UNC Center for Transplant Care

Patient Handbook

This book is about getting a Kidney, Pancreas, or Kidney/Pancreas transplant at the University of North Carolina Center for Transplant Care. This includes information on living donation for kidney transplant.

Bring this book with you to appointments so you can remember to ask your transplant providers. If you have any questions, call the transplant office at 984-974-5200.

HEY! Did you know…?

…that your kidneys filter about 45 GALLONS of blood every single day? That is about ½ cup of blood per minute… and would fill up a small bathtub!

THE KIDNEY AND THE PANCREAS

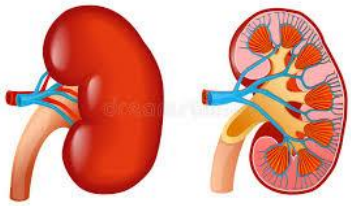
THE KIDNEYS AND THE PANCREAS

What do your kidneys do?

Your kidneys look like kidney beans. They are about as big as your fist.

Most people have two, located in the lower back, on either side of the spine.

The kidneys make urine to get rid of body wastes and extra fluids from the blood. They also:



- Help control blood pressure.
- Help with making red blood cells.
- Help control electrolytes needed by your body, like potassium.

Treatments for kidney failure

When you have a temporary injury to your kidney(s) that causes them to stop working, this is called an **acute kidney injury (AKI)**. This could be something like an accident or infection. Some people will need dialysis for a short time to help their kidney(s) heal.

If you have **permanent kidney failure (End Stage Kidney Disease/ESKD)**, this means that your kidneys have stopped working and are not expected to restart. If you have ESKD, you have options for treatment:

- You can start **dialysis** and/or,
- You may want to have a kidney **transplant**.
- You may decide not to have **any** treatment.

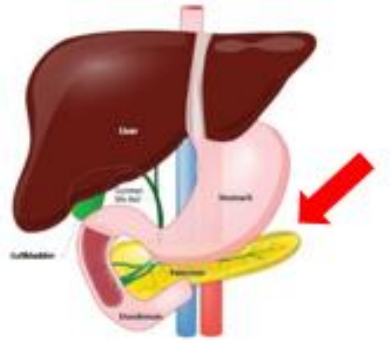
Dialysis can replace some of the things that your kidneys normally do. For some people who are doing well on dialysis, they may not want a transplant, or they may not think that they need one.

Not everyone does well on dialysis. Some people do not feel well. Others may feel tired and feel that they have no energy. Some may think that dialysis takes up too much of their time. These people might choose kidney transplant as a treatment.

Even if you choose to have a transplant, you may still need to start dialysis. Most of the time, people have to wait for a transplant and will need dialysis while they are waiting. In this situation, following all of your dialysis recommendations can help you stay healthy enough to get a transplant when an organ is available.

What does the pancreas do?

The pancreas is an organ that sits behind the stomach and under your liver. It makes insulin, which controls your blood sugar levels. Your pancreas also makes digestive juices to help your body break down food.



What is diabetes?

If a doctor has ever told you that you have diabetes, this means that your blood sugars are too high. Too much sugar in your blood can lead to many other health problems, including kidney damage.

There are different kinds of diabetes.

- **Type I diabetes** is caused when the body's immune system attacks and destroys the cells in the pancreas that make insulin. If you have type I diabetes, then you must take insulin for the rest of your life to control your blood sugar because your body can no longer do it.
    - People with type I diabetes could be eligible for a pancreas transplant. Talk to your provider to find out more information.

- **Type II diabetes** is caused when your pancreas is still making insulin, but your body is no longer able to use it well or make enough. Patients with type II diabetes might be able to improve their blood sugar levels by making changes to their diet, losing weight, exercise, and taking medications (e.g., pills or insulin).
    - People with type II diabetes are usually not eligible for a pancreas transplant. Talk to your provider to find out more information.
- **Gestational diabetes** happens during pregnancy for some women. Most of the time, this will go away after the baby is born.
- **"Type 1.5" diabetes/Latent Autoimmune Diabetes in Adults (LADA)** is also caused when the immune system attacks the cells in your pancreas that make insulin. However, this type is very gradual and slow acting, and is usually found in adults.

Dialysis and diabetes

Many patients with kidney failure feel that it is easier to control their blood sugar after they start dialysis. Dialysis does not "cure" your diabetes.

Your blood sugar levels may seem to be getting better because of other changes you are making due to your kidney disease.

If you get a kidney transplant, your blood sugars are likely to change and you will have to start managing them again. It will be important to control this after transplant, so that your diabetes does not damage your new organ(s).

Treatments for pancreas failure

When you are diagnosed with diabetes, you have a few options:

- You can decide to make lifestyle changes and/or take medicine to manage your blood sugars.
- If you have Type I diabetes, you may want to consider a pancreas **transplant**.
- You may decide not to have **any** treatment.

TRANSPLANT AS A TREATMENT

The goal of transplant is to replace the function of an organ that is no longer working well. The transplanted organ will take over the work of your sick kidneys or pancreas and will hopefully allow you to live a longer life and have a better quality of life.

Transplant is not a cure, but it can be a successful treatment for ESKD and the effects of type I diabetes. However, there are not enough organs for everyone who might want a transplant. That means that many patients will have to wait for several years before an organ is available.

RECIPIENTS

WHERE DO KIDNEYS/PANCREATA COME FROM?

Kidneys that are used for transplant can come from two sources:

- Living Donors.
- Deceased Donors.

A pancreas that is used for transplant can come from only one source:

- Deceased Donors.

Living donor kidney transplant

This is one way to get a kidney transplant, but it does depend on someone else being willing to give you one of their kidneys.

There are three different kinds of living donors:

- A relative, called a “living related donor” (LRD).
- A spouse, friend, or even someone you don’t know, called a “living unrelated donor” (LURD).
- A Kidney Paired Donor (KPD) match.

There are several ways to coordinate a living donor transplant surgery, depending on your situation. If you have a living donor, we will go over all of your options with you.

Some people prefer a living donor because:

- The surgery can be planned, so you know the exact date of your transplant.
- You may not have to wait as long to get a transplant.
- In general, kidneys from a living donor work better and last longer.

Deceased donor transplant

A deceased donor kidney or pancreas comes from someone who made a decision to donate their organs when they die. Their family can also make this decision.

Depending on **your** situation, providers will talk to you about the different options for deceased donor kidneys and what may work best for you. Options to shorten your waiting time could include:

- Donors with Hepatitis C.
- Donors of a different but compatible blood type (A_2/A_2B to B).
- Donors with a Kidney Donor Profile Index (KDPI) of 85% or higher.

We will talk more about these options a little later.

Remember that a deceased donor transplant cannot be planned.

- You could be called to the hospital anytime of the day or night for the surgery.
- There are more people waiting than there are donated organs.
- You may have to wait several years to get a deceased donor transplant.

HEY! Did you know…?

…that about 13% of all adults in the United States have chronic kidney disease?

…that 1 out of every 10 Americans has diabetes?

…about 90-95% of those Americans with diabetes have Type II?

…and 5-10% have Type I?

That's a lot of people!

RISKS AND BENEFITS OF TRANSPLANT

Having a transplant could help you to feel better in many ways, as well as to live a longer life. Before you get on the transplant waiting list, you will need a full medical evaluation. We will talk to you about all of the possible risks and benefits.

Risks of transplant

Include but are not limited to:

- Being put to sleep for surgery (anesthesia).
- There may be problems during or after surgery, like:

  - Bleeding.
  - Blood clots.
  - Problems with your incision healing.
  - Fluid collecting around your new organ(s).
- You could get an infection after transplant, like a urinary tract infection (UTI) or pneumonia.
- You **must** take anti-rejection medicines after transplant for as long as the organ is working.
- You could have some heart problems, like:
  - Abnormal heart rhythms.
  - Stroke.

    - Heart Attack.
- You may have some changes in your mood, including feelings of sadness/depression, worry/anxiety, fear, anger, or guilt.
- You may have some rejection of your new organ(s).
- Your new kidney may not work at first and you could need dialysis for a while after surgery until it “wakes up”.
- Your new organ(s) may not work at all, though this is rare.
- Death is also a risk of any surgery or procedure.

Benefits of transplant

Many patients will:

- Live longer after a transplant than they would if they had stayed on dialysis.
- Report feeling better and having more energy.
- Enjoy more free time without having dialysis each week.
- Be able to return to work, school, or other activities.
- Have fewer limits on what they can eat and drink after transplant.
- After pancreas transplant, you could be free from your regular diabetes care, including blood sugar checks and insulin shots.

- Having normal blood sugar levels may help preserve your eyesight and decrease/delay other complications of diabetes, such as vessel disease, and diabetic nerve pain.

How long does a transplant last?

Many patients think that a single transplant will last for the rest of their lives, but this is often not true. Many things can affect how long a transplanted organ will last. Some of those things you will have control over and some you will not. The earlier in life that your kidneys stop working, the more transplants you might need over the course of your whole life.

Your transplant providers will expect you to be responsible for taking your medicines as directed, getting your lab work done, and coming to your medical appointments. We will expect you to keep in touch with your transplant team if you have any problems or changes.

THE EVALUATION

THE EVALUATION PROCESS

Whether you get a living donor or a deceased donor kidney, the evaluation steps are the same. We want to make sure you will be able to care for yourself and your new organ(s) after surgery. We want to make sure that transplant is the right treatment for you.

Your testing will probably be different from anyone else's transplant testing because **everyone is different**. Testing will usually take several days and will include multiple tests, appointments and lab work. You will meet many different providers. Every test will help us to know more about you and your health. Nothing will be scheduled for you that is not needed.

The evaluation process for a pancreas transplant is the same as for a kidney transplant, but does include some extra blood tests.

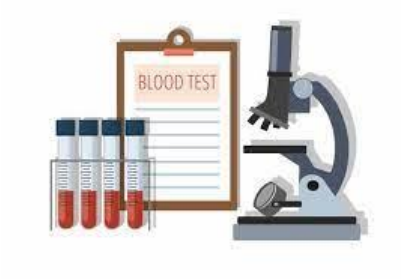
Testing

The transplant evaluation is very detailed and it will give the transplant team a lot of information about your medical needs and how well we think you will do before and after surgery. While every patient will have their evaluation match their needs, most patients can expect the following:

- **Orientation Class**: This class will teach you about transplant. It will give you information about the evaluation process, including the risks and benefits, and will explain your treatment options.
- **EKG and Chest X-ray:** These tests will check your heart and lungs.

- **Kidney Ultrasound**: This is a way of looking at the shape and size of your kidneys using sound waves. Even though they may not be working, we still want to check to make sure that they are not causing you any other problems.
- **Stress Test/Echocardiogram:** These tests check to make sure your heart is healthy enough for surgery.
- **CT Scan**: Sometimes called a "CAT" scan, this test allows doctors to take a super detailed picture of the inside of your body, using x-rays and a computer.
    - This test can be used to give the surgeon a good picture of the blood vessels leading to the kidneys.
- **Blood Work**: You will need **many** blood tests over the course of your evaluation. Some will need to be done more than once and some may need to be repeated every year. We will use these tests to confirm your blood type and check for infections like HIV or hepatitis.

- One special transplant blood test is called **Tissue Typing**. This test will help us match a kidney to you, whether from a living donor or a deceased donor.
- Another specialized test is called a **Crossmatch**, which will be done every time you have a potential donor (living or deceased). This test tells us if your body will accept a kidney from a specific donor.



- A **Panel Reactive Antibody**, or PRA test, will predict the percent of people in the general population that likely will **not** be a good match for you. This tells us the chances of finding a good match for you among potential donors.

- **Health Maintenance**: Depending on your age and assigned sex, you will likely have some additional tests to complete on your own. Most will have to be repeated in the future to continue to make sure that you are healthy. If you have any problems getting these done close to home, let your transplant nurse coordinator know and you can have them done at UNC.
  - Examples could include things like:
    - Pap Smear.
    - Mammogram (ages 40+).
    - Colonoscopy (ages 45+).

YOUR TRANSPLANT TEAM

You will meet many people during your evaluation. Below are just a few of the team members you may meet.

- **Transplant Program Assistant (TPA):** This person will work with your transplant nurse coordinator to schedule all of the appointments needed for your evaluation.
- **Transplant Nurse Coordinator:** This person will help guide you through the evaluation process. If you have any questions or concerns, they should be your first contact.

- **Transplant Social Worker:** Our social workers will meet with you to:
    - Listen to your thoughts/feelings about transplant.
    - Make sure that you understand all of the risks, benefits, and responsibilities of getting a transplant.
    - Make sure that you have the things you will need after surgery to be successful. This could include things like safe housing, family/friend support to help take care of you after surgery, and reliable transportation.

- **Transplant Financial Coordinator**: You will meet with one of our transplant financial coordinators who will:
    - Review Medicare, Medicaid or any commercial insurance rules that apply to you.
    - Talk with you about any additional insurance you may have, like a Medicare supplement plan.
    - Help make sure that you will have insurance coverage for hospital and medicine costs related to transplant.
- **Transplant Nephrologist**: A transplant nephrologist has had special training in how to take care of transplanted kidneys. They will:

    - Review your medical history.
    - Talk with you about transplant benefits and risks.
    - Give you a physical exam.
    - Review the results of your testing up to that point.
    - Answer your questions.
    - Decide if other tests are needed before you can be placed on the transplant waiting list.

- **Transplant Surgeon**: A transplant surgeon has had special training in how to perform transplant surgeries. They will:
    - Review your surgical history.
    - Talk with you about transplant benefits and risks.
    - Give you a physical exam.
    - Review the results of your testing up to that point.
    - Answer your questions.
    - Decide if other tests are needed before you can be placed on the transplant waiting list.

- **Specialist Providers:** Other medical providers may be needed during your evaluation, depending on your health history. Your transplant nurse coordinator will let you know what you need and a TPA can help schedule these appointments. All test reports must be reviewed by the transplant team to make a decision about putting you on the waiting list. Examples could include:
    - Cardiology.
    - Dentist.
    - Dermatology.
    - Hepatology.
    - Hematology.
    - Pulmonary.
    - Infectious Disease.
    - Transplant Dietician.
    - Transplant Psychology.
    - Urology.
    - Vascular Studies.

Scan the QR code below to take you directly to our orientation class video.

ARE YOU READY FOR TRANSPLANT?

There are many reasons why someone may not be able to get a transplant. Some of the reasons could change over time or with treatment, but some may not.

Absolute contraindications for transplant

An **absolute contraindication** means that we cannot put anyone on the kidney and/or pancreas transplant list that has any of following:

- Active tuberculosis (TB).
- Active substance abuse.
- Serious heart, lung, or other medical problems that would make an elective surgery too dangerous and/or life threatening.
- If you do not want a transplant, or change your mind later about wanting a transplant.

Relative contraindications for transplant

A **relative contraindication** means that there is an issue(s) that needs to be addressed before a patient can be considered for active listing.

