

# Living Kidney Donor Program



*Summer (left), kidney recipient (transplanted October 2021) with her living donor, Nedra*



**THE OHIO STATE UNIVERSITY**  
WEXNER MEDICAL CENTER

# Living Kidney Donor Program Introduction



*Raul (right), kidney recipient (transplanted March 2016) with his donor and friend, Albert*



**THE OHIO STATE UNIVERSITY**  
WEXNER MEDICAL CENTER

# Why Cho Living

## About The Ohio State University Wexner Medical Center



One of the nation's leading academic health centers, The Ohio State University Wexner Medical Center offers health care services in virtually every specialty and subspecialty in medicine. In 2022, the *U.S. News & World Report* "Best Hospitals" rankings named the Ohio State Wexner Medical Center in the top 10% of all hospitals in the nation based on outcomes, structure, patient experience and expert opinion, ranking in **nine specialties**.

The Comprehensive Transplant Center at the Ohio State Wexner Medical Center is one of the largest in the United States, performing nearly 600 liver, kidney, pancreas, combined kidney-pancreas, heart and lung transplants each year. Since our program began in 1967, we have performed more than 11,500 lifesaving organ transplants.

# How to be a Kidney Donor?

Patients with end-stage renal (kidney) disease have three options for treatment: dialysis, a kidney transplant from a deceased donor or a kidney transplant from a living donor.

Dialysis is only a temporary solution. While a patient can remain on dialysis for many years, it's not a cure for kidney disease. It is also time-consuming, with treatment schedules as frequent as three times each week for four hours each session.

Transplantation is a preferred alternative, but the demand for donated organs is greater than the number available, and demand is steadily increasing. United Network for Organ Sharing (UNOS), the organization responsible for allocating deceased donor organs for transplant, reports there are approximately 90,000 candidates waiting for a kidney transplant. In 2021, 24,670 kidney transplants were performed in the United States, with 18,669 from deceased donors and 5,971 from living donors.

**The best and fastest option for a patient waiting for a kidney is to receive one from a living donor.** Wait times for patients with living donors are reduced from years to months, and transplant recipients have better outcomes with kidneys from living donors. According to the National Kidney Registry, kidneys transplanted from living donors may last nearly twice as long as kidneys from deceased donors.

At any given time, about 700 patients in Ohio State's transplant program are awaiting a kidney transplant – many whose lives could be changed by a living donor.

Patients with a living donor can receive a transplant more quickly, potentially avoiding dialysis. The wait for a kidney from a deceased donor can be many years.

About a third of the transplants performed at Ohio State use kidneys from live donors. Often these donors are family members, but a growing number are friends or co-workers. There are also people who choose to donate a kidney without having a specific recipient in mind. These extraordinary people are called non-directed or altruistic donors.



*Ashley (center), non-directed donor  
(donated July 2014), with her parents*

# Qualifications for Living Donors

To qualify as a living donor, an individual should be in good overall physical and mental health and free from uncontrolled high blood pressure, diabetes, cancer, HIV/AIDS, hepatitis and organ disease.

Individuals considered for living donation are usually between the ages of 18 and 75. Gender and race are not factors in determining a successful match.

Living donor candidates must take a blood test to determine blood type compatibility with the recipient.

<u>DONORS WITH BLOOD TYPE</u>	<u>CAN DONATE TO PATIENTS WITH BLOOD TYPE</u>
A	A and AB
B	B and AB
AB	AB
O	A, B, AB and O

If the donor and recipient have compatible blood types, the donor undergoes a medical history review and a complete physical examination, in addition to tests to ensure compatibility. The donor and recipient may also have to complete a psychological evaluation. **It's important to note that even if a donor's blood type is not compatible with the recipient's, there is still the option to be an indirect donor for your recipient. Please review the information on Kidney Paired Donation on page 6.**

The decision to become a living donor is a voluntary one, and the donor may change their mind at any time during the process. The donor's decision and reasons are kept confidential.

Education is the most important component in the decision to become a living kidney donor. If you are considering donation, you can speak with a living donor coordinator at the Ohio State Comprehensive Transplant Center by calling 614-293-6724, option 3 or visit our education webpage at [wexnermedical.osu.edu/KidneyEducation](http://wexnermedical.osu.edu/KidneyEducation).



*Donors and recipients took part in a five-way kidney paired donation chain transplant on Valentine's Day 2017.*

# Evaluation Process – What to Expect

Ohio State's Pre-Transplant Office will schedule an evaluation appointment with you that will include medical testing, in-person or virtual education, evaluation by a surgeon and a nephrologist (kidney doctor), and a conversation with a donor advocate. Additional testing will also be scheduled.

Here's what you can expect during your evaluation process:

- Provide a copy of your blood type or have blood drawn to confirm blood type (the Pre-Transplant Office will provide an order for blood draw)
- 24-hour blood pressure monitoring
- Female donors will need to provide a copy of their last Pap test result, breast exam and mammogram report. A *Release of Information* form is included in this packet. Please sign the form and forward it to your doctor's office. If your Pap test or mammogram is more than a year old, you should schedule an appointment for new exams
- Complete a glucose tolerance test (GTT) if requested by the Pre-Transplant Office
- 24-hour urine collection
- Chest X-ray and EKG (tests to determine heart and lung health)
- CT angiogram of kidneys (an X-ray test to evaluate the kidneys and blood vessels)
- Meet with a transplant coordinator have a psychosocial evaluation, a psychosocial evaluation, receive surgical and medical evaluations, and complete tests
- Any additional testing as needed
- Final pre-donation evaluation studies (done seven to 10 days before surgery)

