

Kidney Transplant

What Is a Kidney Transplant?

- An operation to place a healthy kidney in someone whose kidneys have failed
- 1st successful kidney transplant was performed in 1954 in Boston



What Does a Kidney Transplant Do?

A kidney transplant does what your natural kidneys did:

- Filters & removes wastes from blood & excess fluid in urine
- Makes hormones to control blood pressure, make red blood cells & keep bones healthy
- Balances levels of calcium, phosphorus, sodium & potassium

How Successful Are Kidney Transplants?

- Kidneys from living donors usually last longer than those from deceased donors
- Getting a preemptive kidney transplant before dialysis may help you live longer
- You can be evaluated as your kidney function declines & get a transplant when your GFR is 20 or less

How Long Might My Kidney Transplant Last?

	Donor Type	Transplant Success*
1 year	Living	97%
	Deceased	93%
5 years	Living	85%
	Deceased	74%
10 years	Living	62%
	Deceased	46%

USRDS 2017 Annual Data Report (2014 data)

*Adjusted by age, gender, race, ethnicity, primary diagnosis & first or other transplant

How Do I Get a Transplant?

- You can contact a transplant center at any time - <https://www.srtr.org/transplant-centers/> (choose organ & distance from you to see list & data)
- You must be accepted by a transplant program & their acceptance rules may vary
- **You CAN get one before dialysis, once GFR is 20**
- Listing in more than 1 area could get a transplant faster
- Diabetes? Ask about kidney-pancreas transplant
- Evaluation is NOT a commitment to be transplanted

What Might Keep Me from Getting Listed for a Transplant?

- Severe heart or circulatory disease, liver disease, active infection, recent cancer
- Morbid obesity
- Active substance abuse (alcohol, drugs, tobacco)
- Uncontrolled psychiatric illness
- Not following your diet, skipping/shortening dialysis or not taking medications as prescribed
- Lack of a plan to pay for surgery or medications

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What Can Help Me Get a Transplant?

- Ask for transplant center's acceptance criteria
- Keep healthy – exercise, avoid people with colds/flu, wash hands often
- Lose weight, if obese
- If you smoke, stop
- Find a healthy living donor
- Do home dialysis (PD/HD) – helps transplant team see you can self-manage, may stay healthier
- Avoid blood transfusions, when possible

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Where Do Donated Kidneys Come from?

Deceased donor:

- Signed a donor card
- Told family to donate organs at death
- Stranger or someone who designates a recipient

Living donor:

- Blood relative
- Spouse
- Friend
- "Good Samaritan" (anonymous or altruistic donor)

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Who Pays for Transplant?

- **Living donor** covered by recipient's plan for work-up, surgery & follow-up; donor's insurance covers other health problems
- **Recipient** needs good health insurance:
 - Through work, as a spouse/dependent, or through an individual plan
 - Medicare Part A must be in effect the month you get the transplant to have Part B ever pay for anti-rejection drugs
 - Medigap plans &/or Medicaid can help pay costs

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Who Pays After the Transplant?

- Medicare pays for just 36 months if you have it due to kidney failure **only**
- Ask the transplant financial counselor to help you plan for when Medicare ends:
 - Employer health plan
 - Individual plan on or off the ACA Marketplace, if available

[HealthCare.gov](https://www.healthcare.gov)

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Tissue Typing Glossary

- **Antigens** – body sees as foreign, "not self" – bacteria, viruses, pollen, transplanted organs, etc.
- **Antibodies** – made by the body to fight antigens
- **Human leukocyte antigen (HLA)** – blood test finds if donor & recipient antigens are similar
- **Panel reactive antibody (PRA)** – blood test finds how many HLA antibodies there are (0-99%)
- Transplants succeed more with similar antigens

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What Blood Types Match?

Blood types come from ABO and Rh antigens that react if types don't agree; people with type O are "universal donors" (no blood type antigens); people with type AB are "universal recipients"; all subtypes are not listed

DONOR	RECIPIENT
A2*, O	O
A or O	A
A2*, B or O	B
AB, A, B, or O	AB

*May also be called non-A1

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What Is Crossmatching?

- Picks up antigens other than ABO
- Donor & recipient blood are mixed
 - If blood clots = **positive** crossmatch, which means a lot of antibodies for that organ (**bad**)
 - If blood doesn't clot = **negative** crossmatch, which means no or fewer antibodies (**good**)

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What Are Some Myths About Kidney Transplant?

- Myth: Transplant cures kidney failure
 - **Fact: Transplant is a treatment, not a cure**
- Myth: You can't get a transplant if you're over 60
 - **Fact: Age is less important than health**
- Myth: You move higher up the list as others get transplants
 - **Fact: Organ sharing system is complex**

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How Does the UNOS Computer Transplant "List" Work? (Deceased Donor Kidneys Only)

- Location
- Blood type
- Recipient's antibody level
- Antigen match
- Recipient's wait time
- Prior organ donation
- Donor kidney health
 - Creatinine
 - Height & weight
 - Hepatitis C
 - Other
- How long recipient might live & need a working kidney

See <https://optn.transplant.hrsa.gov>

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What Tests Do I Need to Get a Kidney Transplant?

Tests may vary by transplant center

- ABO blood typing
- HLA, PRA
- Physical exam
- Medical history
- Chest x-ray
- Kidney ultrasound
- Urine test
- Heart stress test
- Circulation test
- Dental exam
- Psychosocial assessment
- Insurance status
- **Repeat yearly!**

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What Can I Expect in the Hospital If I Get a Transplant?