- Uncontrolled HIV.
- Goodpasture's Syndrome.
- Active infection.
- Severe vascular disease.
- Body Mass Index (BMI) of 40% or more.
- Problems following medical recommendations, like not completing all of your dialysis treatments or not taking your medications as prescribed.
- Problems paying for your current bills and expenses that could affect your success after transplant, like paying for your medicines.
- Having a stable and reliable support plan for how you will meet your needs after transplant surgery. This would include having help at home and safe transportation.
- Any current diagnosis of cancer that suggests a survival of less than five years.
- Any past or current history of cancer will require a specific treatment plan and could require an extended wait period prior to active listing.
- Age 80 years old or more.

- Smoking cigarettes, e-cigarettes, vaping and using smokeless tobacco.
- Pediatric patients who weigh less than 10 kg, or about 22 lbs.
- If you decide you do not want a transplant or change your mind.
- Specific to pancreas transplant:
    - Age 60 years old or more.
    - BMI of 32% of more.

Tobacco and nicotine

- Every patient will be evaluated based on their situation and medical history.
- While we **do not require** all patients to stop smoking or using tobacco/nicotine before transplant, we **strongly recommend** that you stop before surgery.
    - Research has shown that smoking after kidney transplant is associated with an increase in heart disease, cancer, loss of your new organ and death.
- Some patients **may be required** to stop using tobacco/nicotine before transplant because of other health issues.

- Your providers will discuss their recommendations with you.

Marijuana

We get many questions about the use of marijuana before and after transplant.

Please know that we address the use of marijuana on a case by case basis.

- Some patients **may be required** to stop using marijuana before transplant because of other issues.
- Your providers will discuss their recommendations with you.

CBD, vitamins, and over-the-counter products

As the use of CBD and hemp products become more popular, we ask all patients to be honest with their transplant providers about the use of **any** over the counter products. This could include (but is not limited to) things like herbal teas, homeopathic medical remedies, vitamins, supplements, and nutrition/protein powders.

- **Do not assume** that because something is labelled as “healthy”, “natural”, or “organic” that it is good for you.
- Many over the counter products can get in the way with how well your medications work in your body, or they could even hurt your new organ(s).
- Please discuss this with your providers so that they can talk with you about your situation.

HEY! Did you know…?

…that the first pancreas transplant was in December 1966 at the University of Minnesota?

HEY! Did you know…?

…that the first successful kidney transplant was on December 23, 1954 at Brigham Hospital in Boston, MA? Between 2 identical twin brothers, Richard and Ronald Herrick?

The amazing part is that Richard lived another 8 years with his brother's kidney, and this was BEFORE we had any anti-rejection medicines. How did that happen? Remember, they were *identical twins*!

His brother and donor, Ronald, died in 2010 at the age of 79, after complications related to heart surgery.

THE WAITING LIST & ORGAN OFFERS

THE WAITING LIST

Getting listed

Our center makes decisions about placing patients on the transplant waiting list based on the input from a large team of providers. Our team has members from all of the different areas that were included in your evaluation. The team will meet to review and discuss all of your results to make sure that you meet our guidelines for transplant and are healthy enough for surgery.

If the team approves you to be put on the waiting list, then your insurance company may need to review your testing results too, and they will decide whether to approve insurance coverage for transplant.

If you are approved by the team and your insurance company, your name will then be placed on the kidney transplant waiting list. We will send you a letter and call you when this happens.

You cannot be approved to be on the waiting list until your evaluation is done and approved by the transplant team and your insurance.

What is the waiting list?

The "waiting list" is a list for the whole country and is managed by the **United Network for Organ Sharing (UNOS)**. Every person who needs a kidney/pancreas is listed with UNOS.

Even if you have a living donor, you will still be placed on the waiting list, just in case your donor is not able to donate a kidney.

- The average waiting time for a deceased donor kidney transplant in this area is between 4-8 years based on the recipient's (or the person who needs the transplant) blood type. Different areas of the United States can have different waiting times.
- Please know that the amount of time each person spends waiting for a transplant can be very different. It might be anywhere from a few days to over 10 years. Both of those situations would be rare, but have happened.
- It is very hard to predict someone's waiting time because we never know when an organ will be offered, and who will be the best match.
- If you are interested in getting listed at more than one transplant center ("multi-center listing"), please see the brochure at the back of this book.
    - You can also talk to your transplant nurse coordinator for more information about multi-center listing.

HEY! Did you know…?

…that the current Guinness World Record holder for most kidney transplants received by one patient is Bjorn van Empel from the Netherlands. He received his 7th kidney transplant in March 2014.

Allocation of organs

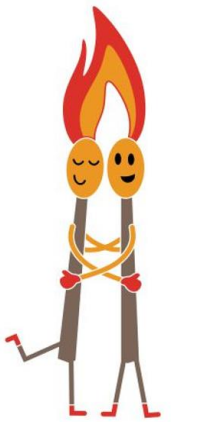
Patients have many common questions about the transplant process, including:

- How do organs get assigned to a person?
- Who decides what "a match" is?
- What number am I on the "The List"?

The decision about which kidney needs to go to which patient is complicated. Lots of different things are considered, all with the hope that we can find the best match for you. However, several things affect the waiting time.

These things could include:

- How long someone has been on dialysis.
- How long someone has been on the waitlist, for those not on dialysis yet.
- A high cPRA, which is a lab value that tells us how many antibodies someone has in their blood; having a high number could make it harder to find a match.
- "0 mismatch", otherwise known as "The Perfect Match".
    - These do not happen very often, but when they do… it is a big deal. That organ will be placed



with that patient no matter where they are in the United States, or how long they have been waiting for an organ.

- People listed for more than one organ, like a Kidney/Pancreas, Heart/Kidney, or Liver/Kidney.
- Pediatric patients (18 years old and younger).
- Prior living donors.

How are kidneys and pancreata distributed?

Another thing that can complicate where organs go is **location**. Most experts agree that it is best to get a donor organ into another patient as soon as possible. In general, kidneys and pancreata are offered to patients closest to the hospital where the donor is located.

Offers will be sent out in a 250 Nautical Mile (NM) circle from wherever the donor is located.

HEY! Did you know…?

…that a "nautical mile" is used over water, while a "statute mile" (or regular old "mile") is used over land and in the air?

ONE nautical mile =1.151 regular old miles

Kidney scoring system: What is a KDPI?

When a deceased donor kidney becomes available for transplant, it will be given a score called a **Kidney Donor Profile Index (KDPI)**.

- A KDPI score helps providers estimate how long the kidney is likely to work when compared to other kidneys.
- A KDPI score is based on the donor's age, height, and weight, cause of death, medical history, and lab work.
- Scores can range from 0-100%. The lower the score, the longer the kidney is estimated to last.
- Kidneys with a KDPI of 85% or higher are also a good option for some patients.
    - Waiting times are often shorter for these kidneys, which could get you off dialysis faster.
    - Every single kidney offer is looked at closely by one of our transplant surgeons. Offers are only accepted if it is decided that this is **a good kidney for you**.

Kidney scoring system: What is an EPTS?

Every recipient (the person who needs the kidney) will get a score called an **Estimated Post Transplant Survival (EPTS)**.

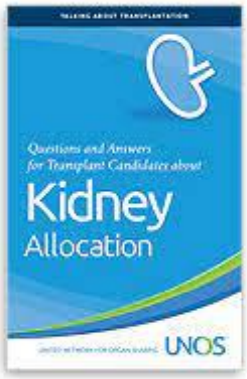
- An EPTS score helps providers estimate how long you will need a kidney to work, when compared to other patients.
- An EPTS score is based on the patient's age, time on dialysis and diabetes status.
- Scores can range from 0-100. The lower the score, the longer the patient will need a working kidney. For example, a patient with an EPTS score of 20 will need a kidney to last longer than a patient with an EPTS score of 90.

The match run list

Remember that a new "list" is created for **every** donor organ. This means that there are lots of individual "lists" that are made for every available kidney; not one single "list" where all patients are listed in order. The idea is to make the best match possible between each patient and organ.

Once a list is created for an available kidney, things start to sort out. Please see the included UNOS brochure on Kidney Allocation that is included in your handouts today.

- Patients that need a transplant to work the longest are offered the kidneys that are estimated to last the longest. This means that kidneys with a KDPI of 20 or less are offered first to patients with an EPTS score of 20 or less.
- If no one accepts the offer, then the kidney will be offered to patients within the 250 NM circle who matches the donor, regardless of their EPTS score.
- The offer will keep being extended out from where the kidney is located until an accepting patient is found.



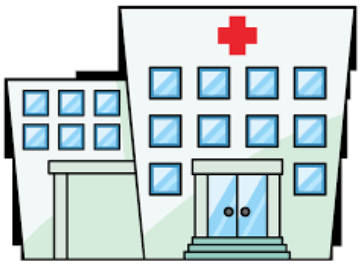
Getting an organ offer

We may call you at any time of the day or night with a deceased donor transplant "organ offer". We need to always have working phone numbers for you and your emergency contacts so we can reach you when an organ is available.

- Please call your transplant nurse coordinator as soon as possible with any changes to your address, phone number, or emergency contact information.
- If you only have a cell/mobile phone, make sure you are:

- Keeping your phone charged and on.
- Keeping your voice mail on and able to record new messages.
- Checking your voice mail regularly, especially if you screen your calls.

- Be prepared to come to the hospital quickly and safely when we call you.
  - **This means that you will always need a way to get to UNC Medical Center at all times that does not rely on any kind of public or Medicaid transportation.**



- Keep a hospital bag packed. Bring pajamas, hairbrush/comb, toothbrush, medications, etc. **Do not** bring jewelry, cash, or other valuables.
- If you have any children, pets, or other people/animals depending on you, you will need someone to care for them while you are in the hospital. You can expect to stay in the hospital about five days.
- Tell the transplant nurse coordinator if you have been sick or if you are taking antibiotics for any reason.
- The transplant nurse coordinator will tell you when to stop eating and drinking. You can take your medicine with small amounts of water.
- If you have diabetes, bring glucose tablets or hard candy (not sugar free) with you to keep your blood sugar from getting too low.

- Bring your medicines and dialysis information.
- Bring your insurance card(s).

What happens if I say "Yes"? What comes next?

If you accept the "offer", you will have more tests done when you get to the hospital. You will probably feel like you have had all of these tests before, but we will need them again. These tests could include:

- Blood work (including cross match with the donor).
- EKG and Chest x-ray.
- Assessment by transplant nephrologist and surgeon.

Unfortunately, getting a call about a possible transplant **does not** guarantee you will get the transplant. Usually, at least two patients are called for each organ. The first patient called is the **primary** (or first) candidate, and the second person is called a **backup** candidate. Back up patients are always called so that if the first patient cannot have the transplant, we can move quickly to the backup patient. Sometimes, the transplant could be cancelled because of a problem with the donor kidney or the potential recipients. These are just examples of the many things that could happen.

What if I'm not sure? What happens if I say "No"?

- You have the right to refuse any organ that is offered to you.
- It will not affect your place on the transplant waiting list.

If you are not sure, please talk to the transplant nurse coordinator that is calling you about the offer. They are a great resource and can answer your questions and address your concerns.

HEY! Did you know…?

…that as of December 17, 2021, the US passed 40,000 transplants in ONE YEAR… a new record!

HEY! Did you know…?

…that the first PEDIATRIC transplant at UNC was in 1975?

HEY! Did you know…?

…that the first successful PEDIATRIC living donor transplant was in October 1959 between 12 year old twins? The first deceased donor PEDIATRIC transplant followed in December 1963.

THE SURGERY & HOSPITAL STAY

THE TRANSPLANT SURGERY

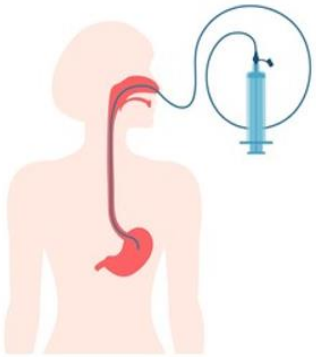
Whether you are getting a kidney from a living or deceased donor, you can expect many of the same things to happen during your surgery and hospital stay.

- To prepare for a possible surgery, your providers will probably ask you to do several things that can lower your risk of having problems:
    - Stop eating and drinking hours before the operation.
    - Wash your body with a special antiseptic soap.
    - Take some special medicine to make you go to the bathroom and empty out your bowels ("bowel prep").
- Once you are ready and in the operating room, you will be put under anesthesia. Some people call this being put "to sleep". A special provider called an Anesthesiologist will be watching you closely while your transplant surgeon(s) are doing the actual surgery.

- While you are "asleep", a tube called a urinary catheter will be put into your bladder. This lets us measure how much urine you are making during and after surgery.
    - It will be kept in place for at least three days after surgery.

- It will be removed either in your hospital room or later during a clinic visit.

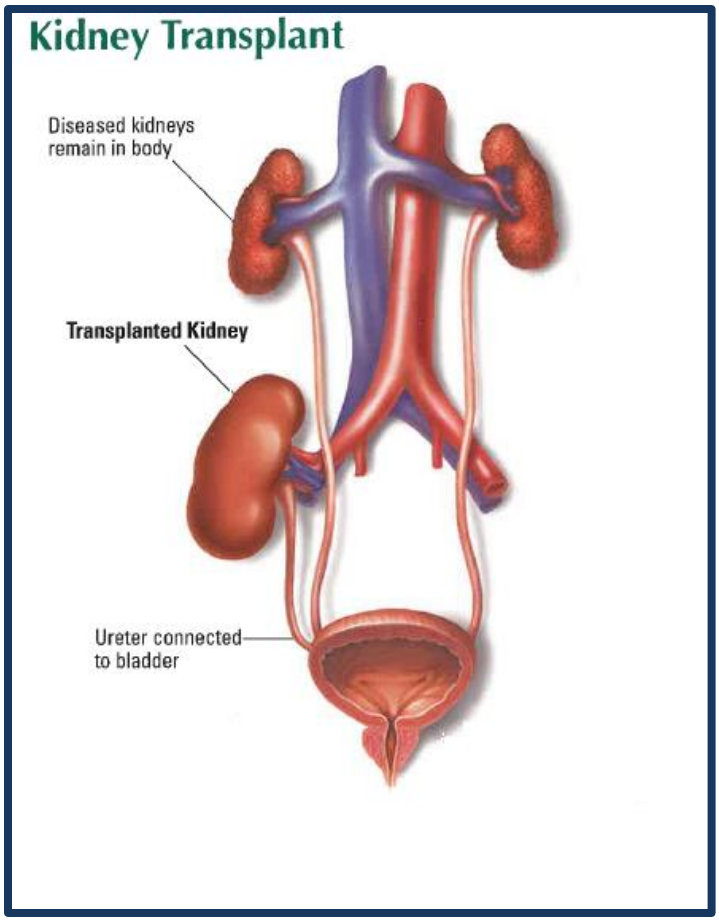
- A small tube called a nasogastric (NG) tube may be put down your nose and into your stomach. This tube will help keep you from feeling sick and throwing up after the surgery.
  - Patients who are receiving a pancreas or kidney/pancreas transplant will wake up with this NG tube still in place.
  - Patients who are getting a kidney transplant are usually able to have this tube removed before they wake up from surgery.