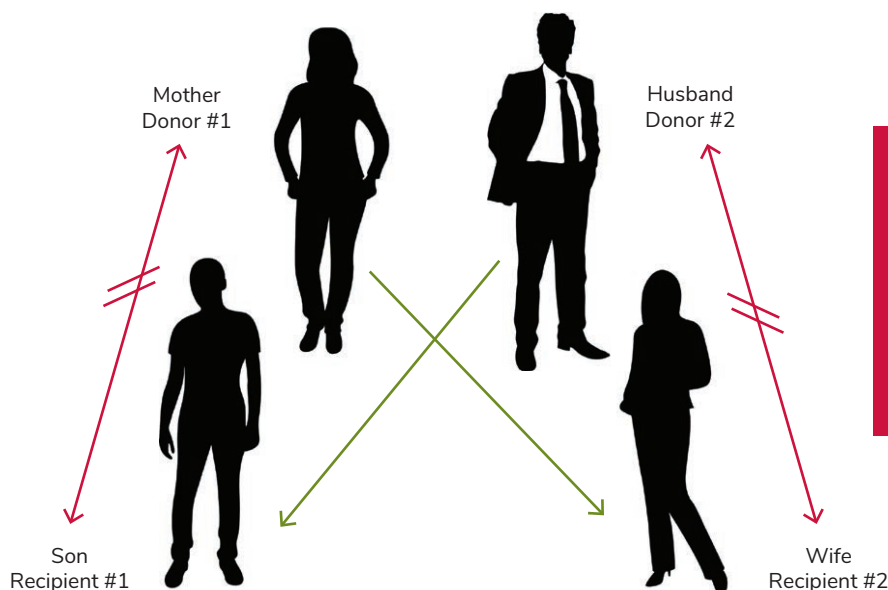
**IMPORTANT:** You won't be evaluated for living kidney donation until you've watched our 30-minute education video: [go.osu.edu/KidneyDonorEducation](https://go.osu.edu/KidneyDonorEducation).



# Kidney Paired Donation

Sometimes, a person may agree to donate a kidney to a recipient, but their blood or tissue type does not match their recipient. The Ohio State Comprehensive Transplant Center can help match such a donor/recipient pair with another donor/recipient pair through a process called *Kidney Paired Donation*.

For example, if the recipient from one pair is a match with the donor from another pair and vice versa, the transplant center can arrange the exchange through two simultaneous transplants. This allows the two recipients to receive organs from two people who were willing to donate, even though the original pairings were incompatible or mismatched.



In a paired donation, an incompatible donor/recipient pair is matched with another incompatible donor/recipient pair for an exchange. Each donor gives a kidney to the other person's intended recipient.

Both donor and recipient candidates are carefully evaluated and tested medically and psychosocially to ensure that the benefits outweigh the risks. It's important for both surgeries to be scheduled for the same time, in case either donor changes their mind before surgery.

*Kidney Paired Donation* can also involve multiple donors and recipients. In September 2011, Ohio State Wexner Medical Center achieved national recognition with a six-way kidney paired transplant, coordinating the in-house transplantation of six kidneys in a domino-effect surgical process.

In 2020, Ohio State completed an 8-way kidney transplant — the largest living donor kidney chain in Ohio to date. The 8-way chain included 8 living donors and 8 recipients for a total of 16 surgeries performed in less than 48-hours, and only possible due to the vast resources at the Ohio State Comprehensive Transplant Center. With more than 90,000 Americans currently waiting for a kidney in the U.S., these types of paired donations make a positive impact on reducing the kidney transplant wait list.

# Non-Directed Living Donation

A non-directed living donor, or altruistic donor, is someone who offers to donate a kidney to any recipient currently on the deceased donor waiting list.

- Non-directed donors must satisfy the same medical, psychosocial and ethical criteria used in the selection of all living donors, as well as any recommended psychiatric criteria.
- Non-directed donors must be 18 years or older.
- The transplant team will provide opportunities for discussion and education at all stages of the donor evaluation. Non-directed donors can change their mind to donate at ANY time prior to surgery, with their reasons kept confidential.
- The transplant team will assess the donor's and the recipient's positions regarding anonymity. In all cases, anonymity between the donor and the recipient will be maintained until the transplant is complete. The transplant team will facilitate correspondence between the donor and the recipient post-transplant, only if agreed upon by both parties.

## Evaluation Process:

- Non-directed living donors will receive a medical evaluation at the Ohio State Comprehensive Transplant Center.
- A preliminary donor evaluation is conducted after the individual's first contact with our transplant team to indicate their interest in pursuing organ donation. Potential donors are sent a living donor informational packet and asked to complete the online health history questionnaire at [osuwexmedlivingdonor.org](https://osuwexmedlivingdonor.org).
- Once the online health history questionnaire is completed, it's reviewed by our team. If you're a potential candidate, a full donor evaluation will be started. This process involves gathering additional information and reaffirming the potential donor's interest and intent in pursuing donation. We provide education on all aspects of donation to the potential donor.
- Non-directed donors will undergo the same evaluation process as directed donors, including evaluation by a living donor coordinator, transplant coordinator, social worker, psychologist, transplant nephrologist (kidney doctor), transplant surgeon and living donor advocate.

For more information about becoming a non-directed donor, please contact Ohio State at 614-293-6724, option 3, to speak with a living donor coordinator or email [livingdonor@osumc.edu](mailto:livingdonor@osumc.edu).



*Nedra, non-directed kidney donor (donated October 2021)*



# Frequently Asked Questions

## Are living donor kidney transplants common?

Most kidney transplant centers perform living donor transplants. At The Ohio State University Wexner Medical Center, more than 300 kidney transplants are performed each year, with a third of them from living donors.

## Do living donor transplants offer any advantages over deceased donor transplants?

A kidney from a living donor offers several benefits over a deceased donor organ:

- Receiving a kidney from a living donor keeps patients from long waits for a deceased donor kidney.
- Living donor transplants have a first-year success rate of 98.5%.
- Preservation time and organ transportation are not factors in living donation. Donor and patient operating rooms are adjacent to each other, and transplanted kidneys are working in the recipient within 30 minutes of donation.
- Living donation surgeries can be scheduled in advance, which allows procedures to be performed under the best circumstances for the patient and donor.
- The entire health history of a living donor is known and verifiable.

## Who can donate?

To be a donor, you must be in good general health. You must be free from diabetes, cancer, HIV/AIDS, hepatitis, kidney disease, uncontrolled high blood pressure and heart disease. Gender and race do not matter. Individuals considered for living donation are typically between the ages of 18 and 75. A matching blood type is not a requirement for living kidney donation. Through our *Kidney Paired Donation Program*, it's possible to donate with mismatched blood or tissue.



*Nicki (left), kidney exchange recipient (transplanted September 2021), with her daughter, Jenna, who donated on her mother's behalf.*

## Will kidney donation cause health problems for a living donor?

All donors must go through a series of tests before being accepted as a donor. These tests must be reviewed and approved by the transplant team. Only people with excellent health are accepted as donors. After donation, you will be able to return to a normal lifestyle. Life expectancy of donors is the same as that of people with two kidneys. A single kidney can meet the body's needs very well. There are always possible risks with any surgery; however, these are reduced by the extensive evaluation performed on all donors.

