. Promoting the best interest of the potential living donor
2. Advocating for the rights of the potential living donor
3. Assisting the potential living donor in obtaining and understanding information about the:
   - consent process
   - evaluation process
   - surgical procedure
   - benefit and need for follow-up

At Stanford, the IDA ensures that your rights as a potential organ donor are fully represented. The IDA serves as your living donor advocate from the time you contact the transplant program, as well as after donation. Your current and future safety is our number-one concern.
Keep in mind that at any point in the donor evaluation process, you have the right to change your mind. We will respect your decision whether you decide to move forward or if you would like to stop the process.
During hand-assisted laparoscopic surgery, your surgeon will make a series of small incisions (about the size of a dime) in your lower abdomen and insert a laparoscope—a tiny tube with a light and a camera—to view and access the kidney. Your kidney will then be removed through a three- to four-inch incision below your belly button.
SURGERY & RECOVERY

Advances in medical technology in recent years have led to increasingly less invasive procedures for kidney donors. While the procedure to remove a donor kidney (called nephrectomy) may be either conventional or laparoscopic surgery, more often than not donor kidneys are removed using hand-assisted laparoscopic techniques. If conventional surgery is required, we also offer a “muscle-sparing open nephrectomy,” which can shorten recovery time.

Once the donor kidney is removed, it is transplanted within hours into the recipient. During the recipient surgery, the donor kidney will be placed in the lower abdomen, and the native kidneys will remain undisturbed.

The donor surgery takes about three hours, and pain medication is provided after surgery as needed. Donors typically stay in the hospital for about two to three days and return to normal activities within four to six weeks. However, we recommend that you do not return to work for about six weeks, depending on the physical requirements of your job.

Risks related to kidney transplant for donors are similar to those involved with any major surgery, such as bleeding and infection. In the US, death as a consequence of donation occurs in three to four of every 10,000 donations. Being a living donor does not shorten life or lead to long-term health consequences.

FOLLOW-UP CARE

Upon discharge from the hospital, we will arrange a follow-up appointment at Stanford within two weeks to see how your wound is healing. You will also need to schedule follow-up appointments at six months, one year, and two years after kidney donation.
DONOR MEDICAL COSTS

Generally, the transplant recipient’s health insurance covers the donor’s transplant-related medical costs, including evaluation, surgery, and follow-up care. Stanford’s transplant financial coordinators will verify coverage availability to ensure the donor and recipient have no undue out-of-pocket expense.

Donors are responsible for non-medical expenses, such as transportation and time off from work. If you are currently working full-time, we encourage you to research your disability coverage, as it may help bridge this gap.

While donors generally do not have difficulty obtaining medical insurance post-donation, some donors have reported difficulty obtaining life insurance; however, this is rare. Transplant financial coordinators at Stanford are available to assist both transplant recipients and donors with questions about insurance coverage.

MAKING AN INFORMED DECISION • Donating a kidney is a big decision. As you consider becoming a donor, learn everything you can, research the risks and benefits, and ask lots of questions. Only you can decide if becoming a donor is the right decision for you.

Thank you for taking the time to review these materials. We will be happy to speak with you by phone or in person if you have any questions. Please call our living donor coordinator at 650.736.0795.