- You will have at least one needle placed in your vein ("IV"), so you can have fluids during and after the surgery. These fluids are very important to keep your new kidney working and making a lot of urine.
- You may have a temporary surgical drain in place.
- For all procedures, the skin incision will be closed using staples. The staples will be removed during a follow-up clinic visit about 4-6 weeks after transplant. A gauze dressing will be put over the incision to keep it clean and absorb any drainage, which is normal.

Kidney transplant surgery

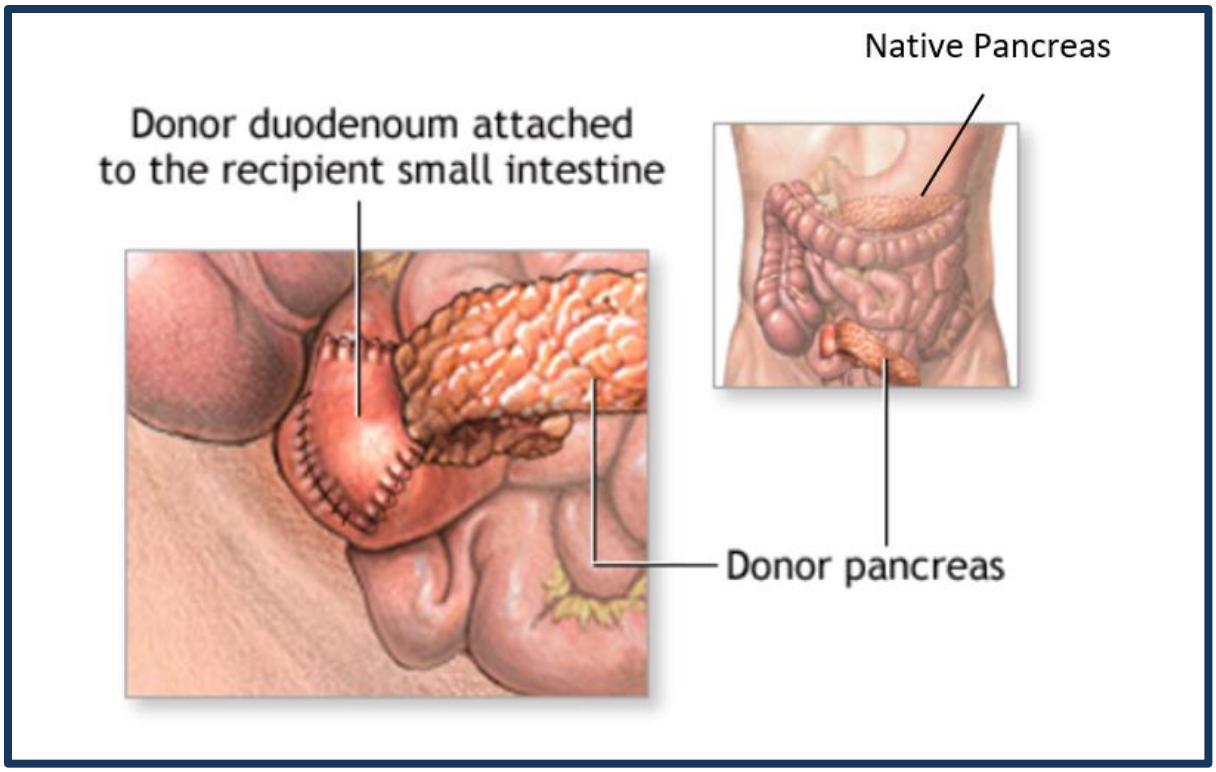
- Kidney transplant surgery lasts about four hours. The new kidney will typically be put in the right or lower part of your abdomen (belly) just above your hip bone.
- Most of the time your own kidneys are not taken out, so you may have three kidneys in your body after surgery.



- The blood vessels of the donor kidney will be sewn to your own blood vessels. The tube that connects your new kidney to your bladder (called a ureter) will be sewn to your bladder.
- A very small tube about the thickness of thin spaghetti (called a stent) will be placed in the ureter to make sure urine passes without problem. You will not even feel this tiny tube. It will be taken out 4-6 weeks after transplant during an outpatient procedure.

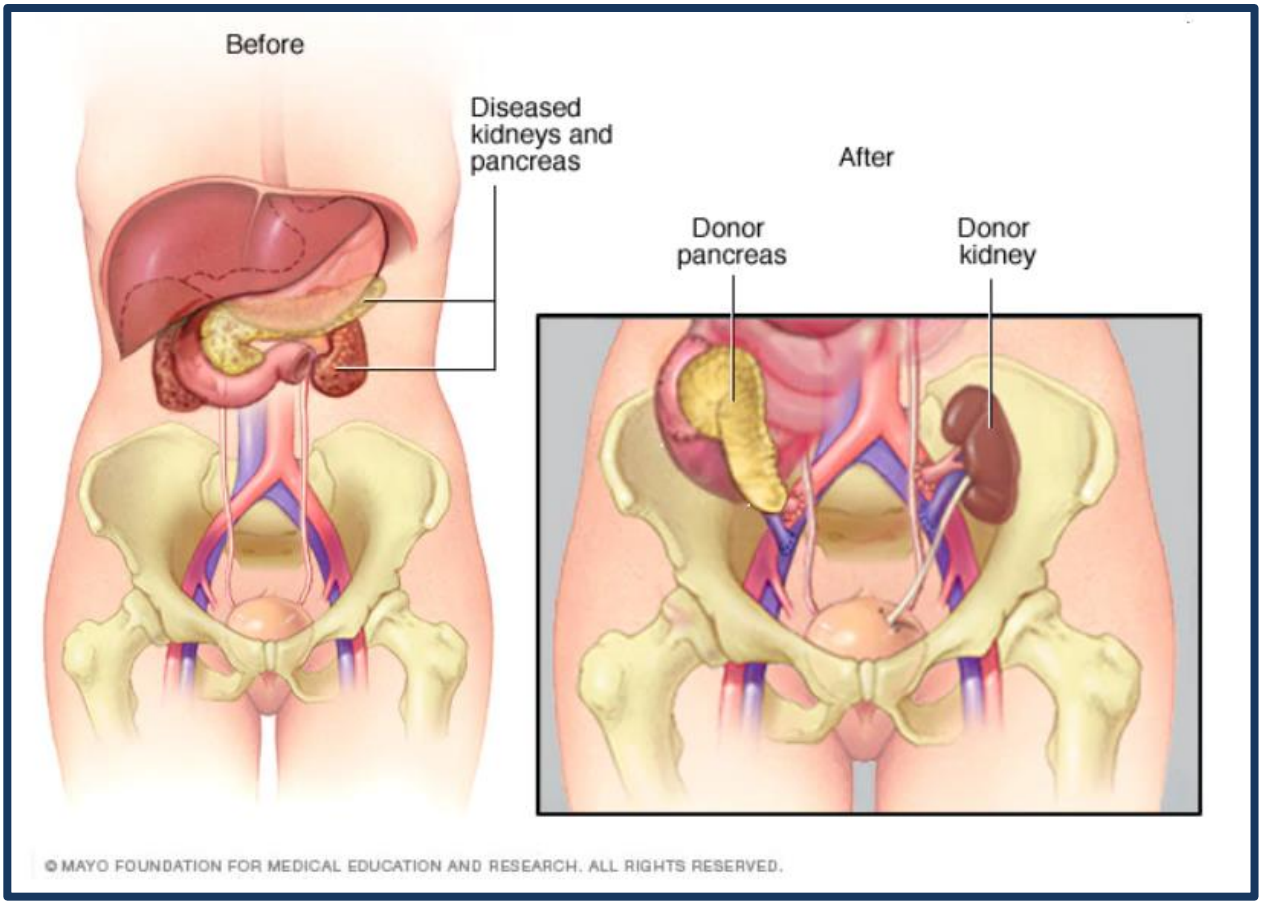
Pancreas transplant surgery

- Pancreas transplant surgery is similar to a kidney transplant. You will have a urinary catheter, an IV, and an NG tube. The surgery usually takes 2-4 hours.
- The incision for surgery usually goes from your belly button to right above your pubic bone, called a midline incision. The pancreas is usually placed on the right side of your abdomen.
- The blood vessels of the new pancreas are sewn to the larger blood vessels that go to your leg. The pancreas is also connected to part of your small intestine so that it can drain digestive juices. Your own pancreas is not taken out.



Kidney and pancreas (K/P) transplant surgery

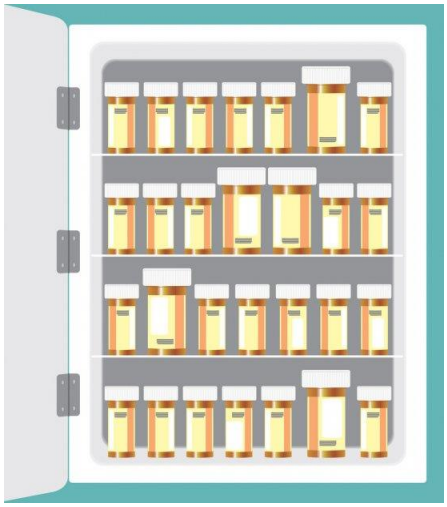
- If you have a combined kidney and pancreas transplant, the surgery may take 3-6 hours and both of the organs are put in through a midline incision. The pancreas usually goes on the right side and the kidney on the left.



"Transplant" medicines

You will hear your transplant providers talk quite a bit about these special medicines that **must** be taken after transplant. You may hear us refer to them as:

- Transplant medicines/drugs.
- Anti-rejection medicines/drugs.
- Immunosuppressants/immunosuppressant medicines.



Remember that they are all the same thing!

Your body will react to your new organ as it would a foreign object. Think about what happens when you have a splinter: the area gets red, swollen, and puffy and your body tries to push it out. To prevent this type of reaction, called **rejection**, you have to take anti-rejection medicine. All transplant patients have to take anti-rejection medicines for as long as they have a working transplanted organ(s).

For your health and the health of your new organ(s), you must know all about your medicines: what medicines you are taking, why you are taking them, when you should take them, and how much you should take.

THE HOSPITAL STAY

- A transplant provider will come and talk with your family after surgery and let them know how you are doing.
- After the operation, you will go to the recovery room (called the PACU/Post Anesthesia Care Unit) for several hours where you will be carefully watched until you wake up. You will get medicines for pain and IV fluids. Your vital signs (blood pressure, heart rate, breathing, and temperature) will be checked frequently.
- After the recovery room, you may go to the intensive care unit (ICU) for a day or two, but usually you will go to our "step-down" unit or Intermediate Surgical Care Unit (ISCU).
- Most patients will stay anywhere from 24 hours to a few days in the ISCU and then are moved to the main transplant floor (5 West) for the rest of their hospital stay.

- The transplanted kidney usually begins to work right away. Sometimes the kidney does not work right away and you may need dialysis for a while until the kidney is working better. A small number of kidneys (less than 1%) may never work.
- The amount of urine you are making will be checked every hour.
- Blood work may be checked several times a day.
- You will be weighed daily.
- The nurses will ask you to turn in bed, cough, and breathe deeply at least every 1-2 hours while you are awake.
- The nurses will encourage you to get out of bed and walk several times a day.

  - You can help decrease problems such as pneumonia, constipation, or blood clots in your legs if you cough, take deep breaths, and walk a lot.
  - An IV will be used to give you fluids until you are able to eat or drink. The IV will be removed before you go home.
- Due to the surgery and pain medicines, the bowels are sluggish for a short time. You will be able to drink and eat once your bowels are moving normally. You will start with liquids and by the time you go home, you

should be back to your usual diet. Your providers will talk with you more about this after surgery.

- The incision will be closed with staples and will have a dressing over it. This dressing will be removed before you leave the hospital. We will teach you how to keep your incision clean and dry.

HEY! Did you know…?

….that your pancreas can actually "taste" sugar, thanks to real taste receptor cells? It can't send that information to your brain (like the cells on your tongue), but it does use that information to keep your blood sugar levels stable. Cool, huh?

DISCHARGE TO HOME

You will learn how to take care of your new organ(s) and yourself as a transplant patient before you leave the hospital. This means you will:

- Need to have a thermometer, a scale, and a blood pressure cuff at home after discharge. The inpatient transplant nurse coordinator will help you get these if you do not already have them. For the first six weeks, you will need to:

    - Check your blood pressure twice a day.
    - Check your temperature daily.
    - Weigh yourself daily.
    - Write down how much you drink and how much you urinate. This is called checking your 24-hour fluid Intake and Output, or your "Is & Os" or "ins and outs".
- Some patients will go home with a surgical drain(s). This is normal and we will teach you how to take care of it.
- Some patients will go home with a urinary catheter. This is also normal and we will teach you how to take care of it.

You will meet with our inpatient transplant nurse coordinator, transplant dietician and transplant pharmacist before you leave the hospital. They will teach you and

your support person(s) about how to take care of your new transplant(s). This will include things like:

- Signs (what to look for) and symptoms (how you feel) of infection.
- Signs and symptoms of rejection.
- Your new medicines and how to take them.
- Who to call if you have questions or an emergency.
- What you should and should not eat and drink after transplant.

Most of our patients will be seen by someone on our physical therapy (PT) and/or occupational therapy (OT) team to make sure that you are strong enough to go home and that you can move around safely.

- **Keep in mind that if you were having any problems moving around before surgery, it will be harder for you to get up and moving after transplant.** Your support person(s) might have to help you with things like getting in/out of a chair or in/out of the shower.
- Our physical and occupational therapists will make recommendations if they think that you will need any in-home services or medical equipment to help you stay safe once you leave the hospital.
- Our care managers can help set this up for you before you go home.

After transplant, you have a big job: taking care of your transplanted organ(s). It is important to follow the instructions and advice of your transplant team, take all your medicines as you have been taught, get lab work regularly, and come to all scheduled clinic visits.

AFTER TRANSPLANT

AFTER TRANSPLANT: AT HOME

Having a support plan

Every single patient needs support from their family and friends in order to have a successful transplant. You need to have people who will agree to help you both before and after surgery. If you have any problems after transplant, you might need help for longer than expected.

- Your support person(s) should come with you to all of your social work appointments while you are waiting for transplant.
- Your support person(s) should come to the hospital during your stay and learn about post-transplant care.
- You will not be allowed to drive for 4-6 weeks after surgery, so you will need people who can drive you:
    - To UNC Medical Center for your surgery and home after your discharge.

    - To the hospital, anytime of the day or night, in case of an emergency.
    - To the hospital for clinic appointments once a week for 4-6 weeks.
    - To get your blood work done three times a week for about 4-6 weeks. This can be done near your home.