## How do I get started?

The first step in the donor process is to complete the online health history questionnaire at [osuwxmedlivingdonor.org](https://osuwxmedlivingdonor.org). If you'd like to speak to our living donor team before taking the health assessment, call **614-293-6724, option 3** or email [livingdonor@osumc.edu](mailto:livingdonor@osumc.edu).

## What testing will I have to complete?

If you pass the initial screening process, the next step will be to confirm your blood type. Once this is received, we will proceed with any other preliminary tests that need to be completed prior to scheduling your full evaluation.

Your evaluation will include laboratory tests such as tissue typing, urine collections, chest X-ray, EKG and any other testing deemed necessary by our transplant team. Once your evaluation has been reviewed, you will be scheduled for a CT angiogram of the kidneys. If all testing is found to be acceptable, the transplant surgery can then be scheduled.

## Are there medications I should be careful about using after donating my kidney?

You should always check with your doctor before taking medication. After kidney donation, you should avoid taking non-steroidal anti-inflammatory drugs (NSAIDs), which include any medications with ibuprofen, such as Advil or Motrin, and medications with naproxen, such as Aleve. Also, many arthritis medications may be harmful to your remaining kidney.

## Who pays my medical bills?

Your evaluation and surgery are paid for by the recipient's medical insurance. However, some things to consider that are not covered are travel and lodging expenses (if any), and lost wages from work if you do not have personal or vacation time. Some donors may qualify for assistance with travel and lodging. The usual recovery time for a donor is four to six weeks.

## How long will I be in the hospital?

Generally, donors are in the hospital for three days. Recipients are usually in the hospital for four to six days.

## Where can I obtain more information about living donor transplantation?

- Call the Ohio State Pre-Transplant Office at **614-293-6724, option 3** or email [livingdonor@osumc.edu](mailto:livingdonor@osumc.edu)
- Visit Ohio State's Kidney Transplant Education Hub at [wexnermedical.osu.edu/KidneyEducation](https://wexnermedical.osu.edu/KidneyEducation)
- Review the available website resources listed on page 10

## Resource Websites

The Ohio State University Wexner Medical Center – [wexnermedical.osu.edu/KidneyEducation](http://wexnermedical.osu.edu/KidneyEducation)

*Information on kidney donation procedure and tools for how to ask for a living kidney donation*

Organ Procurement and Transplantation Network – [optn.transplant.hrsa.gov](http://optn.transplant.hrsa.gov)

*Information and data on living donation*

Living Donors – [livingdonorsonline.org](http://livingdonorsonline.org)

*Read, post messages and chat with other living donors*

Donate Life America – [donatelife.net](http://donatelife.net)

*National coalition on organ donation and living donor information*

American Kidney Fund – [kidneyfund.org](http://kidneyfund.org)

*Provides direct financial assistance to kidney patients in need, and education for those with and at risk for kidney disease*

United Network for Organ Sharing Transplant Living – [transplantliving.org](http://transplantliving.org)

*Information on live organ donation and transplant for patients*

National Kidney Foundation – [kidney.org](http://kidney.org)

*Information on kidney disease, transplantation and living kidney donation*

Lifeline of Ohio – [lifelineofohio.org](http://lifelineofohio.org)

*Information about transplantation and living donation from the local agency*

Living Donation Storytelling Project –

[explorelivingdonation.org/](http://explorelivingdonation.org/)

*A digital library of people sharing their living donor kidney transplant experiences*

TRIO – [trioweb.org](http://trioweb.org)

*Support, education and awareness for those involved with organ transplantation*

Scientific Registry of Transplant Recipients – [srtr.org](http://srtr.org)

*Data on living donation at specific transplant centers*

United Network for Organ Sharing – [unos.org](http://unos.org)

*Resources for living organ donors*

Health Resources and Services Administration – [organdonor.gov](http://organdonor.gov)

*Information and resources on donation and transplantation*

National Kidney Registry – [kidneyregistry.org](http://kidneyregistry.org)

*Information and resources regarding donor exchange*

## A History of Excellence: Ohio State's Kidney Transplant Program

**1967:** First living donor kidney transplant – the first solid organ transplant at Ohio State

**1986:** First living-donor kidney transplant between non-relatives

**1999:** First laparoscopic kidney donation surgery

**2005:** First paired donor exchange kidney transplant

**2011:** National recognition for in-house six-way paired kidney transplant

**2016:** Combined lung-kidney transplant. This was the first in Ohio, with only 37 performed in the U.S. to date

**2020:** 8-way kidney transplant (largest living donor kidney chain in Ohio to date)

- More than 300 kidney transplants per year
- Among top 10% in patient volumes in the United States
- Recognized by *U.S. News & World Report* as a top hospital for kidney disease care
- About one third of kidney transplant patients at Ohio State receive organs from living donors

# Living Kidney Donor Program Evaluation



*Brian, kidney recipient (transplanted May 2021), with his wife and living donor, Elizabeth*

Patient Name: \_\_\_\_\_

Date: \_\_\_\_\_

Living Donor Nurse Coordinator: \_\_\_\_\_

Social Worker: \_\_\_\_\_

Living Donor Advocate: \_\_\_\_\_

Nephrologist: \_\_\_\_\_

Surgeon: \_\_\_\_\_

Donor evaluation (check off as completed):

- Complete online health history questionnaire at [osuwexmedlivingdonor.org](http://osuwexmedlivingdonor.org)
- Watch 30-minute living donor education video at [go.osu.edu/KidneyDonorEducation](http://go.osu.edu/KidneyDonorEducation)
- Blood draw
- 24-hour urine collection
- Urine specimen
- 24-hour blood pressure monitor
- Chest x-ray
- EKG
- Overview with living donor nurse coordinator
- Consult with living donor advocate
- Psychologist interview (scheduled if needed)
- Social worker interview
- Consultation with nephrologist (kidney doctor)
- Consultation with transplant surgeon
- Pap test and breast exam (all female)
- Mammogram (all females age 40 or older)
- CT angiogram (final exam)
- Colonoscopy (age 50 or older)

Additional items requested by Transplant Team:

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Visit the Kidney Transplant Education Hub at [wexnermedical.osu.edu/KidneyEducation](http://wexnermedical.osu.edu/KidneyEducation) to view all your donor education materials in one place, including the health history questionnaire, 30-minute video, plus additional information about the National Living Donor Assistance Program and donor support group information.

