



Preparing for a Kidney or Kidney/Pancreas Transplant



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER

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Please note: the care for kidney and kidney/pancreas transplant patients is much the same. We will refer to kidney transplant throughout this book and only mention kidney/pancreas if there is a difference in the care provided.

Talk to your doctor or health care team if you have any questions about your care.

The Library for Health Information is available to help you find more health information at (614) 293-3707 or e-mail: health-info@osu.edu.

Considering a Kidney Transplant

At Ohio State's Comprehensive Transplant Center, our goal is to help you understand the transplant process. Our team of doctors, nurses and staff will work together to help you to:

- Learn about transplant to decide if this is the best treatment for your health.
- Manage your health before a transplant and share information with your referring doctor before, during and after the transplant.
- Prepare for a hospital stay during transplant surgery.
- Transition to a Post-Transplant Coordinator who will help you to balance your health care and daily living needs.

We want you to be an active partner in your care and treatment before and after a kidney transplant. Share the information in this book with your family and friends to help them understand as well, so they can support the choice you make.

Frequently asked questions

What are the benefits and risks of having a kidney transplant?

Kidney transplant offers you the chance to lead a more normal lifestyle with:

- Improved quality of life and reduced risk of death when compared to dialysis patients.
- Freedom from dialysis.
- Ability to be active with family and friends.
- Opportunity to return to work.
- The loss of the effects of kidney disease.
- Less dietary or fluid restrictions.

Getting a transplant is not a cure for kidney failure, it is a treatment. You will need to partner with the transplant care team to manage your care. After transplant, you will need to:

- Check your vital signs often.
- Go to the lab often for tests.
- Take your medicines as ordered.
- Communicate with your Post-Transplant Coordinator.

For more information

It is common to feel both concerned and excited as you consider a kidney transplant. Please call to talk with our Pre-Transplant Coordinators to get more information and address your questions and concerns.

- **Call 614-293-6724 or 1-800-293-8965, Monday through Friday from 8:00 AM to 4:00 PM.** After regular hours, a phone tree will direct you to the right person to leave a message.
- The fax number is 614-293-6710.

We encourage you to get as much information as possible. Ask questions. Talk with other transplant patients and talk with your doctor. Talk with your dialysis center about getting a referral. **You may also self-refer to get more information about transplant.** Attending an education session at the Transplant Center may also help you with your decision.

The possible risks of transplant include:

- High blood pressure.
- Diabetes after transplant.
- Weight gain.
- Potential for cancer.
- Increased risk for infections.
- Rejection of your transplant.

What information do I need to have to begin the process?

Talk with your current dialysis center or doctor who is treating you for kidney problems, such as a nephrologist (kidney doctor) or primary care doctor. Gather these materials or ask your doctor to send them to Ohio State's Comprehensive Transplant Center:

- Recent reports of health and laboratory values.
- Dialysis schedule (if needed).
- A list of your current medicines.

How will I know if I am a candidate for a transplant?

All patients must complete an evaluation that includes a review of your medical status by the transplant care team. Few conditions prevent a transplant, but the most common are infections, cancer and heart disease. The transplant team will review your results and advise you if you are a candidate.

What are my kidney transplant options?

More than half of our kidney transplants are from living donors. We feel this option is better because it is a planned surgery when your health is stable. However, you can consider a transplant with either a living donor or a deceased donor. If you need a kidney/pancreas transplant, you will need a deceased donor.

- **Living donor transplant:** This type of transplant occurs when a living person wishes to donate a kidney to someone in need. Living donors are often family members, a spouse or friends. All living donors must be healthy and have a medical evaluation by our staff before being accepted as a suitable donor. More information is available through the transplant office.
- **Deceased donor transplant:** This kind of transplant involves taking an organ from a person who has been confirmed as brain dead. This type of transplant requires waiting on a national list until a good match is found. The wait can be 2 to 7 years, depending on your blood type. For more information, read, *Placement on the Wait List*, later in this book.

How successful are kidney transplants?

Kidney transplants are a very successful treatment option. Most people can keep kidney function of their transplanted kidney an average of 10 years. This may be even longer in cases where there is a strong match between a living donor and transplant recipient. Success also depends on your general health, medical problems after transplant and how well you follow your treatment plan.

Is there an age limit for someone to have a transplant?

Age will be considered with respect to a person's overall health.

If I have diabetes, will that prevent me from having a kidney transplant?

Diabetes will not prevent you from having a kidney transplant. However, diabetes may increase the risk of problems during transplant surgery. After transplant, you will need to have strict blood sugar control to prevent damage to your new kidney.

Are my original kidneys removed before the transplant?

Most often, your own kidneys are not removed before the transplant surgery. Kidneys may be removed before transplant when there is:

- Polycystic kidney disease (PKD).
- Chronic infection in the kidney.
- Uncontrolled high blood pressure (hypertension).
- Urine backed up in the kidney. This can prevent the new transplanted organ from working normally.
- A previous transplant (this may or may not be removed).
- Kidney cancer. If you have kidney cancer, you will meet with a cancer doctor, called an oncologist. You will need to be cleared for surgery and be cancer-free before having a transplant.