- Someone to be with you 24 hours a day who is able to help you at home for the **first two weeks after surgery.** For example, you will need help with things like organizing your medicines, cooking meals, doing laundry, and caring for pets/animals.
    - If you were helping to take care of someone else before your surgery, like an aging parent or small children, you may need help with those things during your recovery.
- **Everyone needs help staying organized.** The first few weeks are busy and full of new information. You will have many things to remember and your instructions could change quickly.
- All patients will be asked to follow extra precautions to avoid infections and getting sick after transplant surgery. We will talk to you about this in more detail at discharge. This could include things like:

    - Washing your hands frequently.
    - Wearing a mask around other people.
    - Staying away from people who have been sick, or have been around sick people.
    - Avoiding crowds and public places.
    - Avoiding public transportation, which would include Medicaid or County Medical transportation services.

STAYING IN TOUCH

Keeping in touch with your transplant team is very important. Be sure to tell your transplant nurse coordinator if:

- Your phone numbers, address, or insurance changes.
- You get sick or have any kind of infection (e.g., COVID, flu).
- You go to any emergency room, are admitted to any hospital, or have any kind of surgery.
- Call us if you have any questions or concerns – we are here for you!

We have a transplant nurse coordinator on call all day, every day, including holidays and weekends. **If you have an emergency after hours**, you can reach out to on-call transplant nurse coordinator by:

- Calling the UNC Medical Center's hospital operator at 984-974-1000 and asking the operator to page the "on-call kidney transplant nurse coordinator".

You can also learn more about kidney transplant at UNC by going to our website: www.unckidneytransplant.org

HEY! Did you know…?

…that in addition to controlling your blood sugar levels, your pancreas ALSO makes a natural antacid that helps settle your stomach when it's upset?

Who knew?

UNC HEALTH SM

OPTIONS FOR

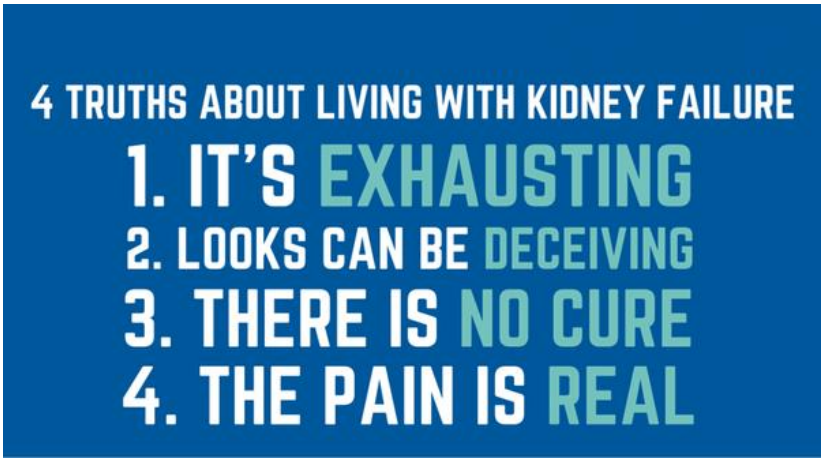
LIVING &

DECEASED DONOR

TRANSPLANT

I NEED A NEW KIDNEY… WHAT ARE MY OPTIONS?

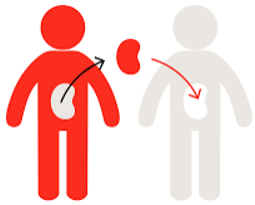
If your kidneys are not working, and you are interested in kidney transplant, you may hear your providers talk about getting a kidney from a deceased or living donor. If you need a kidney, here is what you need to know about your options.



LIVING DONOR OPTIONS

What is a living donor?

Most people are born with two kidneys. Since you **only need one** to live, some people decide to donate one of their kidneys to someone else who needs a working kidney. These people are called **living donors**. We know that asking someone to be your living donor might be uncomfortable. We encourage you to start by sharing your story with your family and friends. You can also share the last section of this book with them, labeled "Living Kidney Donation".



They may know that you have kidney disease and are on dialysis but they may not understand your need for a new kidney. While you will still need to be listed for a kidney transplant, having a living donor can help you get a transplant faster. If you are in need of both a kidney and pancreas transplant, you may be able to receive a kidney from a living donor first while you wait for a pancreas from a deceased donor.

Someone who is interested in being a kidney donor must contact our living donor transplant nurse coordinator by phone or email; **you cannot call or email for them**.

- Call the living donor transplant nurse coordinator at 984-974-7568.
- Email the living donor transplant nurse coordinator at livingdonors@unchealth.unc.edu
- Check out our website at www.uncmedicalcenter.org/livingdonors

What if I can't find a match?

With living donation, we have time to make a plan and this sometimes gives us more options.

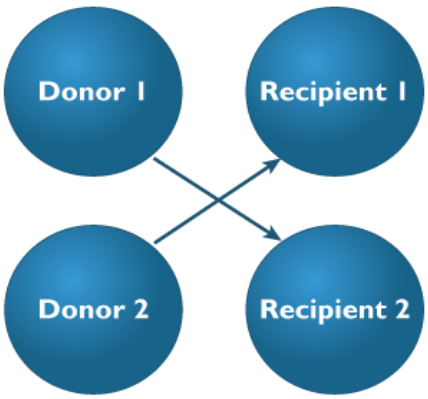
If you know someone who wants to donate a kidney to you, but they are not a good match, **they may still be able to help you.** Sadly, about one third of living donors are not a good match for their planned recipient. Because of that fact, many providers have been working hard to try and make every possible match count for someone…somewhere!

- **Unmatched Blood Type transplant (or "Blood Type Incompatible")**: This is when a person gets a kidney from a donor that has a blood type that would usually not be considered a match.
    - Special blood tests have to be done ahead of time to see if this is an option for you.

- If it is, special medications and/or treatments are given to you before the surgery. This allows the surgery to be done safely.
- Not every recipient is a good candidate for Blood Type Incompatible transplant. Your transplant team will discuss this option with you if it applies.

UNC also participates in a Kidney Paired Donation Program called the National Kidney Registry (NKR).

- **Kidney Paired Donation (KPD)** is when two or more donor/recipient pairs who are not a good match for each other (incompatible) exchange kidneys to give each recipient the best possible matched kidney.
- All recipient and donor pairs can be considered for the KPD Program which matches recipients and living donors from transplant centers across the country.
- For more information on Kidney Paired Donation, please see the section at the back of this book labeled "Living Kidney Donation".



DECEASED DONOR OPTIONS

What is a deceased donor?

A **deceased donor** is someone who has just died, and either they or their family chose to donate any healthy organs at the time of death to others who might need an organ transplant.

What is an expanded organ offer?

Because there are many more people waiting for a kidney transplant than there are available organs, medical providers everywhere are trying very hard to use as many available kidneys as possible. Many organs that would not have been used in the past are now being used for someone on the waiting list. Our team members will go over all of the options available with you and explain the risks and benefits so that you can make a decision about what is right for you.

Please know that by signing a consent form to get expanded organ offers:

- You are not signing away your right to receive offers for other organs. Rather, you are **expanding** your access to as many organs as possible. This could help you get an organ offer sooner.
- When you receive an organ offer, the transplant nurse coordinator will give you as much information as they can about the organ(s) so that you can make a decision about what is best for you.

Please know that there will **always** be information that we **cannot** share because of patient confidentiality laws (HIPAA). We have to protect both your privacy, as well as the privacy of the donor and their family.

HEY! Did you know…?

…that your pancreas actually has TWO glands inside ONE organ? Everyone has an exocrine gland that helps your body digest fats and proteins so you can use them. The other one is the endocrine gland, which makes hormones like insulin that help balance the amount of sugar in your blood.

Types of expanded organ offers

Below are some of the types of expanded organ offers that your providers may talk to you about:

- **Risk for Acute Infection:** You may be offered a kidney from a donor that has done something in the past to put them at higher risk for having things like HIV, hepatitis B or hepatitis C. Those "social behaviors" could include things like IV drug use, spending time in prison, or getting paid for sex.

  At the time of your offer, you will be told if your donor had any risk factors for acute infection.

  - The tests we use to look for donor infections are very good and the risk of not finding one of these viruses is very low, **but it is not zero.** There is a small chance that a test may be negative, even if the virus is present.
  - You will be tested for these viruses as part of your evaluation, just before your transplant operation and again 1-2 months after transplant, even if your donor did not have a risk for acute infection.
  - If transmission of any of these infections does occur, there are medications available for treatment.

- **Donors with hepatitis C:** With your permission, we can consider donors who tested positive for hepatitis C. If you receive a kidney from a donor with hepatitis C, you will be followed closely and will be given treatment for hepatitis C if needed.
- **Donors with blood type A_2 or A_2B:** If your blood type is B, we may be able to consider donors from other blood group. Many patients with blood type B have long waiting times in the United States and this allows them some additional options that could shorten their waiting times.
- **Donors with a KDPI of 85% or greater:** KDPI can be an indicator of how long a kidney will last. These kidneys are a good option for some patients.

We will talk to you about all of your options, all of the risks and benefits, and help you find a plan that feels comfortable to you!

UNC HEALTH SM

CELEBRATING 50 YEARS

OF TRANSPLANT EXCELLENCE

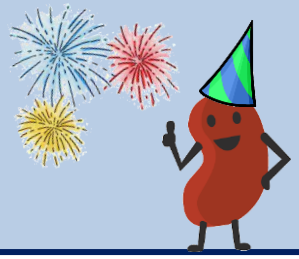
UNC HEALTH CARE

Come join our transplant family and take part in a long tradition of excellence!

November 5, 2018: Celebrating 50 years of excellence in transplant at UNC Medical Center. Dr. Stanley Mandel, the surgeon to perform the first successful kidney transplant at UNC Medical Center in 1968 addressing the crowd gathered.

HEY! Did you know…?

…that the longest surviving deceased donor kidney transplant patient in the world is thought to be Angela Dunn, born in 1948, who lives in France. She received a transplant on July 25, 1970 and is STILL living a healthy life with that kidney! WOW!!!!



OTHER

RESOURCES

COMING TO UNC MEDICAL CENTER: THINGS TO KNOW

Travel

- Plan to arrive a little early for your appointments.
- Allow yourself time for traffic, weather, parking, and hospital construction. Arriving early will give you plenty of time to park, register, and find your way around the hospital.

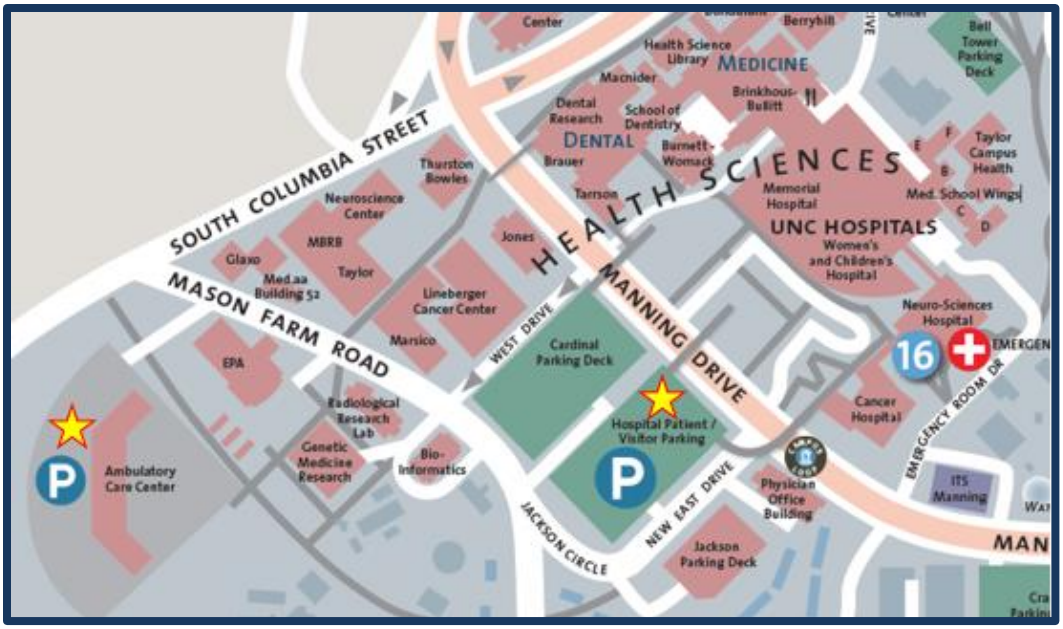
- Check your appointment letters carefully; your appointments could be in several locations. The majority of your appointments will likely be at UNC Medical Center or the Ambulatory Care Center (ACC) on Mason Farm Road.
- Your appointment could also be by phone or video, so please check your appointment letters carefully for instructions.

Parking

Public parking is available in the Dogwood Parking Deck across from the hospital and at the Ambulatory Care Center (ACC) on Mason Farm Road.

- The cost for both the visitor's parking deck at the hospital (Dogwood Deck) and the ACC is $1.50/hour with a maximum cost of $10/day. You can pay by cash or debit/credit card.
    - Because of the distance, a golf cart "shuttle" is available to and from the Dogwood Deck and the main hospital.
- Valet parking is available Monday-Friday, 5:30 am-7:30 pm, in front of the NC Children's Hospital.

    - The cost for Valet Parking is $12/day, no matter how long you stay. So if you leave and come back on the same day, they will charge you two times.
    - You can buy valet coupons from the valet cashier. They come in books of five, at a cost of $55 per book.
- **We do not have vouchers for parking.**



Getting around UNC Medical Center

- If walking is hard for you, you can ride to and from the Dogwood Deck to the hospital in one of the golf cart shuttles.
- Wheelchairs are available for visitors and patients once you get inside the hospital.
- Hospital staff can also help you push a wheelchair or provide directions on where you need to go. Just ask any staff at one of our Visitor/Information Desks, which can be found throughout the ground floor of the hospital.

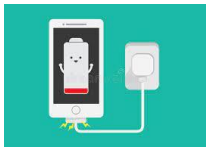
Food and snacks

Patients are welcome to bring their own snacks and drinks from home, especially for our diabetic patients. However, food and drinks are available throughout the hospital and beside the ACC.

- Hospital Food Service locations accept debit/credit cards and Freedom Pay **only**.
- Hospital gift shops and vending machines accept cash for drinks and snacks.
- **We do not have vouchers available for food/meals.**

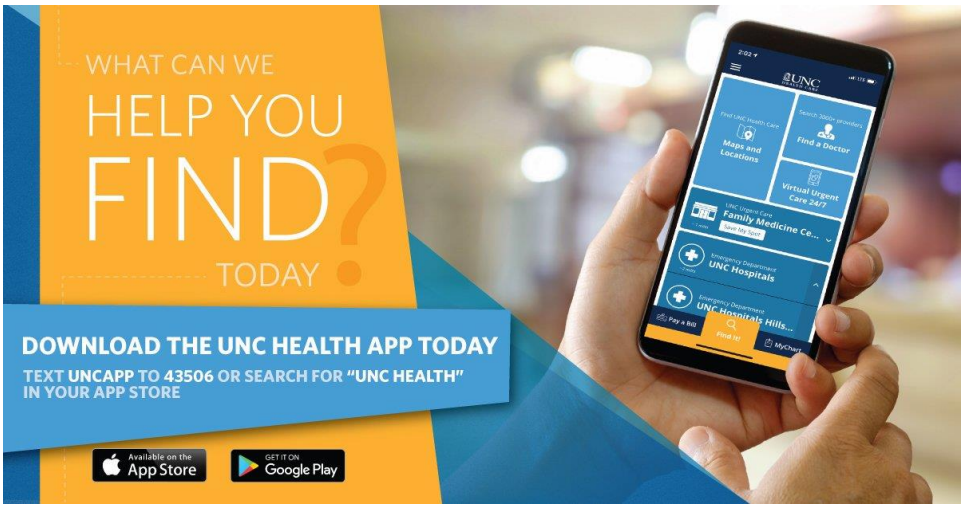
Other things to think about

- Plan for the day.
- Bring a bag with books, magazines, food/snacks, water, chargers… whatever you can carry that will help you be more comfortable as you wait for your appointments.