The Ohio State University Wexner Medical Center  
Comprehensive Transplant Center  
300 W. 10th Ave., 11th Floor  
Columbus, OH 43210  
Phone: **614-293-6724, option 3**  
Email: [livingdonor@osumc.edu](mailto:livingdonor@osumc.edu)  
Fax: 614-293-6710  
[wexnermedical.osu.edu/KidneyDonor](http://wexnermedical.osu.edu/KidneyDonor)

# Donor Education

Before you can be evaluated for living kidney donation, please watch our 30-minute education video: [go.osu.edu/KidneyTrxEducation](https://go.osu.edu/KidneyTrxEducation).

**IMPORTANT:** You must watch the education video in its entirety before you can start the donor evaluation and testing process. If you don't have internet access, please speak with your living donor nurse coordinator.

Our education video explains in detail your donor rights and responsibilities, risks for donation (health risks, financial risks and emotional risks), and breaks down the donation process into **6 steps**:

- **Step 1:** Referral for Kidney Donation
- **Step 2:** Donor Education
- **Step 3:** Evaluation and Testing
- **Step 4:** Patient Selection Committee (PSC)
- **Step 5:** Pre-Admission Testing
- **Step 6:** Donation Surgery



*Nathan (left), a non-directed kidney donor (donated June 2018), with his partner, Michael*

# The Evaluation Process

Becoming a living kidney donor is a voluntary, personal decision. For some it is an easy choice to provide a better life for a loved one, but for others it requires more careful consideration. However you arrived at your decision to be evaluated today, you may change your mind at any time during the process. Your reasons are kept confidential, and your recipient will only be told that you are not an appropriate candidate.

Education and donor screenings are two very important components in the living donation process. Living kidney donors are advised on surgical, medical, financial and emotional risks. They are also thoroughly evaluated to ensure good health and organ function prior to donation.

## Evaluation

Your evaluation appointment will include medical testing, evaluation by a surgeon and a nephrologist (kidney doctor), and a conversation with a living donor coordinator, social worker and living donor advocate. You may also be asked to complete a psychological evaluation with a Comprehensive Transplant Center clinical psychologist. Additional testing may also be scheduled. If your evaluation shows that donation is too risky for you, your donation will not proceed.

Your guide throughout the entire evaluation process will be your living donor nurse coordinator. You can approach your nurse coordinator with any questions or concerns at any time. Here's what you can expect during your evaluation process:

- Upon arrival, turn in your 24-hour urine collection
- Blood draw to confirm blood type, tissue compatibility and general health
- Education review with living donor nurse coordinator, to confirm that you watched the entire 30-minute education video ([go.osu.edu/KidneyDonorEducation](http://go.osu.edu/KidneyDonorEducation))
- Evaluation by transplant surgeon and nephrologist (kidney doctor)
- Consultation with social worker and living donor advocate
- Chest X-ray and EKG (tests to determine heart and lung health)
- CT angiogram of kidneys (an X-ray test to evaluate the kidneys and blood vessels)
- Any additional testing as needed

## Additional Testing

After your clinic evaluation day, further testing will be arranged by the Pre-Transplant Office including:

- 24-hour blood pressure monitoring (if not previously completed)
- Female donors will need to provide a copy of their last Pap test result, breast exam and mammogram reports. A *Release of Information* form is included in this packet (if you have not already completed one). Please sign the form and forward it to your doctor's office. If your Pap test or mammogram is more than a year old, schedule an appointment for new exams.
- Final pre-donation evaluation at the transplant center (done seven to 10 days before surgery)

# Living Donor Support

If you decide to become a living donor, you will need a support person for assistance after donation surgery. It is important to understand that living kidney donation is a major surgery. You may experience some discomfort after donation and will need the assistance of others while you recover at home.

Prior to your surgery date, please review the following with your support person:

- How to pay for additional costs related to donation surgery, like gas, parking and hotels
- Availability of support person to help you with daily activities after surgery
- Discussion with work supervisor or human resource department about time off from work for donation surgery and whether it will be a paid leave of absence
- If you have a living will and/or health care power of attorney
- Care for your home, family and pets while you are in the hospital
- Need for travel arrangements for you or caregivers, including hotel and transportation
- How to stay in contact with friends, family and/or faith community while you are recovering

Please address any medical questions you have regarding your recovery to your living donor coordinator at **614-293-6724, option 3**. Also, if you are interested in obtaining information about joining a transplant support group, you can contact your transplant social worker at the same number.



*Amy, non-directed kidney donor (donated May 2021)*



# Financial Concerns

Most medical expenses related to donation are covered under the recipient's insurance. Medication that you may need following surgery (e.g., pain medication) will be given to you at the time of discharge from the hospital. If you receive a bill related to donation, please contact your living donor team immediately at **614-293-6724, option 3** or email [livingdonor@osumc.edu](mailto:livingdonor@osumc.edu) to discuss.

As a donor, it is important to consider your financial situation in making a commitment to this process prior to surgery. Please take time to consider how your recovery time will affect your home and work life. It is also important to think about how much paid or unpaid time off you will be able to use after surgery, including sick days, personal/vacation days, short-term disability (STD) and Family and Medical Leave Act (FMLA). Please address your questions to your work supervisor or human resources department.

Some donors may be eligible to receive financial assistance for donation expenses like transportation, parking and hotels. There is no financial assistance available for lost wages. Contact your assigned social worker or living donor coordinator about assistance.

# Tax Incentives

The state of Ohio passed a tax incentive for organ donors that may benefit those with out-of-pocket costs. The information is discussed in the Ohio IT 1040 instructions manual. The tax incentive is up to \$10,000 of qualified organ donation expenses incurred during the taxable year. "Qualified organ donation expenses" means unreimbursed travel and lodging expenses that you incur in connection with your living kidney donation. You can claim this deduction only once for all taxable years.

Expenses that can be claimed currently include gas, parking, hotels and out-of-pocket medical testing. Lost wages are not included. Evidence of the expenses (receipts, bills, etc.) should be kept, as the information will need to be itemized on your tax form.