As a woman, can I try to get pregnant after a kidney transplant?

Some women have had children after a transplant. **We recommend that you do not become pregnant for at least one year.** Pregnancy after a transplant involves risks and benefits that should be discussed with your transplant nephrologist and your obstetrician.

Will I be able to live a normal life after a kidney transplant?

It is our hope that you will resume a more normal lifestyle. Normal, however, is different for every person. All patients require medical follow-up for the life of the transplanted kidney. Most people are able to return to work or school shortly after the surgery. How quickly you become active depends on how active you were before surgery.

Are there physical activities that I will not be allowed to do after a kidney transplant?

Most activities can be done safely after a transplant. If you wish to take part in sports or other activities that could cause injury to the transplant, talk to the transplant surgeon about how to protect your new kidney.

You will have lifting and driving restrictions after surgery. The amount of time you have activity restrictions will depend on wound healing and your overall health.

What if I have problems with my new transplanted organ?

Sometimes, problems can happen. Problems can occur from side effects of anti-rejection medicines you take, longer time for your new organ to fully function or rejection of the transplanted organ. If you have signs of rejection or other problems, call your Post-Transplant Coordinator. You will be assigned a Coordinator after surgery. **Anytime you have questions or concerns, please call your Coordinator.**

What if I need another transplant years after this one?

While your new kidney will last you a long time, you can also get referred again for another transplant. Your kidney doctor and your transplant team will work together to manage your health. If you need another transplant, you can be referred again.

Are there support groups?

Buckeye GIFT (Giving Inspiration For Transplantation) Network has open meetings for support, education, awareness and advocacy. Anyone whose life has been touched by organ and tissue donation and transplantation may attend monthly meetings. Please visit www.lifelineofohio.org for more information and to confirm meeting times and locations.

- **Buckeye GIFT Central:**

Meeting place: Lifeline of Ohio, 760 Kinnear Road, 2nd Floor, Columbus, OH 43212.

Meeting time and day: 6:30 PM to 8:00 PM on the second Thursday of every month.

Contact: volunteers@lifelineofohio.org.

In February, October and December, meetings occur at The Ohio State University Wexner Medical Center. Please contact Lifeline of Ohio for more information.

- **Buckeye GIFT East:**

Meeting place: Genesis Health Center Community Room, 61353 Southgate Parkways (State Route 209), Cambridge, Columbus, OH 43725. The meeting place varies, so please contact Kathy for the specific location.

Meeting time and day: 6:30 PM to 8:00 PM on the third Thursday of every month.

Contact: Kathy Warhola at 1-800-525-5667, ext. 344 or by cell at 740-680-3190

- **Buckeye GIFT Mid-Ohio:**

Meeting place: OSU Mansfield Campus, Riedl Hall, Room 153.

Meeting time and day: 7:00 PM to 8:00 PM on the second Tuesday of every month.

Contact: Amy Baden at 1-800-525-5667, ext. 348.

- **Buckeye GIFT Southern, Chillicothe:**

Meeting place: Adena Regional Medical Center Hopewell Room, 272 Hospital Road, Chillicothe, OH 45601.

Meeting time and day: 6:30 PM to 8:00 PM on the second Thursday of every month.

Contact: volunteers@lifelineofohio.org.

- **Buckeye GIFT Southern, Athens/Meigs:**

Meeting place: The meeting place varies, so please contact John for the specific location.

Meeting time and day: 7:00 PM to 8:00 PM on the third Monday of every month.

Contact: John Bise at 740-797-2402.

Your Kidney Transplant Journey

Your first visit to the Transplant Center helps us to learn about your health care needs and for you to learn about kidney transplant. You will also be assigned a Pre-Transplant Coordinator to be your care manager.

My Pre-Transplant Coordinator is:

who can be reached at **614-293-6724** or **1-800-293-8965**.

We have two goals for this visit:

- To help you understand the risks and benefits of transplant surgery and your care after transplant.
- To help us understand how you plan to actively manage your care after transplant. To provide you the best health care, we need you as our partner, before and after transplant surgery.

Before the evaluation

We ask that you:

- Talk with your insurance company to make sure they will pay for a pre-transplant evaluation. Also ask your insurance company about medicine coverage after transplant. You need to know your responsibility for health care costs after transplant.
- If you are on dialysis, please collect and bring copies of these medical forms with you for the visit:
 - Dialysis treatment sheets
 - Current blood test reports
 - Medicine list
 - History of blood transfusions

During the evaluation

The transplant care team will:

- Teach you about the transplant process.
- Review your medical records. You will also have a physical exam to check if your overall health is good enough for transplant and if your body can have a 4-hour surgery with general anesthesia.
- Do blood tests to check your blood type and tissue type.
- Determine if more tests are needed before you can be considered a transplant candidate.
- Answer your questions.