- Temperature can vary a lot from one end of the hospital to the other. Bring a sweater or dress in layers.

- Wear shoes that are comfortable to walk in for most of the day.
- **Do not** hesitate to ask questions or ask for directions. It is easy to get lost! Any hospital staff member will try to help you find where you are going.
- You can download the UNC Health app on your phone, which can help you find your way throughout the hospital buildings.



WHERE CAN I LEARN MORE ABOUT TRANSPLANT?

If you or your loved ones would like to know more about transplant, please check out some of the below resources for more information.

UNOS/United Network for Organ Sharing

UNOS is the private, non-profit organization that manages the nation's organ transplant system. Their website has some great information about transplant for both patients and their support person(s).

UNOS provides a toll-free patient services line to help patients and families who are interested in transplant understand where organs come from and how they are transplanted. You may also call this number to discuss a problem you may have with your transplant center or the transplant system in general.

The toll-free patient services line number is 1-888-894-6361. UNOS also has a website at www.unos.org

UNOS UNITED NETWORK FOR ORGAN SHARING

SRTR/Scientific Registry of Transplant Recipients

This is a great website where you can find statistical data about different transplant centers across the US. If you are interested in being on the waitlist at more than one transplant center, this is a good place to start.

Their website can be found at www.srtr.org

SRTR also offers a "decision aid" for patients to use when talking to their providers about transplant. It can help patients think about the pros and cons of different treatments.

Check it out at www.srtr.org/tools/kidney-transplant-decision-aid/

SCIENTIFIC REGISTRY OF TRANSPLANT RECIPIENTS

UNC Center for Transplant Care/ Kidney transplant website

This is a good place to find information about our transplant programs and providers here at UNC Medical Center. You can also find a link to our Orientation Class video, if friends or family would like to watch and learn more about kidney transplant. Scan the QR code below to take you directly to the video.

The UNC Center for Transplant Care website can be found at: www.unckidneytransplant.org

UNC HEALTH CARE
CENTER FOR TRANSPLANT CARE

UNC Center for Transplant Care/ Living donor website

This is a great online resource for information about becoming a kidney living donor at UNC Medical Center. Anyone who is interested in being a living donor or would like to learn more about the process should contact our team, either via our online form found at the below site, via phone at 984-974-7568, or via email at livingdonors@unchealth.unc.edu

DONATE LIFE LIVING DONOR

The website can be found at www.uncmedicalcenter.org/livingdonors

SHIIP/Seniors' Health Insurance Information Program

Feeling lost and confused about Medicare? This great resource provides free and unbiased information and counseling on Medicare.

You can find more information by calling 1-800-443-9354 or at their website www.ncshiip.com

DVRS/Division of Vocational Rehabilitation

The Division of Vocational Rehabilitation Services (DVRS) helps people with disabilities reach their goals for work and independence.

For more information: https://www.ncdhhs.gov/divisions/dvrs

End-Stage Renal Disease Network (ESRD) Program

The mission of the ESRD Network Program is to promote safe, effective, efficient, patient-centered, timely, and equitable health care for all patients with end-stage renal (kidney) disease. North Carolina is represented by Network 6/ESRD Network of the South Atlantic.

End-Stage Renal Disease Network Program

For more information: https://esrd.ipro.org/

NLDAC/National Living Donor Assistance Center

The mission of the NLDAC is to help alleviate some of the financial burden on people who are interested in, or approved to be, a kidney living donor. Priority is given to donors who would not be able to donate without help. Interested donors should ask their living donor social worker, independent donor advocate, or living donor transplant nurse coordinator for more information.

See their website at www.livingdonorassistance.org

National Living Donor Assistance Center

HonorBridge *(formerly known as Carolina Donor Services)*

The United States has 58 **Organ Procurement Organizations (OPOs)** that are responsible for getting organs from the donor to the patient who needs them, as well as teaching others about the importance of organ donation. In North Carolina, we have three OPOs that serve all 100 counties.

HonorBridge is the designated organ procurement organization (OPO) for our area, serving 77 counties of North Carolina and Danville, VA, and representing some 7.2 million people.

See their website at https://www.honorbridge.org/

SECU Family House at UNC Hospitals

The SECU Family House is open to all adult patients at UNC Medical Center, their family members, and caregivers. They can provide a safe, affordable home for patients and their loved ones who may have to travel to UNC Medical Center for care.

See their website at www.secufamilyhouse.org

LIVING KIDNEY

DONATION

Dear Potential Kidney Donor,

Thank you for getting in touch with the UNC Center for Transplant Care about giving someone your kidney. I am your Independent Donor Advocate, which means that I am here to help you through each stage of the donation process—from learning about donation to testing for it, getting better after surgery, and dealing with feelings or issues that may come later. I am here for *you*, and I do not work with the person who might get your kidney. You can call me if you change your mind. You can call me if you wonder or worry about how things are going. You can also call me if you ever have a problem with how the living kidney donor team is doing things here at UNC Medical Center. I will do my best to help you. My number is 984-974-7595.

Before you decide to get started, there are many things you need to know about being a living kidney donor. The first and most important thing for you to know is that if you ever decide that this is *not* something you want to do—at any point along the way—you do not have to move forward. Members of the team will help you stop the process. We can stop it in a way that is private so that you don't have to say to anyone else that you have changed your mind. It must be *your* decision to give your kidney. We will remind you of this important fact again and again.

Donating a kidney is a big decision because it will take a good deal of work on your part and it will put you at some risk. You will get a lot of information from the living kidney donor team

about how the whole process works and about the risks you will face. We will give you printed information and we will also talk to you about every step. Please write down a list of questions as they come to you. We want to answer all of your questions.

Please take the time to read the information in this packet about being a living kidney donor. There are many things that you should know before you take another step. We will go over all of these things in person if you decide to come to the hospital for testing. But if you have a question about any of it that you want to ask before deciding to come to the hospital, please call me. Even starting the testing process can put some people at risk, and we want to make sure that you are as safe as possible.

If you want to take the next step after you have gone over all of this information, please read the other letter in this packet that tells you how to get started on the process.

Sincerely,

Beth Vazquez, LCSW

Independent Living Donor Advocate

LIVING KIDNEY DONOR INFORMATION

The information in this section is for anyone who might be interested in being a living kidney donor. Our living donor transplant nurse coordinator is a resource for any questions you may have about living donation.

I want to be a donor! What should I do?

If you think you want to donate your kidney, here are the next steps:

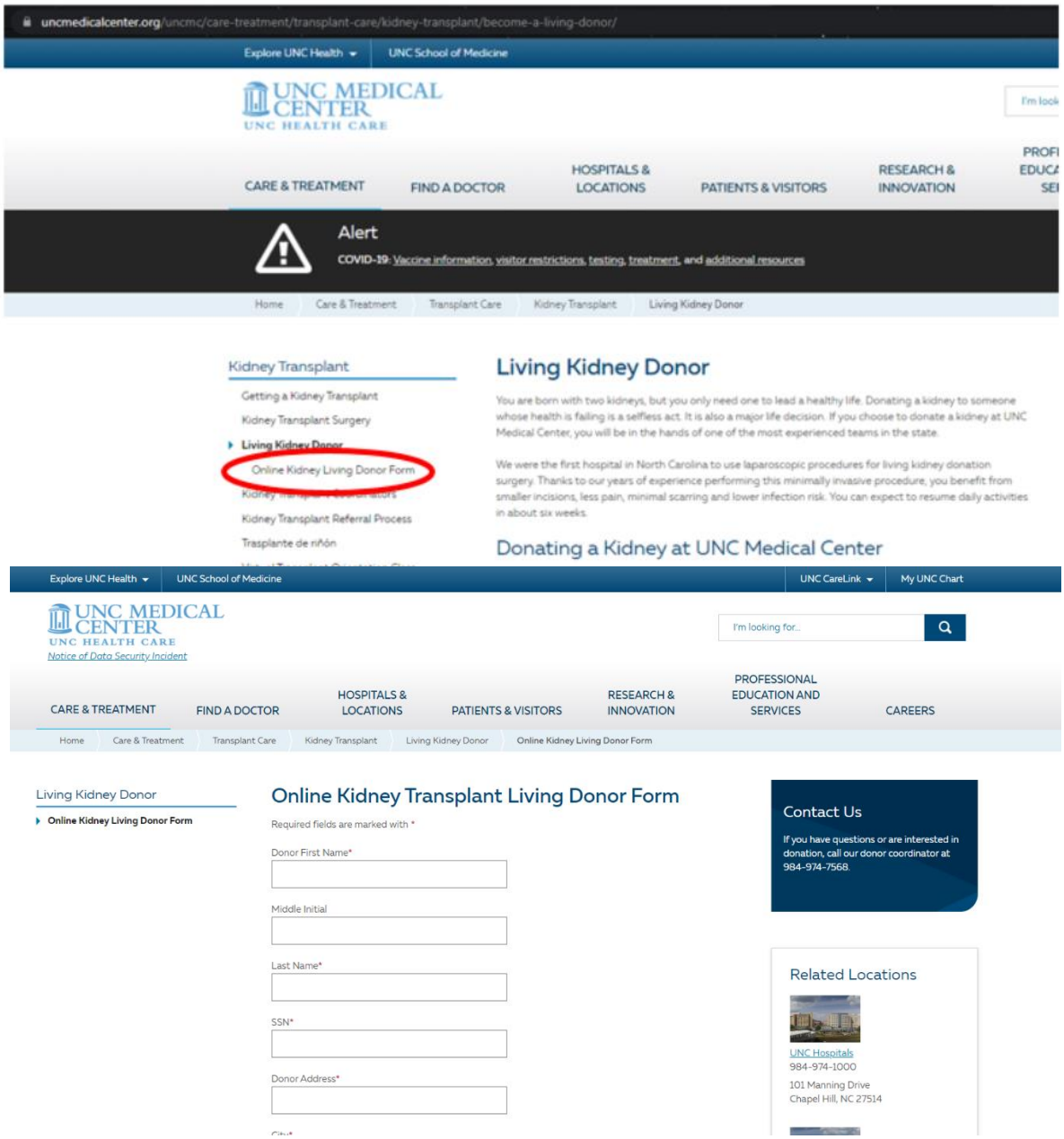
- Go to our website at www.uncmedicalcenter.org/livingdonors to learn more about donation. **Please read carefully** and call us if you have any questions.
- Scroll all the way to the bottom of the page, and click on "Living Donor Online Questionnaire". Or, scan the QR code here to access the questionnaire.
- If you need a paper copy of this form, please call the living donor transplant nurse coordinator at 984-974-7568.
- If you do not hear from us in 7-10 days, please call our living donor transplant nurse coordinator to be sure that we received your information.

For more information you can visit these websites:

- http://www.transplantliving.org/living-donation/
- http://www.kidney.org/transplantation

What comes next for the donor?

Filling out the “Living Donor Online Questionnaire” will allow our living donor team to see if we think that this will be an option for you. If you are cleared to move ahead after filling out that online form, then your next step will be a full medical work-up.



TYPES OF LIVING KIDNEY DONATION

Sometimes, people are interested in donating their kidney but:

- Do not have a specific person that they want to donate to,
- Are not a good match for the person that they want to donate to,
- Or, they live too far away from the person that they want to donate to.

If this happens to you, there are some other options available!

- **Non-directed Donation**: A non-directed donor is a living person who donates a kidney and does not have a particular person that they want to get their kidney. The organ is donated as a gift, with no expectations of anything in return and no connections between the donor and recipient.
- **Kidney Paired Donation (KPD)** is when two or more donor/recipient pairs who are not a good match for each other (incompatible) exchange kidneys to give each recipient the best possible matched kidney. UNC participates in a KPD program through the National Kidney Registry (NKR). All recipient and donor pairs can be considered for the KPD Program which matches recipients and living donors from transplant centers across the country.
- **Advanced Donation Program (ADP or "voucher program"):** The "voucher program", or Advanced Donation, is a kidney paired exchange separated in time. What does that mean? That means that the person

donating a kidney will go ahead and have the surgery, even if the person that they want to donate does not need a kidney yet. The donor gets a "voucher" for having donated their kidney that can be "redeemed" at a later date. Think of it like a raincheck!

- A **Standard Voucher** is given when a donor donates their kidney for someone who will probably need a transplant within the next year, but does not need it **right now.** The donor gets one Standard Voucher to be used at a later date for their recipient.
- A **Family Voucher** is given when a donor wants to donate their kidney, but the person that they want to donate to is not likely to need a transplant within the next year. Family Vouchers can have up to five people listed, with the first one needing a transplant getting the benefit.

- **Remote Donation**: Remote Kidney Donation allows someone who wants to donate a kidney to a friend or family member in a distant city to do so without requiring the donor to travel to where their recipient lives. It allows the donor to have their surgery close to home, then have their kidney transported to their recipient. Convenient, huh?

- **ABO incompatible transplant:** This may be a possibility if your blood type is not compatible with your intended recipient's blood type. You both may require additional blood tests to determine if this would be a good choice.

HEY! Did you know…?

…that,the longest surviving kidney donor pair is Johanna Rempel and Lana Blatz of Canada? Johanna received a transplant from her identical twin sister, Lana, on Dec. 28, 1960. To date, Johanna and Lana are also the **youngest pair** to undergo living donor kidney transplant surgery. They were just 12 years old at the time of surgery!

THE LIVING KIDNEY DONOR EVALUATION

The evaluation process is meant to protect you and helps ensure that you are healthy enough to donate a kidney. Both your evaluation and the surgery have some risks to the donor. We want to make sure you know about any possible risks before you decide to do this.

The process

Your evaluation will cover many different things, including your physical and your mental health. This could include things like:

- Answering questions about yourself over the phone with someone from our living donor team.
- Answering questions about yourself on our "Living Donor Online Questionnaire".
- About 2-3 days of medical testing and appointments, most of which will be done at UNC Medical Center.
- Our goal is to finish all of your testing and appointments in less than 90 days. It could take more, or less time, depending on your situation or your recipient's situation.

Your safety is important to us

Your doctor will run several different tests to check the function of your kidneys and other organs.