Please contact the State of Ohio IRS Department with further questions at 800-282-1782. If you live in a state other than Ohio and file taxes there, please contact your local state tax department to discuss whether they offer any tax incentives based on organ donation.

# Medical Risks

As a potential living kidney donor, you will be carefully screened by our transplant team to determine if you are a good candidate for kidney donation. According to the United Network for Organ Sharing (UNOS), there is no national systematic long-term data collection on the risks associated with living kidney donation. Based upon the limited information that is currently available, overall risks are considered to be low and about the same as risks for people who haven't donated a kidney. Risks can differ among donors and, as with any surgery, death is a possibility.

During your health evaluation, a nephrologist (kidney doctor) will discuss your health risks for kidney donation. Possible risks include:

## High Blood Pressure

High blood pressure, or hypertension, is a condition in which your heart is required to work harder than normal to circulate blood through the blood vessels. Blood pressure is made up of two measurements: systolic and diastolic. Normal blood pressure at rest is within the range of 100 to 120 systolic and 60 to 80 diastolic. High blood pressure is said to be present if your blood pressure at rest is persistently at or above 140/90. If high blood pressure is not properly managed, it can damage your remaining kidney and contribute to other kidney diseases.

## Proteinuria

Proteinuria is a condition in which urine contains a high amount of protein. As blood passes through your remaining kidney, waste products are filtered out. If the filters of your kidney, called glomeruli, are damaged, protein can leak from your blood into your urine. Proteinuria can be a sign of chronic kidney disease, which is when the kidney becomes damaged but can still function. Chronic kidney disease is usually the result of uncontrolled high blood pressure, diabetes or diseases that cause kidney inflammation.

## End-Stage Renal Disease

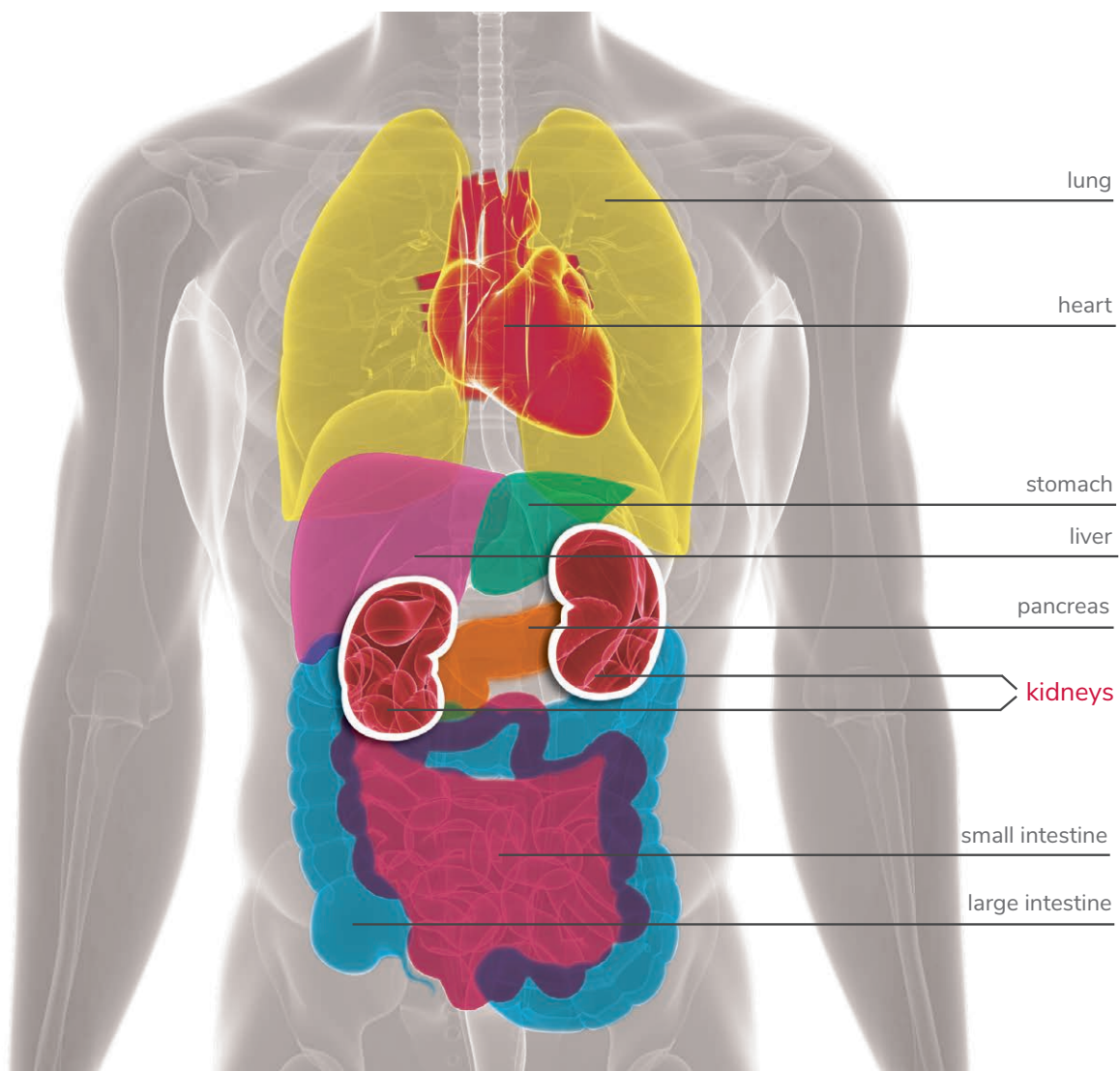
End-stage renal disease, or ESRD, is a condition in which your kidney stops working and no longer performs normal fluid and waste removal. To live, you need dialysis or a kidney transplant. This kind of kidney failure is permanent and cannot be fixed. Many cases of ESRD are caused by diabetes or uncontrolled high blood pressure.

Regular checkups, along with kidney function and blood pressure monitoring, are recommended after kidney donation. It is important that you follow the recommendations of your transplant team and keep your follow-up medical appointments to ensure your continued good health. Please discuss all medical concerns with your nephrologist and contact your living donor coordinator or living donor advocate if you have any questions about living donation.

# Surgery Risks

Living kidney donation surgery is considered a relatively safe procedure, but it is still a major surgery with the potential for complications. Donors are tested and re-tested prior to surgery to ensure overall good health for the best possible outcomes after surgery.