Transplant selection

After this visit, your records will be reviewed by the transplant selection committee. This team decides if transplant is the best treatment option for you.

If you are a candidate for surgery:

- A surgery date will be set if you plan to have a living donor.
- You will be placed on the national transplant wait list if a deceased donor transplant is planned.

Waiting period

If you plan to receive a kidney by deceased donation, there may be a waiting period until the right match is found. It may be 2 to 7 years, or it may be sooner! Please be ready for this surgery at all times:

- Have blood tests, as directed.
- Follow your doctor's orders for medicines and treatments. Continue your regular routines as discussed with your doctor.

- **Contact your Pre-Transplant Coordinator during business hours every time you are sick or have changes in phone number, address, emergency contact or insurance.**
- **Contact your Pre-Transplant Coordinator twice a year while you are waiting.** Even if you are not sick during this period of time, your Coordinator still wants to hear from you.
- Have a healthy lifestyle. Stay active, have a healthy weight, and if you use tobacco, quit and get support.

When a kidney match is found

A Coordinator will call you and make sure that you are healthy enough to receive a transplant. Remember, it can be at any time once you are on the wait list.

- You will be asked to come to the hospital for testing. If the lab test, called a cross match, shows that you are a match, surgery will be done. Cross matching is also used to reduce the chances of rejecting the transplanted kidney. **Plan to be in the hospital for 4 to 7 days for surgery and after care.**
- Transplant surgery will take 3 to 4 hours. The doctor will make an incision on the lower abdomen and attach the new kidney to your blood vessels and bladder. Your own kidneys will not be removed.
- After surgery, you will go to a special care area.
- Before going home, we will help you to learn about your post-transplant lifestyle. We will teach you about your anti-rejection medicines, how to take your blood pressure, pulse, weight and temperature, when to call your Post-Transplant Coordinator and when to have regular lab testing.

Possible risks and problems

Some kidneys start to work right away and others may take several days or weeks to fully function. You may need dialysis and have other restrictions after your transplant surgery.

Other possible problems include:

- Rejection or your body not accepting the new kidney. This can occur at any time after the transplant.
- Infection.
- High blood pressure.
- Cancer.
- Diabetes.

Your responsibilities

While our transplant care team will give you the best possible health care, we need your help. You are the most important member of the team, and we need you to follow the plan of care to stay healthy. We need you to:

- Have a primary care doctor who can take care of non-transplant medical needs after transplant.
- Pay all medical insurance premiums.
- Take transplant medicines **on schedule** every day.
- Follow the care plan to keep you healthy, and call your Post-Transplant Coordinator if you get sick or have problems.
- Have routine lab testing and home monitoring.
- Have regular clinic visits to check your health.
- The goal of transplant is to help you have a better quality of life. Consider job opportunities and make plans for the future.

How to Talk about Living Kidney Donation

How to start the conversation

If you need a kidney transplant, talking to a family member or friend about becoming a kidney donor can be hard. Here are ways to start the conversation:

- Share your health journey and need for a kidney transplant. Explain that the current treatment for your kidney problems is not working. Tell them:
 - Why you need a kidney now and how the transplant will help you.
 - What you are doing now for treatment.
 - Why living donation works better for transplant.
- It may be easier to have someone ask on your behalf for a transplant. Find a close family member or friend to be a spokesperson. Have your spokesperson come to an education session to have accurate information about living kidney donation.
- Create lists of family, friends, neighbors and people you know in religious, community and service groups or other social networks who might be open or interested in being a living kidney donor.
- Ways to connect with family, friends or potential living donors:
 - Word of mouth, face to face meetings or speaking events.
 - Social media or e-mail.
 - Websites or blogs, such as Caring Bridge or WordPress.
 - Create a video. Upload it to a website, blog or social media site.
 - Send a letter to friends and family about your health journey.
 - Put a notice in religious, service group or community newsletters and newspapers. For example, “Help or prayers are needed for (name) that is in need of a kidney transplant. If you are willing to donate a kidney, please call 614-293-6724 or 1-800-293-8965.
 - Place information about kidney donation in your home for visitors to see or send it to family and friends for them to read and share with others.
 - Create a business card, including your name, contact information and your need for a living kidney donor.
 - Be realistic and have a positive attitude. There can be many reasons why potential donors are not able to donate. Your goal is to build interest.
- Do not overly pressure the potential donor. You may want to try a phrase, such as, “I know this is a big decision for you (and your family), but would you consider becoming a kidney donor?”
- If someone is not interested or able to be a donor, ask if they are willing to help you to build contacts to find a donor.

Talking to the media

Radio, TV or internet webcasts can be another way to talk about your need for a living kidney donor. Be ready to share:

- Why living donor kidneys are better for transplant.
- Answers to questions to educate viewers, such as people can live a normal life with one kidney. For more information, read, *Considering Being a Living Donor*, in this book.
- Your story and why you need a transplant now. Some people will do selfless acts of kindness to benefit others.