- If you have a history of high blood pressure, diabetes, or heart, lung or kidney disease, you may not be able to donate.
- The team may decide that you **should not** donate a kidney.
    - For example, we may find problems that could cause harm to you or the possible recipient if you donate.
- If that happens:
    - We will tell you why you should not or cannot donate a kidney.
    - Our decision may be different from another transplant center. It does not mean that all other transplant centers would make the same decision.

Living donor evaluation

The living donor evaluation is very detailed and it will give the transplant team a lot of information about your health and how well we think you will do during and after surgery. These tests can all be done as an outpatient. While every patient will have their evaluation match their needs, most patients can expect the following:

- **Education:** You will have a chance to talk to our living donor transplant nurse coordinator in a 1:1 session, where you will learn about living donation. They will give you information about the evaluation process, including the risks and benefits, and will explain your options.
- **Blood Work**: You will need **many** blood tests over the course of your evaluation. Some of these tests will have to be repeated before surgery. We will use these tests to confirm your blood type and check for infections like HIV or hepatitis.
- **Kidney Scan:** You will need a special scan of your kidneys to check their function.
- **Other Blood and Urine Tests:** You will need additional testing to check for drug use, extra checks on your kidneys, and your overall health.

- **EKG and Chest X-ray:** These tests will check your heart and lungs.
- **CT Scan**: Sometimes called a "CAT" scan, this test allows doctors to take a super detailed picture of the inside of your body, using x-rays and a computer.
    - This test will give the surgeon a good picture of the blood vessels leading to the kidneys.
    - This test helps decide which kidney will be donated.

- **Health Maintenance**: Depending on your age and assigned sex, you will likely have some additional tests to complete on your own. If you have any problems getting these done, let your living donor transplant nurse coordinator know and you can have them done at UNC Medical Center.
    - Examples could include things like:

        - Pap Smear.
        - Mammogram (women ages 40+).
        - Colon Cancer Screening (ages 45+).
        - Stress Test and Echo (ages 50+).
        - PSA Blood Test (men age 45+).
        - Chest CT (depending on smoking history).

RISKS AND BENEFITS OF LIVING DONATION

If you have read this far, then you have likely already figured out that transplant is a pretty complicated process, both for a recipient and a donor. There are lots of risks and benefits to both sides. It is important to remember that what might be a risk or benefit to one person, may not feel as risky or helpful to another.

Risk from evaluation to the kidney living donor

- An allergic reaction to the dye used in some medical tests.
- Finding out that you have an infection that you did not know about before testing.
    - Knowing that some infections, like tuberculosis, HIV, or hepatitis, have to be reported to the Health Department.
- Finding out that you have a health problem that you did not know about before testing.
- Need for more tests or treatment that you might have to pay for yourself.
- Finding out things about your family health history that you did not know about before testing.

Risk from surgery to the kidney living donor

Below is a list of the most common problems donors have after surgery, though there are always risks that may not be listed here. Some of these issues may be temporary, while others could last longer.

Medical or surgical problems that could happen after donation:

- Scarring.
- Pain.
- Feeling tired.
- Feeling numb/loss of feeling around your incision.
- Feeling gassy/bloated.
- Feeling queasy/nauseated.
- Problems with having a bowel movement/constipation, which sometimes can happen after anesthesia.
- Problems with infections, like pneumonia or infection at the incision site.
- Problems/injury to other organs, like lung collapse.
- Getting a hernia at your incision site(s).
    - The risk can be lowered if you avoid heavy lifting for 6-12 weeks after surgery.

- Problems with healing at your incision site, like the edges of your skin not healing together, or fluid build-up around the wound called a hematoma.
- Blood clots.
    - The risk for women can be lowered if you stop taking any hormones for birth control or menopause for 4-6 weeks after surgery.
    - Bleeding, which could require a blood transfusion.
- Heart problems like abnormal heart rhythms, heart attack or stroke.

Much more serious and rare medical risks could include:

- Death.
    - One study that followed 80,000 donors showed that 0.0003% (or about 25 people) died from surgery. This rate has not changed over the past 15 years.
- Donor kidney failure after surgery that would require transplant.
    - All prior living donors have priority on the transplant waiting list if they ever need a new kidney in the future.
- Pregnancy after kidney donation.
    - Higher risk of miscarriage.
    - Gestational diabetes.
    - Gestational hypertension and preeclampsia.

Emotional risks after surgery to the kidney living donor

- You may have many different feelings after the surgery, about a lot of different things.
- You could be worried about how you look after surgery with your new scar.
- You might feel guilty or worry about someone else having to take care of you after surgery.
- You may feel sad if the person who gets your kidney gets sick again, "rejects" the kidney, or dies.
- Your life may change in ways you do not like because of things like limited income due to loss of work, or limits on what you can physically do after surgery.
- You may have more serious problems with anxiety and/or depression called **post-traumatic stress disorder**.
- If you feel any changes in your mood, or if your loved ones see any changes in how you are acting or feeling, then **PLEASE** call your living donor

transplant nurse coordinator, independent living donor advocate, or living donor social worker as soon as possible. We are happy to help you.

Financial risks after surgery to the kidney living donor

- You might have to spend some of your own money on things like: travel, housing, and childcare. Ask your living donor social worker if there are programs that might be able to help you.
- You might have health problems after surgery that you will have to pay for yourself or with your own health insurance.
- It will be important for you to continue to see your primary care provider regularly after donation and you will be responsible for paying for this.
- You could lose pay if you have to take time off work.
- If you cannot work for some reason, you could lose your job.
- You could have trouble getting, keeping or paying for insurance:
    - Health insurance.
    - Disability insurance.
    - Life insurance.

Other risks to the kidney living donor

- People who need a kidney transplant ("recipient") must have a medical and psychosocial evaluation too (see the front part of this book).
- The person who gets your kidney may have risks like:
    - The transplanted kidney may not work well or at all.
    - They could have problems such as return of their kidney disease, kidney rejection, infections, or even death.
- Even if you are going through the evaluation, the recipient may get a kidney from a deceased donor before you are approved to donate.
- It is against federal law to get money or gifts in return for your kidney.
- There may be resources to help you with your expenses. Reach out to your living donor team if you have questions or concerns.

Benefits of evaluation/donation to the kidney living donor

Everyone has their own reasons for considering to be a donor. Most of the "benefit" of being a donor will not come from something that you can see or touch, but rather from how the donor "feels" after donating a kidney.

A study by S. Rasmussen et al. (2020) identified many possible benefits of donation to their group of 56 donors, both direct and indirect. They include, but are not limited to:

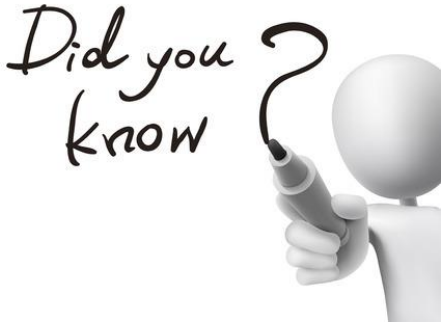
- Less worry about the transplant process.
- Return to “normalcy”.
- Recipient’s ability to go back to work.
- Closer/improved relationships.
- Spiritual/religious benefits.
- Sense of life purpose.
- Sense of pride/satisfaction.
- Feeling increased sense of control over situation.
- Better proactivity towards own health.

Regardless of the reasons, becoming a living donor is a big decision and one that must be right for you, as the donor.

Other things you need to know about living kidney donation

When you donate a kidney, it should not change your lifestyle in a major way. For instance:

- Donating a kidney does not change how long you may live.
- Your chance of getting kidney disease in your remaining kidney will not change.
- The remaining kidney takes over most but not all of the function of both kidneys.
- One kidney does not do as much work as two kidneys do together, but people can live very well with just one kidney.
- Donating a kidney means that you will have about 25-35% permanent loss of kidney function after donation.
- About three out of every 100 people are born with only one kidney and they can expect to live a full life without kidney issues.



RISKS AND BENEFITS TO THE RECIPIENT AFTER LIVING DONATION

There are risks to the recipient with every transplant. Some are related to the process of sharing a kidney with another person, while others are related to general surgery.

Risk from living donor surgery to the recipient

- You can give someone an infection when you donate a kidney.
- If you take part in behavior that puts you at a risk for acute infection with hepatitis B, hepatitis C, or HIV, you can pass along that infection in the kidney that you donate.
    - The doctor that sees you will ask about those behaviors.
    - Some examples of “risky behaviors” are:
        - Illegal drug use.
        - Getting paid for sex.
        - Men having sex with other men.
        - Being in jail/prison.
- If you answer yes to the risk criteria questions in the living donor online questionnaire, we will talk with you about this before you can donate.

- If you are approved to be a donor, we may need to tell your recipient that there **may** be an acute risk for infection. You may not want this person to know that you meet the risk criteria.

Medical risk from surgery to the recipient

Include but are not limited to:

- Being put to sleep for surgery (anesthesia).
- There may be problems during or after surgery, like:
    - Bleeding.
    - Blood clots.
    - Problems with your incision healing.
    - Fluid collecting around your new organ.

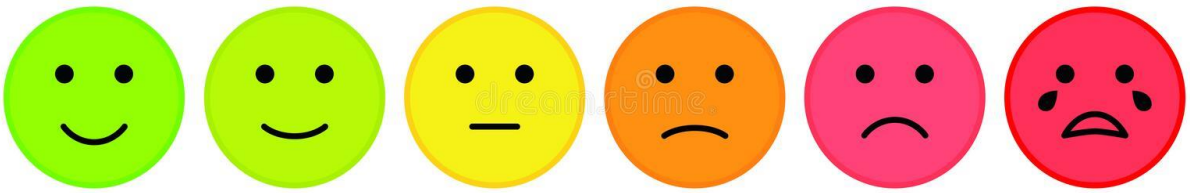
- Your recipient could get an infection after transplant, like a urinary tract infection (UTI) or pneumonia.
- Recipients **must** take anti-rejection medicines after transplant for as long as the organ is working.
- Recipients could have some heart problems, like:
    - Abnormal heart rhythms.
    - Stroke.

    - Heart Attack.
- Rejection of the new kidney.
- The kidney may not work at first and the recipient could need dialysis for a while after surgery until it “wakes up”.
- The new kidney may not work at all, though this is rare.
- Death is also a risk of any surgery or procedure.

Emotional risks after surgery to the recipient

- Recipients could have some changes in their mood, including feelings of sadness/depression, worry/anxiety, fear, anger, or guilt.
- Recipients may have more serious problems with anxiety and/or depression called **post-traumatic stress disorder**.
- Recipients could be worried about how you look after surgery with your new scar.
- Recipients might feel guilty or worry about someone else having to take care of you after surgery.
- A recipient’s life could change in ways that they do not like because of things like changes in their finances, restrictions to their physical activity, or even a temporary return to dialysis because the kidney has not started working yet.

- If a recipient feels any changes in their mood, or if their loved ones see any changes in how they are acting or feeling, then they should **PLEASE** call their transplant nurse coordinator or social worker as soon as possible.



Financial risks after surgery to the recipient

- Possible loss of income and/or missed work (or school) during recovery for either the recipient and/or their caregiver(s).
- If a recipient is getting any kind of benefits related to their ESKD, like disability, those benefits could change after transplant.
- Most patients younger than 65 will lose their Medicare eligibility three years after transplant.

Benefits of transplant to the recipient

Many patients will:

- Live longer after a transplant than they would if they had stayed on dialysis.
- Report feeling better and having more energy.
- Enjoy more free time without having dialysis each week.
- Be able to return to work, school, or other activities.
- Have fewer limits on what they can eat and drink after transplant.

As a kidney living donor, your privacy is important to us

Always know that anyone who thinks that they would like to be a donor can change their mind at **ANY TIME** prior to surgery. Donors change their minds for all different kinds of reasons and that is OK. We will protect your privacy and we will not share those reasons with your recipient.

However, there are some legal limits to that privacy, such as:

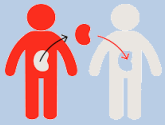
- When someone is in danger of hurting themselves or someone else, we have to tell someone like the police or another doctor, so that we can get help for that person.

- If you get certain infections or cancer in the first two years after surgery, we have to tell the person who got your kidney, that person's transplant center, and other health agencies.

We will always get your permission first, before we share any information with your recipient. You can decide at any time, for any reason, that you do not want to donate a kidney. We will not share that information with your recipient.

HEY! Did you know…?

…that as of 2019, an 84 year old Texas man became the oldest living kidney donor on record? He donated to his 72 year old neighbor!



YOUR LIVING DONOR TEAM

You will meet many people during your evaluation. Below are just a few of the providers you could see.

- **Living Donor Transplant Nurse Coordinator:** This person will help you through the evaluation process. They are a great place to start if you have any questions or concerns.
- **Independent Living Donor Advocate**: This person is not involved with any of our recipients. They are here to ensure **your** protection and best interests throughout the entire evaluation and donation process.
- **Transplant Program Assistant (TPA)**: This person will work with your living donor transplant nurse coordinator to schedule all of the appointments needed for your evaluation.
- **Living Donor Transplant Social Worker**: Our social worker meets with every donor to find out:
    - Your thoughts/feelings about donation.
    - Make sure that you understand all of the risks and benefits of donation, to both yourself and your recipient.

- Make sure that you have the things you will need after surgery to be successful. This could include things like safe housing, family/friend support to help take care of you after surgery, and reliable transportation.
- You will be given a chance to talk about any pressures you may feel to donate.

- **Transplant Financial Coordinator**: All donors will meet with one of our transplant financial coordinators who will:
  - Discuss how your recipient's insurance will cover your care.
  - Discuss any costs you may have during the testing or donation process.
- **Transplant Nephrologist**: A transplant nephrologist has had special training in how to take care of transplanted kidneys and living donors. They will usually meet with a donor at the beginning of their evaluation. They will:

  - Review your medical history.
  - Talk with you about donation benefits and risks.
  - Give you a short physical exam.

- Review the results of your testing up to that point.
- Answer your questions.
- Decide if other tests are needed before donation surgery.

- **Transplant Surgeon**: A transplant surgeon has had special training in how to perform transplant surgeries. The surgeon will usually meet with a donor at the end of their evaluation. They will:
  - Review your medical history.
  - Talk with you about donation benefits and risks.
  - Give you a short physical exam.
  - Review the results of your testing up to that point.
  - Answer your questions.
  - Decide if other tests are needed before donation surgery.

- **Specialist Providers:** Other medical providers may be needed during your evaluation, depending on your health history. Our living donor transplant nurse coordinator will let you know what you need and can help you schedule these appointments. All test results must be reviewed by the transplant team to help decide if donation is a good choice for you.
    - Cardiology.
    - Dermatology.
    - Hepatology.
    - Hematology.
    - Transplant Psychology.
    - Pulmonary.
    - Infectious Disease.
    - Dietician.
    - Urology

WHEN YOUR EVALUATION IS COMPLETE

When the tests are finished, we will review all your test results with you and tell you if you would be a good kidney donor. If it is decided that you can donate a kidney, and your recipient is cleared to receive your kidney, then we will plan a surgery date. When the surgery happens can depend on many things:

- The health status of the recipient.
- Insurance rules.
- The surgery schedule.
- Finding a time that works for both you and the recipient.