Your transplant surgeon will detail the major risks of donation surgery, as well as explain various precautions to prevent complications. Every surgery presents risks to the patient, but these can be minimized by the precautions taken in health screenings prior to surgery, the expertise of your surgical team and by following the care instructions of your transplant team.



## Hemorrhage

The use of laparoscopic surgery, also called minimally invasive surgery, greatly reduces your risk for hemorrhage or forceful, uncontrolled bleeding during living donation surgery. Laparoscopic surgery results in minimal blood loss, reduced pain, shorter recovery time and reduced risk of infection when compared to open surgery. Our program has been performing laparoscopic living donor surgery since 1999.

## Pulmonary Embolism

Pulmonary embolism is a blood clot that can form as the result of poor blood circulation while the body is asleep during surgery. The blood clot can travel to the heart and lungs, blocking circulation, and potentially cause death. To prevent blood clots, blood-thinning drugs are given before, during and after surgery. Also, special boots are applied to the lower legs where blood can easily pool. The boots pulsate, encouraging circulation, and are worn until you are up and walking after surgery.

## Hernia

A hernia can occur when the intestine or fatty tissue pushes through a weak spot in the abdominal wall, usually at an incision location made for surgery. Overexertion or anything that causes an increase in pressure in the abdomen can cause a hernia, including obesity, lifting heavy objects, diarrhea, constipation, or persistent coughing or sneezing. Surgery is required to repair a hernia, and the healing process starts over, which slows recovery time. It is important to follow the lifting and exercise guidelines of your transplant team to prevent a hernia after surgery.

## Infection

When you have surgery that requires a cut or incision in your skin, there is a chance of infection at that site. The small incisions used in the laparoscopic surgery greatly reduce your risk of acquiring an infection. However, all surgeries have a risk of infection and every precaution will be taken before and after surgery to prevent one from occurring.

## Bowel Obstruction

After donation surgery, the healing incision may form scar tissue that can obstruct or block a portion of the bowel or small intestine. Your bowels act like a garden hose, which can be easily squeezed, cutting off flow. Surgery can fix an obstructed bowel, but will increase your hospital stay and/or recovery time. You will be monitored closely after surgery to ensure that you are eating, passing gas and not nauseated or constipated.

Please contact your living donor coordinator if you have any concerns about these potential surgical complications.

# National Living Donor Assistance Center

The National Living Donor Assistance Center (NLDAC) helps to provide greater access to donation for people who want to donate, but cannot otherwise afford the travel and expenses associated with donation.

## Who Can Apply?

Any individual who will incur travel and other qualifying nonmedical expenses toward living organ donation may apply for financial assistance. The donor and recipient must be U.S. citizens or lawfully admitted residents of the U.S. with permanent residences in the U.S. or its territories.

## What Expenses Are Covered?

Coverage is provided for up to \$6,000 in reimbursement for hotel, travel and meal expenses related to the donor evaluation, donor surgery and donor follow-up. Approved applicants will receive a controlled value card (similar to a credit card) to pay for covered expenses for themselves and up to two accompanying people.

## Who Can Qualify?

Preference is given to donors and recipients with income less than or equal to 300% of Health and Human Services (HHS) Poverty Guidelines. Documentation of recipient and donor income is required.

Applications may also be approved with an income greater than 300% of HHS Poverty Guidelines if financial hardship can be demonstrated. Your transplant social worker or living donor coordinator can help you determine if you are eligible, and the appropriate category.

The donor would NOT qualify for this program if donor reimbursement is available from the recipient, a state compensation program, insurance policy or any federal health benefits program.

## Where Do I Apply?

Speak to your transplant social worker or living donor nurse coordinator who can file an application on your behalf with the NLDAC. After your application is received, the approval period is six to eight weeks.

**Contact your transplant social worker or living donor coordinator at 614-293-6724, option 3 for more information, or contact the NLDAC directly at:**

National Living Donor Assistance Center  
2461 S. Clark St., Suite 640  
Arlington, VA 22202  
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LDAC@livingdonorassistance.org  
**livingdonorassistance.org**

# Living Kidney Donor Program Donation Surgery



*Katie, living kidney donor (donated December 2019)*



**THE OHIO STATE UNIVERSITY**  
WEXNER MEDICAL CENTER

# Tips Before Living Do

## Day of Surgery Checklist

- Have your photo ID
- Have a copy of legal medical documents, such as your living will and medical power of attorney
- Pack a bag with loose-fitting clothes for when you go home
- Bring your medication list
- Bring a toothbrush, toothpaste, comb/brush and other personal grooming items
- Leave all valuables at home, and remove jewelry and body piercings
- Nothing by mouth after midnight
- Take medication with only a sip of water

# Donation Surgery

Now that you have made the decision to become a living donor and been evaluated by our transplant team, continue with daily routines that will keep you in good health.

- Eat healthy meals and snacks while waiting for your donation surgery. A balanced diet will help you manage your weight and keep your body functioning to the best of its ability before surgery.
- Stay active and exercise at least five days a week. Exercise before surgery helps to speed up recovery after surgery.
- Keep your transplant team's phone numbers with you at all times. Don't hesitate to contact any member of the transplant team with questions or concerns you might have while waiting to donate your kidney.
- To reduce the chance of getting sick while you are waiting to donate, we recommend you:
  - Don't share eating utensils and drinking glasses
  - Avoid people who are sick
  - Ask family and friends not to visit you when they are sick
  - Wash your hands with soap and water often or use an antibacterial cleaning gel and rub your hands together until they are dry
  - Avoid touching your eyes, nose and mouth where germs can easily enter the body

Please contact the transplant clinic with any significant health events such as **surgery (including dental surgery), any hospitalizations, broken bones, open sores or wounds, any condition that requires you to take antibiotics, heart attack, stroke, or breathing problems.** The transplant doctors will not move forward with surgery until both you and your intended recipient are determined to be in good health.



# Your Hospital Stay

All donation and transplant surgeries are done at the Ohio State Wexner Medical Center by our transplant team. If our transplant team clears you as a donor and your recipient has been identified, the surgery will be scheduled within a few weeks.

## Week Before Surgery

About a week before the surgery date, you and your recipient will have blood drawn for a final tissue matching, as well as HIV and hepatitis testing.