If someone is interested or willing to donate a kidney, have the donor:

- Read, *Considering Being a Living Donor*, in this book.
- Visit wexnermedical.osu.edu/transplant.
- **Contact our Pre-Transplant Coordinators at 614-293-6724 or 1-800-293-8965.** We will invite them to an education session and schedule them for tests to see if they can be a living donor.

Considering Being a Living Donor

We perform about 100 living donor transplants each year. A living donor is someone who is willing to donate one of their kidneys. Most living donors return to a normal lifestyle after surgery.

Living donor transplants are special. A living donor kidney is a better kidney than a deceased donor organ for several reasons:

- A living donor kidney means the patient is not on a long waiting list for a deceased donor kidney.
- A living donor kidney has a first year success rate of 94%, and identically matched persons may have greater than a 95% success rate.
- There is no preservation time with the living donor kidney. It can be walked from one operating room to another, and 30 minutes later, the transplanted kidney is working in the recipient.
- A living donor transplant allows the surgical team to plan a surgery date to allow for the best health of the patient and donor.

Frequently asked questions

How do I become a living kidney donor?

To be a donor, you need to:

- Be in good general health, such as free from diabetes, cancer, kidney disease and heart disease.
- Most living donors are between 18 and 60 years of age, and sometimes 60+ years, depending on their medical history. Your gender and race do not matter.
- A matching blood type is not a requirement for living kidney donation. We have a donor exchange program. It is possible to donate even when blood or tissue types do not match.
- Have tests to see if your health is good enough to be a living donor.

For more information

Call the Pre-Transplant Office at **614-293-6724** or **1-800-293-8965** and visit these websites:

- **Lifeline of Ohio**, www.lifelineofohio.org
- **Donate Life America**, www.donatelife.net
- **Done Vida (in Spanish)**, www.donevida.org
- **Living Donors**, www.livingdonorsonline.org
- **The Living Bank**, www.livingbank.org/living-donor-advocate
- **National Kidney Foundation**, www.kidney.org
- **National Kidney Registry**, www.kidneyregistry.org
- **The Organ Procurement and Transplantation Network**, optn.transplant.hrsa.gov
- **Transplant Living**, www.transplantliving.org
- **U.S. Department of Health & Human Services**, www.organdonor.gov

What testing is needed?

- Contact the Pre-Transplant Office at 614-293-6724 or 1-800-293-8965. You will be given a packet about the process of kidney donation.
- You will have blood tests and be asked to submit blood pressure readings. You will have tissue typing, urine collections, chest x-ray, EKG and other tests to check your health.
- The transplant team will review your file. If all testing is acceptable, you will be scheduled for a CT (computerized tomography) scan of the kidneys. If the CT scan shows healthy kidneys, then surgery will be scheduled.

If I'm selected as a living donor, what happens next?

If you are chosen to be a living donor, expect to be in the hospital for about 4 days. The recipient will be in the hospital for 4 to 7 days. The usual recovery time is 4 to 6 weeks after transplant. **We ask that you check with your doctor before taking any medicines.**

Who pays my medical bills?

Your evaluation and surgery is paid for by the **transplant recipient's medical insurance**. However, some expenses are not covered, including:

- Travel and lodging expenses (if any). Some donors may qualify for help with travel and lodging. Ask the staff for details.
- Lost wages from work if you do not have ill or vacation time. Talk with your employer about time off from work if you want to be a kidney donor.

What about my life after donating a kidney?

Most living donors return to a normal lifestyle after the transplant surgery. There are always possible risks with any surgery. However, these are reduced by the testing done on all donors.

For your continued health:

- Go to your follow-up doctor visits. Have yearly physical exams.
- **Avoid taking any medicines with ibuprofen (Advil, Motrin) or naproxen (Aleve).**
- **Talk with your doctor or pharmacists before taking any arthritis medicines** that may harm your remaining kidney.

Creating a Post-Transplant Plan

Keep all scheduled appointments with your Social Worker and Pre-Transplant Coordinator. **You must meet with them to establish your final transplant plan.**

Insurance and financial planning

Be ready for the financial costs of medicines and testing after transplant. When your plan is complete, you should address all of these items:

- What is covered by your insurance during your hospital stay for transplant and for medical care after transplant? Are you ready for changes in coverage?
- How will you pay for insurance premiums? If you have help through dialysis, this financial help will end after transplant.
- If you have End Stage Renal Disease (ESRD) Medicare Benefits and qualified because of dialysis or transplant, **coverage ends 3 years after the transplant date if you do not qualify for other reasons**, such as age or disability.
- What prescription drugs and transplant medicines will be covered? You need to ask about maximum coverage, including lifetime medicine expenses.
- You may be asked to contact a fundraising agency to help you with transplant costs. Your Social Worker may recommend:
 - National Foundation for Transplants: 1-800-489-3863, or
 - National Transplant Assistance Fund: 1-800-642-8399