DONATION SURGERY

Pre-operative appointments

One to two weeks prior to your scheduled surgery you will be seen at UNC Medical Center for your pre-operative appointments.

- Some tests will need to be done again:
    - Blood tests.
    - EKG.
    - Chest X-ray.
- You will have a physical exam.
- You will be given instructions on what to do the night before your surgery.
- You will sign the consent form for your surgery.

PLEASE NOTE: Sometimes a recipient and donor go through the pre-transplant work-up and the surgery is cancelled at the last minute for a medical problem we cannot control. When this happens, the recipient will stay on our deceased donor transplant waiting list. If possible, surgery will be rescheduled as soon as it is medically safe to do so.

Day of surgery

- Check in at the hospital on the day of surgery at 6:00 am.
- You will have a needle placed in your vein (an “IV”) so you can have fluids during and after the surgery.
- Once you are ready and in the operating room, you will be put under anesthesia. Some people call this being put “to sleep”. A special provider called an Anesthesiologist will be watching you closely while your transplant surgeon(s) are doing the actual surgery.

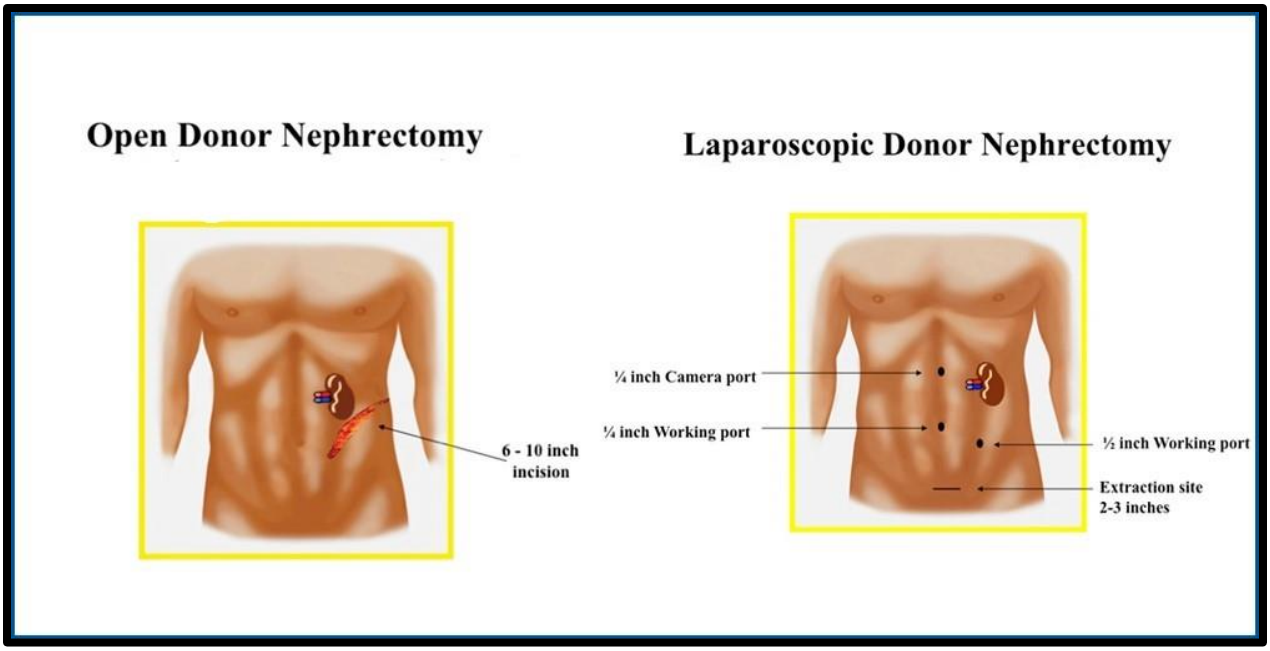
- While you are “asleep”, a tube called a urinary catheter will be put into your bladder. This lets us measure how much urine you are making during and after surgery.
    - This catheter is usually taken out within 24 hours of surgery in your hospital room.

Types of donor surgery

There are two types of living donor kidney surgery: **laparoscopic** and **open flank**.

- The most common one is a **laparoscopic donor surgery.**
    - The surgeon uses very small tools. A laparoscope is a thin lighted tube that is placed into your abdomen. It allows the cuts in the skin to be small and less painful, and you will heal faster.
    - The small opening in your skin to remove the kidney is vertical, meaning the opening is up and down.
    - Your incisions will be closed using special glue.
- In the **open flank surgery**,
    - The wound is about 6-8 inches long on the right or left side of your abdomen under your ribs.
    - The skin and muscle need to be cut in order to reach the kidney.
    - The lowest rib on that side may also be taken out so the surgeons can get to the kidney.
    - Taking out the rib may require a longer healing period but will not cause any long-term problems for you.
    - Because this is a bigger wound, it will be closed with staples that will need to come out about 4-6 weeks after surgery.

- We will schedule this appointment for you with a UNC Medical Center provider.



Care after surgery

- Living donor surgery will take about four hours.
- A transplant provider will come and talk with your family after surgery and let them know how you are doing.
- After the operation, you will go to the recovery room (called the PACU/Post Anesthesia Care Unit) for several hours where you will be carefully watched until you wake up. You will get medicines for pain and IV fluids. Your vital signs (blood pressure, heart rate, breathing, and temperature) will be checked frequently.

- After the recovery room, most donors are moved to the main transplant floor (5 West) for the rest of their hospital stay.
- The amount of urine you are making will be checked frequently after surgery. The urinary catheter is usually taken out after the first day.
- The nurses will ask you to turn in bed, cough, and breathe deeply at least every 1-2 hours while you are awake.
- The nurses will encourage you to get out of bed and walk several times a day.

- You can help decrease problems such as pneumonia, constipation, or blood clots in your legs if you cough, take deep breaths, and walk a lot.
- An IV will be used to give you fluids until you are able to eat or drink. The IV will be removed before you go home.
- Due to the surgery and pain medicines, the bowels are sluggish for a short time. You will be able to drink and eat once your bowels are moving normally. You will start with liquids and by the time you go home, you should be back to your usual diet. Your providers will talk with you more about this after surgery.
- We will teach you how to take care of your incision(s) and change any dressings if needed.

DISCHARGE TO HOME

- The hospital stay is usually about 3 days.
- You will be taught how to care for your wound and what pain medicine can be used before you leave.
- A clinic appointment for after surgery follow up will be made before you leave the hospital. You will need to see a transplant surgeon at one and four weeks after surgery.
    - **Be prepared** to make arrangements to stay close to Chapel Hill (within a two hour drive to UNC Medical Center) after discharge. You will need to be in the area until you are seen for your first post-operative visit.
- You cannot drive until you are cleared by a transplant provider to do so.
- About four weeks after your surgery, your other kidney will have grown a little larger to work better.
- You can return to work by about 3-4 weeks after surgery, **as long as your job does NOT include heavy lifting**.
- **Do not lift more than 10-25 lbs. for three months after surgery**.

    - Remember 10 pounds is about the size of small frozen turkey and 25 pounds is about the size of a large frozen turkey.
- You will need to take it easy for the first six weeks after surgery. You can exercise with some care after 4-6 weeks and little by little increase that to normal levels. Walking is a good exercise. Remember, do not lift more than 10-25 lbs. for **three months** after surgery.
- You should have your blood pressure checked at least once a year and maintain a healthy weight following your surgery.

ORGAN DONORS ARE HEROS

Donating a kidney is a big decision, and it can be a very good experience. Feeling anxious and scared is very normal. It is our hope that this book helps you to understand the process and the risks. Also, we hope reading this allows you to ask more questions. Our staff will be happy to answer any questions you may have. Some people find it helps to talk to family members, friends or their doctor before they decide. If you want to talk to someone who has been a donor in the past, please let us know and we can help set this up.

Do you still have questions? Please call us!

STAY IN TOUCH!

Your ability to help your recipient **does not end** with transplant! All transplant centers are required by UNOS (United Network of Organ Sharing) to follow up with all donors after surgery and get information about how you are doing.

We will be contacting you again at 6 months, 1 year, and 2 years following your surgery date. We will call you, and we will send you messages via your UNC My Chart account and/or regular mail. We will be asking you about your general health. This will include things like:

- Blood pressure.
- Weight.
- Lab tests.

We use this information to:

- Provide you with best care possible after your gift of life.
- Provide your recipient with the best care possible.

- Make overall improvements to our living donor program here at UNC, as well as the larger living donor community across the United States.

The more we know, the better we can provide care. So please help us continue to grow and improve!

Our donors are our superheroes! From all of us here, we…

MYTHS ABOUT LIVING KIDNEY DONATION

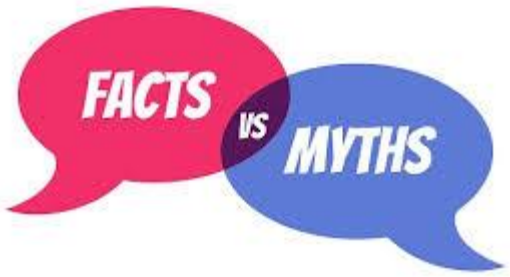
A “myth” is a widely held, but false belief or idea, and there are many of them out there about being an organ donor.

Myth #1: **A kidney donor will have to take medications for the rest of their life.**

Fact: A kidney donor will be given medicines to help with pain and bowel movements when they go home from the hospital. They should only need these for a short period of time. A donor does not have to take medication for the rest of their life as a result of being a donor.

Myth #2: **A kidney donor will have a lot of pain for a long time after surgery.**

Fact: A kidney donor will have some pain after surgery from both the incisions and because of gas and bloating. This pain will slowly get better in the days following surgery and can be controlled with pain medication if necessary.



Myth #3: **A kidney donor will be on bed rest following surgery.**

Fact: A kidney donor will be out of bed and walking on their own before discharge from the hospital.

Myth #4: **A kidney donor will be in the hospital for a long period of time after surgery.**

Fact: A kidney donor will generally be in the hospital for 2-3 nights.

Myth #5: **A kidney donor can no longer participate in sports or exercise.**

Fact: A kidney donor should be able to return to regular activities and exercise at approximately 4-6 weeks following surgery.

Myth #6: **A kidney donor will have to follow a new diet plan following donation.**

Fact: A kidney donor should eat a healthy, well balanced diet. There are no dietary restrictions following donation.

Myth #7: **A kidney donor can no longer drink alcohol following donation.**

Fact: While excessive alcohol use is always dangerous, a kidney donor can consume alcohol in moderation.

Myth #8: **A female kidney donor should not get pregnant after donation.**

Fact: A female kidney donor should wait 3-6 months after donation to become pregnant. The body requires time to recover from the surgery and to adjust to living with one kidney before pregnancy.

Myth #9: **A kidney donor's sex life will be negatively affected by donation.**

Fact: A kidney donor may engage in sexual activity when they feel well enough to do so.

There are many more "myths" out there about transplant and donation. Feel free to call us with any questions. Remember, your questions could address someone else's biggest fear. Help us spread facts about organ donation!

MAPS

MAPS

UNC Hospitals can feel like a big place, especially if you have never been here before. Our original building opened in 1952 under the name "NC Memorial Hospital". It was later renamed "UNC Hospitals" in 1989.

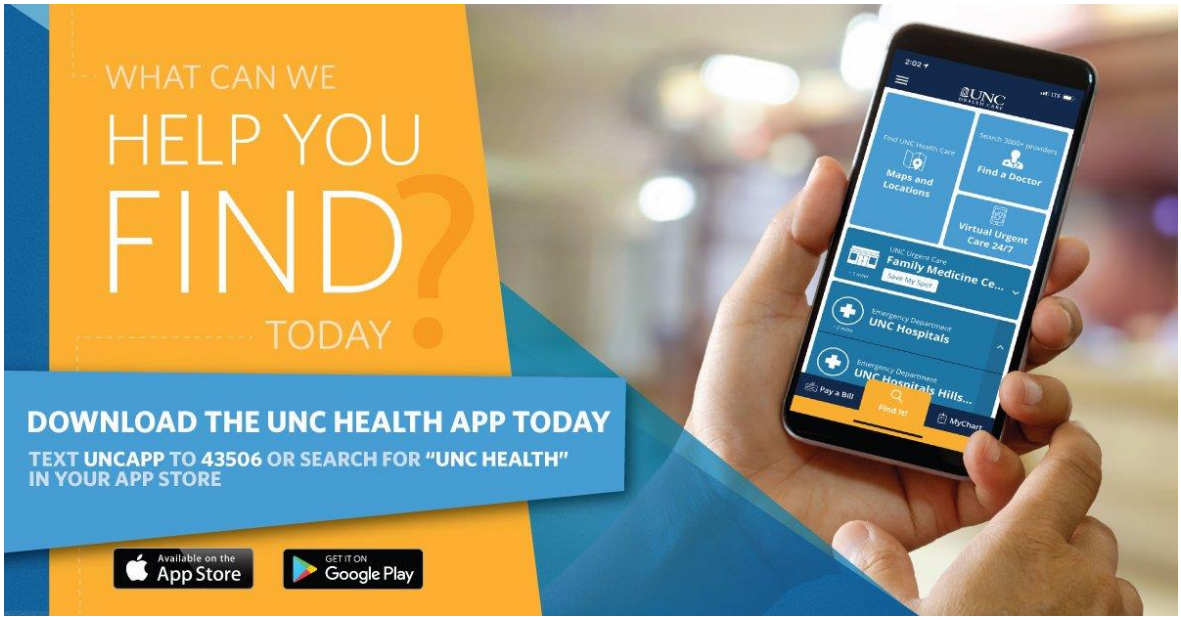
Over the years, UNC Hospitals has seen a lot of change. We have added new buildings, partnered with other hospitals, and added outpatient clinics across the state. This growth has helped us to reach more people and provide more care to the residents of North Carolina. However, it also means that things can seem a *little confusing* when patients and their families/supports are trying to find their way around the system.

Because of the wide variety of care that we offer, and because we are committed to trying to see our patients as soon as possible, you could have appointments across many different places.