## Surgery Day – Day One in the Hospital

The day of your donation surgery, you will be asked to check in to the hospital, usually in the early morning.

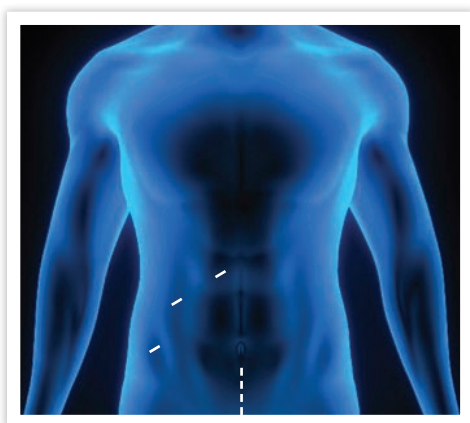
When you arrive at the hospital, you will be admitted into the hospital and taken to the pre-operation area. Once you are comfortable, the doctors and nurses will conduct a final examination. You can expect to have blood drawn and an IV placed in your arm. These final health checks help our transplant staff to know that you are in excellent health for donation. You will meet your surgeon prior to transfer to the operating room. This is also a good time for you to ask any last minute questions and to openly talk about any concerns you may have before surgery.

For information about hospital visitation and the latest updates on the visitor policy, visit [wexnermedical.osu.edu/guide](http://wexnermedical.osu.edu/guide).

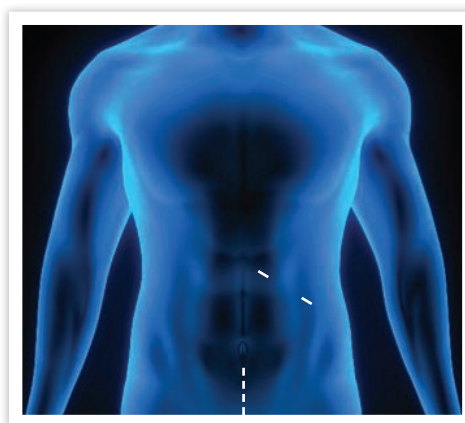
Kidney donation surgery is a laparoscopic procedure. You will have two to three small incisions under your rib cage, on the left or right side (depending on which kidney you are donating). These small cuts, about a half inch each, are small portholes for the laparoscopic instruments to be inserted into your body. There will also be a four-inch vertical incision in the middle of your lower abdomen – this is for the surgeon's hand that assists the laparoscopic instruments for increased safety.

You can expect the procedure to last two to three hours. Once the kidney you are donating is removed, it will be placed in a sterile bowl and taken immediately to your recipient's operating room by a waiting transplant surgeon, where it's then transplanted into your recipient's abdomen.

After surgery, you will be moved to the transplant unit for private recovery. While in your room, you will be closely monitored by our transplant team to ensure you are recovering well, have limited nausea, are able to eat, use the bathroom and pass gas, and are free from infection. Ask us for help when you want to get out of bed, as the surgery and medicines you are given can make you feel less than steady on your feet.



Incision for *right kidney* donation



Incision for *left kidney* donation

Your surgeon will determine which kidney is best for donation and discuss with you prior to surgery.

## Day After Surgery – Day Two in the Hospital

The day after surgery, you will be encouraged to get out of bed and walk with support around the hospital unit. You will also be asked to practice coughing and deep breathing to protect your lungs. The road to recovery should be relatively quick, and you will be given pain medicine as needed to relieve any discomfort.

## Second Day After Surgery – Day Three in the Hospital

Most donors are able to go home on the second day after surgery. You can expect to have some soreness and discomfort. However, you won't be able to leave the hospital until we are sure it's safe for you to continue your recovery in the comfort of your own home. In some cases, if you live more than two hours from the medical center, you may be required to stay in the Columbus area for up to two weeks after your surgery.

It's important to remember that living kidney donation is a major surgery and you will need help while you recover at home. Please talk with your support person about your needs. If you have any questions, contact your living donor coordinator at **614-293-6724, option 3** or email [livingdonor@osumc.edu](mailto:livingdonor@osumc.edu).

## Home After Surgery

Every person reacts differently to surgery, and while some may be up and about the following week, it may take some donors a few additional weeks to return to normal routines. Expect to restart all normal activities within four weeks of surgery. Please do not lift objects over five to 10 pounds for at least six weeks after surgery to protect your health and prevent wound problems.

During your recovery at home, we encourage you to contact our transplant team if you have questions or concerns about your progress.

After donation surgery, your continued good health is our main concern. It is required that you schedule and keep the follow-up appointments with the Ohio State Comprehensive Transplant Center. Appointments will need to be scheduled for:

- Four to six weeks after surgery
- Six months after surgery
- One year after surgery
- Two years after surgery

After two years, we encourage you to visit your primary care physician for annual checkups.



*Rich, kidney recipient (transplanted December 2019)*

# Emotional Concerns

Both before and after surgery you may have many emotions about organ donation. You may be excited about giving the *gift of life*, while at the same time be worried about the future. There are no absolute guarantees about the success of the surgery. You and your recipient may face surgical complications. The transplanted organ may not work right away in your recipient. There is also the chance it won't work at all. It's normal to feel sad, anxious, angry or resentful after surgery. Organ donation may change the relationship you have with the recipient.

While there is most often joy in the celebration of life after living donation, we want you to be prepared before surgery. Talk about your feelings, ask questions and share your concerns with your living donor nurse coordinator, social worker and living donor advocate. We want living donation to be a positive experience and our health care team will work to prepare you for every step of the journey.



*Elizabeth, kidney donor to her husband (donated May 2021)*

# Living Kidney Donor Program After Donation



*Michael, kidney recipient (transplanted October 2019)*



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# Recovery After Living Dona

Every person reacts differently to surgery, and while some may be up and about the following week, it may take others a few additional weeks to return to normal. You should be able to resume most normal activities within four weeks after surgery. Remember that living donation is a major surgery, and you will need assistance at home until you have regained your strength.

If you develop a fever, nausea, vomiting, shortness of breath, a sudden increase of pain or anything that seems out of the ordinary, please contact your living donor coordinator at **614-293-6724, option 3**. If you have severe chest pain or difficulty breathing, call 911.