After transplant

- Who will help you with daily activities in the first weeks after transplant?
- How will you get to your post-transplant visits? You will need to come to the Transplant Center 4 to 6 times in the first year and then every year for the rest of your life.
- How will you get to the blood draws you need 2 times a week for the first 3 months after transplant? What about future blood draws needed for the rest of your life?
- Who will take care of your family, home or pets when you have your post-transplant visits or lab work needed?
- Have you created a return to work plan? Talk to your employer about set-backs you may have with your health. When on different transplant medicines, you are at an increased risk for infections.
- If you are having trouble paying for your medicines, tell your Post-Transplant Coordinator and Social Worker right away. Do not wait! **Tell them at least 2 to 3 weeks in advance, so they can help you to get the medicines in the dosage you need to protect your health.**

Financial Concerns

Talk to your Pre-Transplant Coordinator (1-800-293-8965) and your Social Worker (1-800-626-2538) about your questions and concerns related to paying for medical care. There are financial options available for support.

Glossary of terms

ESRD Program – Branch of the federal government that provides medical insurance services to patients with chronic renal failure.

Medicare – Federal medical insurance for patients who have chronic renal failure and who have earned work credits through social security payments from their employment.

Medicaid – State wide government assistance for patients without insurance coverage and who are unable to work because of illness.

Frequently asked questions

How will I be able to afford a kidney transplant?

Most insurance policies cover 80 to 100% of the cost of kidney transplants. Patients who suffer from End Stage Renal Disease (ESRD) are eligible to apply for ESRD Medicare Benefits. Patients unable to get benefits through either of those resources may be eligible to get Medicaid (Welfare Assistance) to help pay for the medical costs.

How can I be sure my medical insurance policy will cover a kidney transplant?

During the kidney transplant evaluation, you will be asked to complete a financial registration form. This form allows the hospital business office to review specific insurance information to determine if there is an insurance coverage problem. If your insurance coverage is not adequate for transplant surgery, the Social Worker will talk to you about other possible solutions for covering medical expenses.

If I have medical insurance, why do I need ESRD Medicare Benefits?

Medicare benefits for patients who are being treated for chronic renal failure were started to help patients with medical expenses, so benefits from their employers were not used up. Since using Medicare helps a patient's other insurance policy programs, such benefits should be used whenever possible. Medicare has approved payment for anti-rejection medicines (up to 80% of the cost) for 1 year after a kidney transplant. Since anti-rejection medicines can be very costly, Medicare, with other insurance, will benefit you.

How will I pay for my medicines?

Post-transplant medicines can be paid through private insurance, Medicare or Medicaid. These insurance and financial support programs will pay 80 to 100% of the cost of medicines.

We wish we could guarantee that all of the medicines you need for your transplanted organ will always be paid for. Unfortunately, we cannot make such a promise. The cost of medicines after transplant can be very high. Here are some suggestions to help:

- **Know what your insurance covers and any specific requirements for coverage.** Some insurance companies require that you use certain pharmacies and others offer better prices if you use one of their mail order companies. Many insurance policies have a Lifetime Maximum amount above which they will not pay for medicines. If you have any questions about your coverage, call your insurance provider or your place of employment. Medicare covers up to 80% of the anti-rejection medicines for 1 year after kidney transplant. **Have a plan for how you will pay for the medicines and co-payments when Medicare no longer pays.** Do not wait until your Medicare coverage runs out to decide what to do. Then it is a crisis. Be aware of your Medicaid spend down and work with your caseworker at the Department of Human Services to make a plan to meet the spend down every month.
- **Include the cost of medicines in your monthly budget.** Know in advance whether you can afford your share of the cost.
- **Find out about sources of financial support to pay for your medicines.**
- **Do not wait until you are out of medicine or have only a few weeks left to find sources of support.** Most agencies provide service to many people, and they need time to process applications. It may take 8 to 10 weeks to get help from an agency.
- **Talk to your Social Worker to help you identify resources to help you pay for your medicines.**

How can I get help in arranging for insurance payment on my medical bills?

Wexner Medical Center has a Patient Financial Ombudsman to help you get your bills paid by insurance. If you need help in coordinating insurance payments, contact your Social Worker and ask for a referral to the Patient Financial Ombudsman.

Placement on the Wait List

We follow the patient selection criteria written by the United Network of Organ Sharing (UNOS). It is a private, non-profit organization that manages the nation's transplant system for the federal government. This ensures that all donor organs are distributed fairly.

How does the process work?

Kidney donation may be from a living or deceased donor:

Living donor transplant:

For every kidney that is donated, a blood type and tissue test must be done to see if you are a match with the donor. If it is and the donor is in overall good health, then surgery is scheduled.