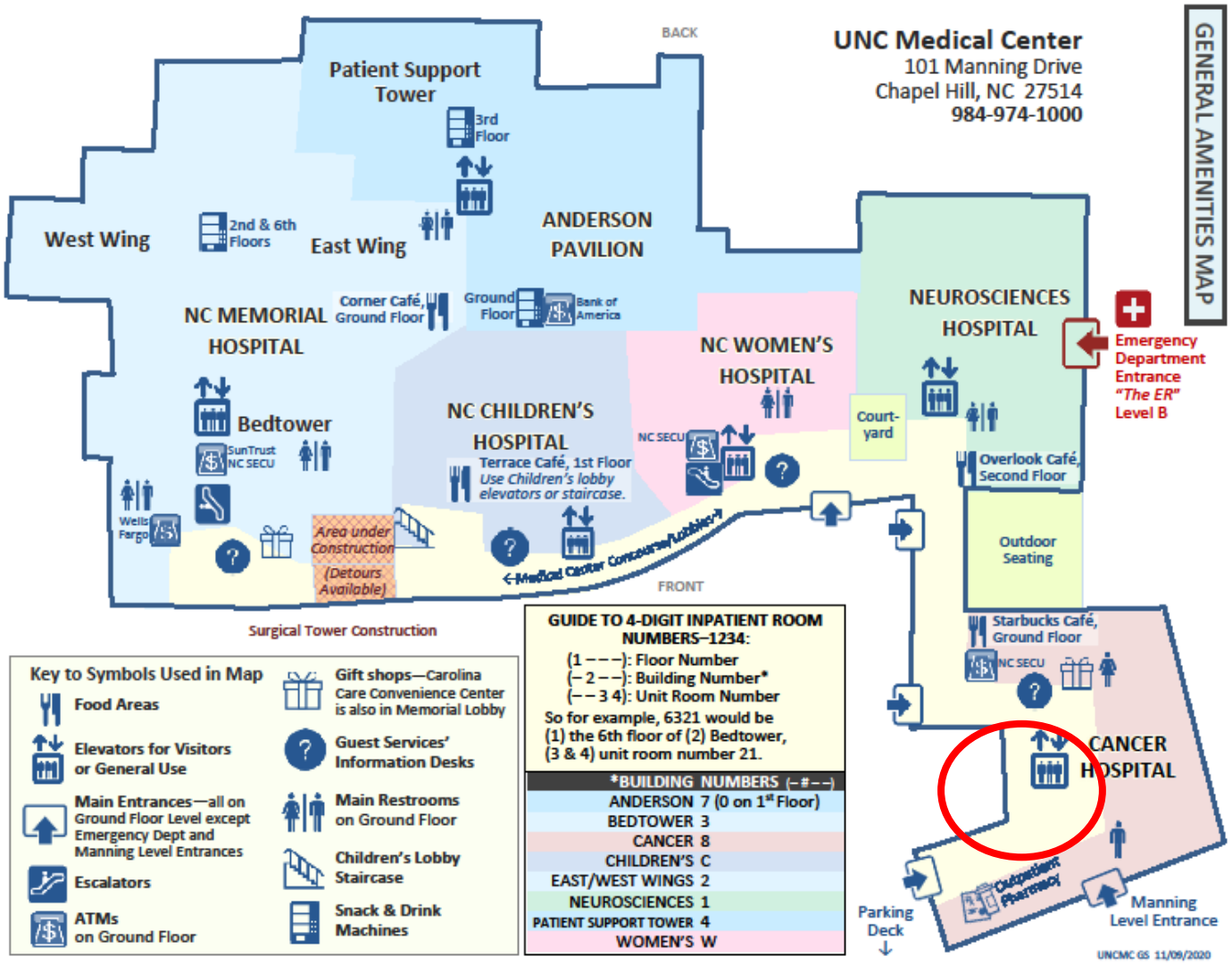
For your convenience, we have attached some maps of common areas to help you find your way to your appointments.

Do not hesitate to ask questions or ask for directions. It is easy to get lost! Any hospital staff member will try to help you find where you are going.

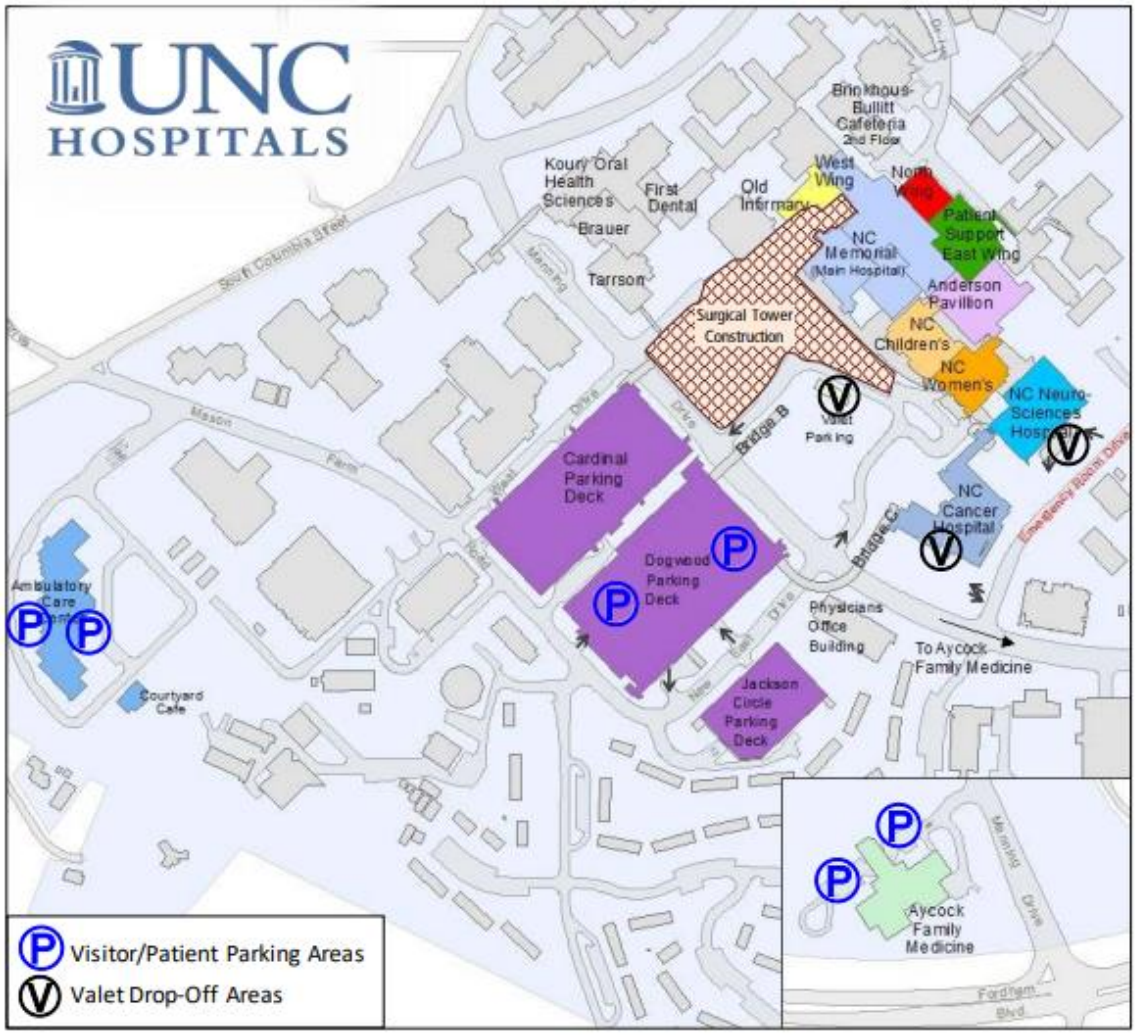
You can download the UNC Health app on your phone, which can help you find your way throughout the hospital buildings.



UNC Health Care-UNC Medical Center (General Map)



UNC Health Care-UNC Medical Center (Parking & Construction)



The UNC Health App

If you have an iPhone or Android phone, you can download the **UNC Health app** for wayfinding assistance and more! Just scan the QR code below and select the link it provides or search for "UNC Health" in your app store.

For additional information, please visit the following websites:

UNC Medical Center **uncmedicalcenter.org**
For Family Resource Guide, click on "Patients & Visitors", then "Family Resource Guide".

UNC Health Care **unchealthcare.org**

UNC Campus Maps **maps.unc.edu**

05/20/2021

UNC Health Care-UNC Medical Center

101 Manning Drive
Chapel Hill, NC 27514
(984)974-1000

Self-Park Options

Public parking is available in the Dogwood Parking Deck *(across from the hospital)* and the Ambulatory Care Center (ACC) on Mason Farm Road at a cost of $1.50 per hour or a fraction thereof, to a maximum of $10 to park your vehicle for a full day.

The Medical Center and ACC lots offer a convenient shuttle service between the parking decks and hospitals. Those parking in either lot can take advantage of the free shuttle to and from the Medical Center to the ACC.

Valet Parking

Valet Parking is available to all patients and visitors to any of the Hospitals at the Medical Center.

Hours available are from 5:30 a.m. - 7:30 p.m., Mon.- Fri.

Cost

$12 per day Valet coupons can be purchased from the Valet Cashier and come in books of five at a cost of $55 per book.

Valet Stations are located the following places:

- Emergency Room main entrance
- In front of the N.C. Children's Hospital
- Manning Level of the Cancer Hospital

Handicapped Parking

Handicapped Parking is available in the Dogwood Parking Deck.

Handicapped-accessible shuttles service these spaces. If you need assistance from the parking deck, please contact the attendant via the call box phones.

For questions and information on Hospital parking options and longer term options, please call (984) 974-1031 for more information.

UNC Health Care-Ambulatory Care Center (ACC)

102 Mason Farm Road
Chapel Hill, NC 27514
(919) 966-7400

Directions from the South:

- Take US 15-501 North to Chapel Hill. US 15-501 becomes South Columbia Street at the NC 54 intersection.
- From South Columbia Street, turn right on Mason Farm Road. The Ambulatory Care Center (ACC) entrance is immediately to your right. The parking lot surrounds the building.

Directions from the North:

- Take NC 86 South (which becomes Martin Luther King Jr. Boulevard) to downtown Chapel Hill.
- Turn right onto Cameron Avenue (2nd light after Franklin Street) then make an immediate left onto Pittsboro Street.
- Bear right when the road splits.
- Turn right on South Columbia Street.
- Turn left onto Mason Farm Road. The Ambulatory Care Center (ACC) entrance is immediately to your right. The parking lot surrounds the building.

Directions from the East:

- Take I-40 West to exit #273A.
- Take NC 54 West to Chapel Hill.
- Take US 15-501 South to Manning Drive.
- Turn right onto Manning Drive.
- Turn left on East Drive (turns into Mason Farm Road). The Ambulatory Care Center (ACC) entrance is 1/2 mile on the left before the light to Columbia Street. The parking lot surrounds the building.

Directions from the West:

- Take NC 54 East to Chapel Hill.
- Exit at Columbia Street/US 15-501 and turn left onto South Columbia Street.
- From South Columbia Street, turn right on Mason Farm Road. The Ambulatory Care Center (ACC) entrance is immediately to your right. The parking lot surrounds the building.

UNC Health Care-Hillsborough Campus

430 Waterstone Drive
Hillsborough, NC 27278
(984) 215-2095

Directions from the North (Durham)

- Take I-85 South
- Take Exit 164 for Hillsborough
- Go Left onto old NC 86 (also known as Churton St)
- Go to the 4th light and turn Left onto Waterstone Drive
- The building and parking lot will be on your right

Directions from the South (Pittsboro)

- Take 15-501 North toward Chapel Hill
- Merge onto 15N/501N/Fordham Blvd toward Durham
- Turn Left onto I-40 West and follow the directions from the East below
-

Directions from the East (Raleigh)

- Take I-40 West toward Greensboro
- Take Exit 261 for Hillsborough
- Bear Right off of the exit onto old NC 86 (also known as Churton St)
- At the first light turn right onto Waterstone Dr.
- The building and parking lot will be on your right

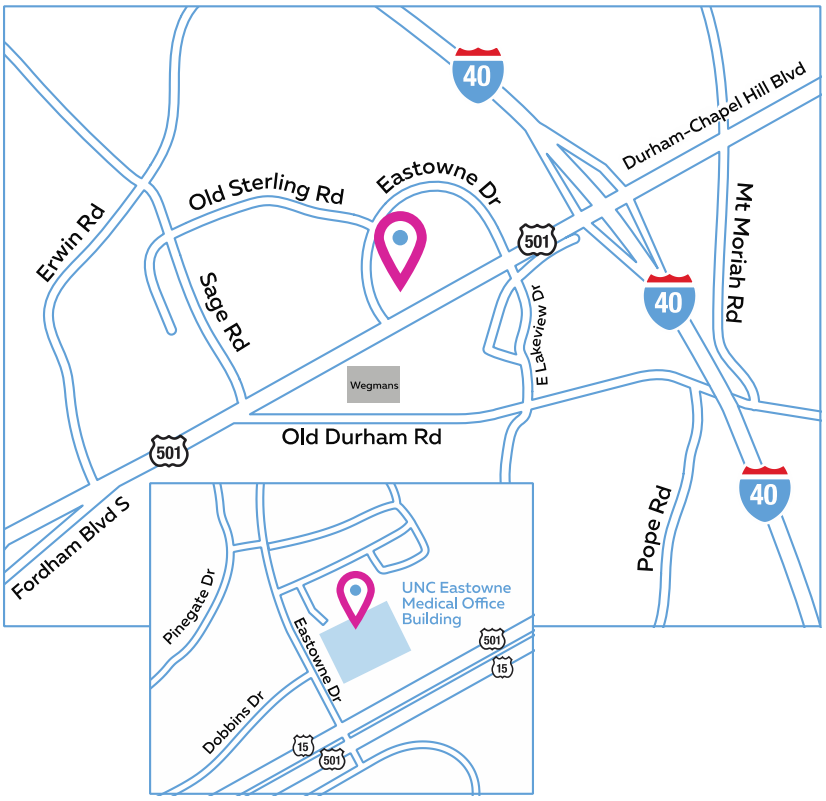
Directions from the West (Greensboro)

- Take I-40 East/ I-85 North towards Raleigh/Durham
- At the I-40/I-85 split stay to the right onto I-40 East towards Raleigh
- Take exit 261 for Hillsborough
- Turn Left off the exit onto old NC 86 (Churton St)

- At the first light turn Right onto Waterstone Dr.

UNC Health Care—Eastowne Medical Office Building

UNC Eastowne Medical Office Building



Location

100 Eastowne Drive
Chapel Hill, NC 27514

Directions from I-40 Eastbound

1. Take exit 270 for US-15/US-501 toward Chapel Hill/Durham
2. Turn right onto US-15 S/US-501 toward Chapel Hill/Durham
3. Turn right onto Eastowne Dr
4. Turn right onto 100-150 Eastowne Dr
5. Parking deck and the Medical Office Building are located on the right

Directions from I-40 Westbound

1. Take exit 270 for US-15/US-501 toward Chapel Hill/Durham
2. Use the left 2 lanes to turn left onto US-15 S/US-501 S/Durham-Chapel Hill Blvd
3. Turn right onto Eastowne Dr
4. Turn right onto 100-150 Eastowne Dr
5. Parking deck and the Medical Office Building are located on the right

Directions from the Medical Center

1. Turn left onto Manning Dr
2. Use the left 2 lanes to turn left onto Fordham Blvd S
3. Turn left onto Eastowne Dr
4. Turn right onto 100-150 Eastowne Dr
5. Parking deck and the Medical Office Building are located on the right

UNC HEALTH®

Learn more at
unchealthcare.org/eastowne