## Does My Incision Need Special Care?

You will have pain in the area of your incision. This will gradually go away, but you may feel some pulling, cramping or tightness in the area for several weeks after surgery. Your transplant team will help you manage pain during the healing process, and you can expect to be fully healed in about three months. During this time, follow the advice of your transplant team and avoid swimming and tub baths to prevent infection of the incision. Follow your after-surgery care instructions from your transplant team.

## Do I Need a Special Diet?

After living donation surgery, you should eat a healthy diet low in sodium, and rich in fruits and vegetables, and avoid too much fat. You should also drink extra fluids to prevent dehydration. This will help your body recover faster from surgery. When you are no longer taking pain medicine, you may drink alcohol, but do so in moderation since alcohol causes dehydration.

## When Can I Drive?

You can usually drive about one to two weeks after surgery. It may take longer if you are taking pain medicine or if you are unable to make quick movements while driving. Talk with your transplant team about when it's safe for you to resume driving.

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## When Can I Go Back to Work?

Depending on the type of work, it usually takes two to four weeks before you can go back to work full time. Feeling tired is a common side effect for several weeks after surgery. You may want to work half days until you regain your energy. If your job requires heavy lifting, your transplant surgeon may recommend not returning to work for up to eight weeks, to allow time for your incision to heal and strengthen.

## When Can I Exercise?

Many living donors regain their energy level in four to six weeks. It may take more or less time for you. Start walking and increasing your activity level as soon as you feel up to it. Each day do a little more, but always within reason. Avoid vigorous activity for six weeks and don't go swimming until cleared by your transplant team. Don't lift anything over five to 10 pounds for at least six weeks after surgery to prevent wound problems.

## When Can I Resume Sexual Activity?

It's your decision on when to resume sexual activity. We recommend waiting until your surgical incision is no longer painful.

## How Long to Wait Before Becoming Pregnant?

Although studies have shown that kidney donation does not affect a safe pregnancy and childbirth, it's recommended that you wait at least six months after surgery before becoming pregnant. If you are considering becoming pregnant, be sure to talk with your physician or gynecologist to make them aware you have donated a kidney.

## Reminders After Surgery

- Follow the care instructions from your transplant team
- Maintain a healthy diet
- Drink extra fluids
- Don't swim or take tub baths until approved by your transplant team
- Get permission to drive from your transplant team
- Don't lift anything heavier than five to 10 pounds for six weeks
- Avoid vigorous activity for six weeks
- Contact the Ohio State Comprehensive Transplant Center if you have any concerns about your care after donation surgery at **614-293-6724, option 3** or email [livingdonor@osumc.edu](mailto:livingdonor@osumc.edu)

# Care After

## Follow Up With Ohio State's Transplant Center

After donation surgery, your continued good health is our main priority. It's required that you schedule and keep your follow-up visits with the Ohio State Comprehensive Transplant Center. Appointments will need to be scheduled for six weeks, six months, one year and two years after surgery.

At each visit, we will check your blood pressure, test your urine for protein and have blood drawn to check kidney function. If it's problematic to schedule your follow-up visits at the Ohio State Comprehensive Transplant Center, your transplant team can help you make arrangements with your primary care physician.

Below is the required schedule to monitor your health and the health of your remaining kidney after donation surgery. (As a reminder, please write down the month and year your visits need to be scheduled.)

### First Check up

Schedule for: \_\_\_\_\_  
(insert date)

- Visit four to six weeks after surgery
- Schedule at Ohio State Comprehensive Transplant Center
- Incision check
- Blood pressure check
- Blood draw to check kidney function
- Urinalysis to check for protein in urine

### Six-Month Check up

Schedule for: \_\_\_\_\_  
(insert date)

- Visit six months after surgery
- Schedule at Ohio State Comprehensive Transplant Center
- Blood pressure check
- Blood draw to check kidney function
- Urinalysis to check for protein in urine

### One-Year Check up

Schedule for: \_\_\_\_\_  
(insert date)

- Visit one year after surgery
- Schedule at Ohio State Comprehensive Transplant Center
- Blood pressure check
- Urinalysis to check for protein and blood draw to check kidney function

### Two-Year Check up

Schedule for: \_\_\_\_\_  
(insert date)

- Visit two years after surgery
- Schedule at Ohio State Comprehensive Transplant Center
- Blood pressure check
- Urinalysis to check for protein and blood draw to check kidney function

To schedule your follow-up visits with the Ohio State Comprehensive Transplant Center, please call **614-293-6724, option 3**.

If you have concerns regarding your results, we will contact you. If you would like the results for your own personal records, contact our office 48 hours after your visit.

# Donation

## Follow Up With Your Primary Care Physician

At two years after surgery, it's highly recommended that you have a yearly physical exam with your primary care physician to monitor your overall health and the health of your remaining kidney. Also, please contact your primary care physician for the following:

**If you notice your blood pressure is running higher than normal**

Write down your blood pressure reading and have it checked a few times throughout the year. High blood pressure that is not controlled can cause kidney damage.

**If you develop signs or symptoms of a urinary tract infection or kidney stone**

Symptoms may include pain or burning during urination, the feeling of having to urinate often with very little urine coming out, cloudy or bad smelling urine, a tender or heavy-feeling belly, pain on one side of your back or under your ribs, fever and chills or nausea and vomiting.

**Before taking over-the-counter medicines or new prescription medicines**

Discuss which medicines are safe for you and will not damage your remaining kidney. You should not take NSAIDs, including ibuprofen (Advil, Motrin) and naproxen (Aleve). Many arthritis medications may also be harmful to your remaining kidney.



*Leah, kidney recipient (transplanted October 2018)*



# Thank You!

We thank you for considering this decision to donate the *gift of life*.

Donating a kidney is a life-changing experience and a heroic act. The need for organs is great and there is still a critical shortage of organs available in the United States. Our best advocates are people like you who understand the importance of organ donation and the life-changing impact it can make. We encourage you to talk to friends, family and local organizations so others may consider giving their own *gift of life*.

To support organ and tissue transplant and donation, contact your local agency. In central Ohio, you can contact Lifeline of Ohio at [lifelineofohio.org](http://lifelineofohio.org) or 800-525-5667 to learn more about becoming an organ donor ambassador.



Jenna, kidney donor (donated September 2021)

For additional information about living kidney donation, visit our Kidney Transplant Education Hub at [wexnermedical.osu.edu/KidneyEducation](https://wexnermedical.osu.edu/KidneyEducation).

# Living Kidney Donor Program

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