If your blood type and tissue are not a good match, then you and your donor may choose to be part of the **donor exchange registry**. This registry works by pairing up donors and recipients that do match. The closest match must be found to reduce the chances of organ rejection. For more information, ask for the handout, *Donor Exchange Programs*.

Deceased donor transplant:

When the patient does not have a living donor, a search is made for the best match from deceased donors. All of the people waiting for a donor kidney are listed in a database called the **wait list registry**.

When a donor kidney becomes available, it is compared to the people on the wait list. This is called a **match run**. It is to make sure that people who are eligible for the kidney are the closest match for that blood and tissue type to avoid rejection.

What affects wait time on this list is:

- **Your blood type.** You have either type O, A, B or AB blood. Your blood is also checked for antibodies.

- **Your panel reactive antibody (PRA) lab value** or how sensitive your body is to rejecting a donated organ. A high PRA is more likely to reject an organ.
- **If you have an antibody level greater than 80%**, UNOS rules recognize that it is harder to find an organ match for your body. You are given extra points in your kidney score for the wait list.

When will I get a new organ?

It depends on your health and whether an available kidney is a match for your body. When placed on the hospital's wait list, you are considered for a kidney or pancreas from your local area first. You may choose to be listed at more than one transplant hospital. This is known as **multiple site listing**. Multiple site listings may or may not improve your chances of getting a new kidney or kidney/pancreas. Here are some of the average wait times (can be more or less) by blood type.

Blood Type	Average Wait Time
O blood	3 years
A blood	2 to 3 years
B blood	5 to 7 years
AB blood	Varies - months to years

If you have questions about your wait time, please talk with your Pre-Transplant Coordinator or doctor at 614-293-6724 or 1-800-293-8965.

Vaccines and Organ Transplant

Vaccines help to prevent disease. After getting a vaccine, your body makes antibodies as though you had been exposed to the disease. Vaccines may be given as a single dose or several doses given over time. The full number of doses for each vaccine must be completed for the vaccine to protect you from the disease.

Some vaccines are live virus, while others contain part of the dead virus or weakened bacteria. As a transplant patient, you have a weaker immune system (immunocompromised). **You are not allowed to have live virus or inhaled vaccines. No one else living in the household should have inhaled or live vaccines either to protect your health.**

Talk to your transplant team before you receive any vaccines. Vaccines are safe medicines that rarely cause problems. Some side effects may occur, such as a sore or tender area at the injection site or a mild fever.

Vaccines before transplant

Vaccines before Transplant	Recommended
Hepatitis A	2 doses at 6 months apart; complete before transplant
Hepatitis B (HepB)	Complete before transplant; complete at months 0, 1 and 6 months
Haemophilus influenzae type B (Hib)	1 to 2 doses separated by 1 to 2 months
Influenza (flu)	1 dose inactive flu virus injected each year
Pneumococcal (Pneumovax)	1 dose, repeat every 3 to 5 years
Tetanus, Diphtheria (Tdap)	1 dose, repeat every 7 to 10 years
Inactivated Poliovirus (IPV)	No live polio after transplant
Measles, Mumps, Rubella (MMR)	If before transplant surgery, but no live virus after transplant
Meningococcus (meningitis)	1 dose, repeat dose every 3 years or as needed
Varicella (shingles, chicken pox)	If before transplant surgery, but no live virus after transplant

Vaccines after transplant

You may begin to get vaccines 6 months after transplant.

These vaccines must be avoided after transplant. This is an incomplete list, so **talk to your transplant care team before you receive any vaccines.**

- Inhaled Influenza (live flu virus)
- Japanese Encephalitis
- Measles, Mumps and Rubella (MMR)
- Oral Polio (live poliovirus)
- Oral Typhoid
- Shingles
- Varicella
- Yellow Fever

Cytomegalovirus (CMV)

Risk for the Transplant Patient

Cytomegalovirus is part of the herpes virus family. It is usually harmless to people with healthy immune systems. After the transplant, you will be on several drugs to prevent rejection of your new organ. These drugs suppress your immune system, so you may be at higher risk for CMV infection.

How do I know if I have CMV?

Blood is drawn during your transplant work up to check for CMV in your system. A careful screening is also done to check for the virus in the donor. Even if you have never been exposed to CMV, the person who donated your organ may have been exposed. Knowing if one or both of you have been exposed helps the transplant care team take care of you after the transplant.

Most people with strong immune systems do not know that they have been exposed to CMV. CMV may remain inactive or dormant in your body for life but can become active at any time when your immune system is weak or suppressed.

CMV is spread by close contact with body fluids. Body fluids are urine, saliva, blood, tears and sexual fluids.

Signs of CMV infection

CMV can infect any organ. Some signs of CMV infection include:

- Fever greater than 101 degrees F or 38 degrees C
- Fatigue
- Pain in joints

- Shortness of breath
- Muscle weakness
- Headache, confusion, seizure
- Blurry vision or loss of vision in one eye
- Blood in stool, abdominal discomfort, nausea and vomiting

How is CMV diagnosed?

Sample of blood, urine and sputum may be tested to see if the CMV virus is active. Other blood tests also may be done. In some cases, a biopsy of the infected organ is done. This means a sample of tissue is removed from the organ for testing.

Prevention and treatment

If blood tests show that you have CMV before your transplant, antiviral medicines are given. Additional tests may be used to check your condition.

Because this virus lays dormant in your body, it is possible that you may become infected at any time during your life after transplant. Even if you show no sign of infection, you may be given antiviral medicines after transplant to reduce your risk of infection.

Not every transplant patient develops CMV. However, an infection can be very serious. Antiviral medicines may be given to prevent the spread of infection, but these medicines do not cure CMV. Contact your transplant care team right away when you are not feeling well.

Your Risk for Diabetes after an Organ Transplant

Some of the medicines you will need to take after your organ transplant can increase your risk for diabetes. If you had diabetes before your transplant, you may have some problems controlling your blood sugars after your transplant because of these medicines. Control of your blood sugars is key to protecting your new organ. Learn more about diabetes and work with your health care team to check your blood sugars.

Diabetes is most common in people who are:

- Overweight
- Not active
- Over 40 years of age
- Related to someone with diabetes
- Pregnant
- African American, Asian American, Hispanic, Native American and Pacific Islander
- Women who delivered babies weighing more than 9 pounds or who had diabetes during pregnancy
- Transplant recipients

About diabetes

Diabetes is a disease where your body is not able to use the foods you eat for energy to keep your body working. Your body's cells need fuel to grow and live. This fuel comes from the foods you eat. Your body breaks down most of the foods you eat into a form of energy called glucose. Glucose is another word for sugar and is also called blood sugar. Insulin is a hormone that helps glucose move from your blood stream into your body's cells. Your pancreas makes insulin. A person cannot live without insulin.

When a person has diabetes, there are problems with how the body uses glucose and insulin. The most common problems are:

- The pancreas does not make insulin.
- The pancreas does not make **enough** insulin.
- The body is not able to use the insulin that it makes.

Diabetes is a chronic disease. There is no cure, but it can be treated and controlled.

Warning signs of diabetes

- Having to pass urine often
- Feeling thirsty, even though you are drinking fluids
- Losing weight
- Blurry vision
- Healing is slow for cuts or scrapes on your skin
- Feeling tired
- Feeling hungry
- Being irritable or grumpy

Often people may not notice any signs of diabetes. About 1/3 of the people with diabetes do not know they have the disease. If you think you may be at risk, talk to your doctor or nurse about having your blood sugar checked.

Treatment for diabetes

Most often, diabetes treatment includes:

- Diet changes to balance the amount and types of food your body takes in during a day.
- Checking your blood sugar results with a home blood sugar monitor.
- Exercising for 30 to 60 minutes at least 3 times each week.
- Weight control to help your body use its own insulin better.
- Medicines to help control your blood sugars.

Learn more about living with diabetes

Living with diabetes is not easy, but you can learn to keep your blood sugar under control to live a long, healthy life. Work with your doctor, nurse and dietitian to help you learn more about living well with diabetes.

Talk with your doctor about your treatment after transplant to lessen problems you may have from diabetes. Be sure to have your blood sugar checked when you see your doctor, so you can start or change treatment to help control your diabetes.

Exercise can help prevent or control diabetes. If you are overweight, weight loss can help reduce your risk of diabetes or help control your blood sugars if you have diabetes.

For diabetes education programs to learn more about living with diabetes, talk to your doctor about a referral and call (614) 685-6251 to register. You might also check with the American Diabetes Association or your local hospital for classes.

Preparing for Kidney or Kidney/Pancreas Transplant

Use this sheet to prepare for your transplant. This information will help you after the selection meeting and while on the wait list as a transplant candidate.

- **If you were recommended to have follow-up with the health psychologist for more evaluation, bring a support person to this meeting.** You will get a letter with your appointment day and time. **We ask that your visit be within 60 days of your evaluation.**
- **Keep in contact with your Pre-Transplant Coordinator.** Call 614-293-6724 or 1-800-293-8965. Call when you have:
 - Changes in health, including medicines, surgery or infections.
 - Changes in dialysis or dialysis center.
 - Changes in phone number, address or other contact information.
 - Change in nephrologist (kidney doctor) or other doctors.
 - Change in insurance coverage.
 - Travel plans if more than 2 hours away from The Ohio State University Wexner Medical Center.
- **Keep your phone turned on at all times.** Your call can come in day or night. When the call comes in, come to the hospital as quickly and safely as possible.
- **Get your personal affairs in order.** This includes your Durable Power of Health Care Attorney and/or Living Will, Family Medical Leave paperwork, Home Health Agency paperwork, etc.
- **Know who will be your support person when you come to and leave the hospital.** Plan for a hospital stay of 4 to 7 days.
- **You need a primary care doctor to follow the rest of your medical care.** Tell all of your doctors that you are on the transplant wait list.
- **Take all of your medicines as ordered.** Do not stop taking your medicines, even if you feel well.
- **Stay healthy by exercising and planning healthy meals and snacks.**
- **Consider therapy and support groups for emotional support.** You will need help to cope with long term lifestyle changes after you receive the donated organ.

Being called to receive a kidney

If you are having a living donor transplant, you may have a planned surgery for transplant.

If you are having a deceased donor transplant, the call to get your kidney can come at anytime. You will not know your transplant date and the transition from wait list to kidney transplant can happen quickly. A Pre-Transplant Coordinator will call you after the hospital gets the call for a deceased donor organ. Usually 2 people are called. The first person is asked to come to the Wexner Medical Center. The second person is asked to be ready but to stay at home. You will be asked about:

- Your general health.
- Any signs of infection you may have, or if you feel sick. Tell the Coordinator if you have a fever.
- Medicines you take, how much was taken and when was the last dose.
- **If you have recently used antibiotics**, tell the Coordinator. Share what it was for, the strength (dose) and when the antibiotics were finished.
- **If you recently had a hospitalization or procedure**, tell the Coordinator.
- **If you have diabetes**, ask about medicines and managing blood sugar before surgery.
- How long it will take you to get to the hospital, and if you have directions to get to the Wexner Medical Center from your current location.
- When you last ate or drank.

Getting to the hospital

The Pre-Transplant Coordinator will tell you when to come to the hospital. Sometimes, you need to come right away.

- **Come to the hospital as quickly and safely as possible.** Other times, if you are called at night, you may need to come in very early in the morning. It depends if the donated organ is coming locally or from another region.
- **If you are to come in the morning**, do not eat or drink anything after midnight, except the medicines you need to take with small sips of water.
- **Leave all valuables at home and remove body piercings and jewelry.**
- **If possible, have someone drive you to the hospital.**
- Bring with you:
 - Insurance card, photo ID and money to pay for parking and new medicines before going home.
 - Medicine list or your medicines in their original bottles (include both prescriptions and over the counter medicines).
 - A suitcase with a change of loose clothing for going home, toothbrush and toothpaste, comb or brush, deodorant and other personal grooming supplies.
 - Pharmacy name and phone number.
 - Home health agency name and phone number.
 - Family medical leave paperwork.
 - Power of Attorney and/or Living Will paperwork.
- **If you use hemodialysis, tell us when you had your last dialysis visit.** You may have hemodialysis before transplant.
- **If you use peritoneal dialysis, bring enough supplies for 4 exchanges.**

Hospital registration

During the day, Valet Parking is available in front of University Hospital. You may also park in the:

- **SAFEAUTO Hospitals Garage** at 1585 Westpark Street, Columbus, OH 43210
- **12th Avenue Garage** at 340 West 12th Avenue, Columbus, OH 43210

Please enter through the Emergency Department if you arrive after 10:00 PM at night.

Go to Admitting on the first floor of Rhodes Hall in University Hospital. You will be escorted to the 9th floor to a special care area.

Special note: children 12 and younger are not allowed on the transplant unit.

Your hospital stay

Before surgery

- We will talk to you about the surgery and have you sign consent forms.
- You will be asked to shower if you were not able to before coming to the hospital.
- You will have an IV placed into your arm to give you fluids and medicines.
- Blood work will be sent to the lab.
- A physical exam will be done to check your health. Your heart rate, blood pressure and temperature will be checked often.

During surgery

- While under general anesthesia, the transplant surgeon will make incisions on the lower half of the abdomen. In a kidney/pancreas transplant, the kidney may be placed on the lower left side and pancreas on the lower right side.
- The transplant surgeon will add or graft the new organ(s). The kidney is placed in a space where it can easily connect to your blood vessels and bladder.
 - Your kidneys are not usually removed unless there is repeated infection that can affect your transplant kidney or if you have problems with urine backing up in the kidneys.
 - Your pancreas is not usually removed because it still helps with digestion.

After surgery

- After surgery you will go to a recovery room.
- Your pain levels will be managed. You will have a thin flexible tube, called a catheter, to help drain urine. IVs will give you fluids and medicine.
- Our goal is for you to get out of bed the day after surgery. This helps with bowel function, core strength and blood circulation in the new organ.
- After 24 hours, you will be transferred to a semi-private room on the unit. Education will begin about your medicines and the care you need after transplant. We will help you to learn about the care of your incisions, and how to take your blood pressure, temperature, heart rate and weight before discharge from the hospital.
- When you go home, you will need to have a blood pressure monitor, thermometer and scale to take your vital signs each day. Lab work will be needed 2 times a week at first, so tell us of your transportation plans.
- We will schedule a 6 week visit with the surgeon. Staples will be removed at that time. You will also have frequent visits to the Transplant Center.



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