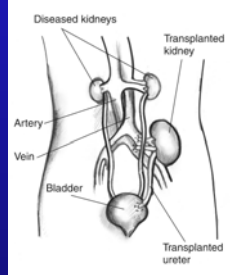
- Pre-surgery prep
- Anesthesia
- Surgical incision
- Organ placement
- Staples or dissolving stitches
- Length of surgery
- Time in recovery
- Hospital stay varies; usually less than week

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Where Does the New Kidney Go?

Most of the time, your natural kidneys are left in place when you get a kidney transplant



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What Can I Expect After Getting a Transplant?

- Different diet & meds from dialysis
- Mild/moderate pain for 3-5 days
 - Report pain or swelling after this to your doctor/nurse
- Frequent clinic visits & labs for first 2 to 3 months, then less often
- Return to activities in 4-8 weeks
 - Ask your doctor when it's OK to exercise, return to work/school or get pregnant
- Some emotional ups & downs



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What Are Possible Complications If I Get a Kidney Transplant?

- Kidney may be slow to work or never work
- Kidney may reject
- Anesthesia problems
- Infection
- Disease from donated kidney
- Bleeding & transfusion
- Clotting
- Drug toxicity
- Injury to another organ
- Urologic problems
- Death (rare)

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What Is Rejection?

Rejection is your body's alarm system

- **Hyperacute rejection** (rare) happens instantly
- **Acute rejection** can happen in first months; 92% reversible; rarely causes transplant failure
- **Chronic rejection** happens over time & can cause transplant failure; needs close monitoring by transplant team

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What Does Rejection Feel Like and How Is It Diagnosed?

Symptoms:

- Pain/soreness at site
- Fever
- Flu-like symptoms
- Pulse rate changes
- Any symptoms of kidney disease

Tests:

- Blood test
- Kidney scan
- Kidney ultrasound
- Kidney biopsy

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About Immunosuppressants (Anti-rejection Drugs)

- Drugs taken for life of the kidney to keep your body from rejecting the kidney
- Can weaken your ability to fight off germs
- Have side effects
- Doctor balances risk of rejection & infection
- May interact with certain foods, ask your druggist



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What Are Possible Side Effects of Anti-rejection Drugs?

- Risk of infections
- Kidney damage
- High blood pressure
- Diabetes
- High cholesterol
- Cancer
- Cataracts
- Bone disease
- Joint problems
- Mood swings
- Increased hair growth
- Gum overgrowth
- Increased appetite
- Weight gain
- Stomach irritation
- Acne
- Rounder face
- Flushed feeling

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How Do I Keep My New Kidney Healthy?

- Watch for symptoms of rejection
- Take medicines **exactly** as prescribed
- Visit the clinic for regular follow-ups & blood draws
- Report symptoms, problems or concerns
- Stick to your prescribed diet – ask what foods, meds to avoid
- Drink as much fluid as your doctor tells you to
- Exercise regularly

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What Else Can I Do to Keep My Kidney Healthy?

Things to avoid:

- Crowds for awhile
- Contagious illness
- Gardening/cleaning without gloves
- Pet wastes, some pets
- Construction sites
- Live vaccines
- OTC drugs
- Herbal drugs

Things to do:

- Get good dental care
- Wash hands frequently
- Clean & dress wounds
- Report signs of infection
- Practice good food safety
- Get vaccines and boosters



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Who Can Be My Living Donor?

Anyone evaluated by a transplant program who:

- Is in excellent general health
- Has healthy kidneys
- Is a good blood/tissue match to you
- Is emotionally ready to donate

To find out more go to:

<https://organdonor.gov/>

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How Is a Living Donor Evaluated? Similar to Recipient

- ABO blood typing
- HLA typing
- Crossmatching
- Disease screening
- Urine test
- Physical exam
- Medical history
- Chest X ray
- Kidney imaging
- EKG (heart test)
- Psychosocial assessment
- Independent donor advocate educates & protects donor's rights

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What If My Donor and I Don't Match?

- Deceased donor list
- Paired donor exchange
- Chain donation
- Other



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What Can a Living Donor Expect in Surgery?

- Pre-surgery preparation
- Anesthesia
- Surgical incision
- Kidney removal (traditional or laparoscopic)
- Staples or dissolving stitches
- Length of surgery
- Time in recovery room
- Hospital stay varies, but usually less than week

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What Can a Living Donor Expect After Surgery?

- Post-surgical pain or discomfort
- Scarring
- Fatigue for short time
- May not be able to drive for 2-4 weeks
- Return to activities in 4-6 weeks, sometimes longer
- Ask your doctor when it's safe to exercise, return to work/school or get pregnant
- Protect your remaining kidney & get follow-up
- Some emotional ups & downs

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What Are Possible Complications If I Donate a Kidney?

- Anesthesia problems
- Infection
- Injury to other organ
- Bleeding, transfusion
- Clotting
- Reduced kidney function
- High blood pressure
- Transplant may never work or reject
- Death (very rare)

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Disadvantages of Transplant

- Risks of surgery & complications
- Risk of infection/rejection
- Risk of cancer
- Small risk of other diseases from kidney
- Medication side effects
- Stress during wait & fear of rejection after transplant
- Costly lifelong anti-rejection meds
- Medicare ends after 36 months if you're under 65 & not disabled for other condition; need other plan
- Disability checks based on ESRD could end 12 months after transplant

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Advantages of Transplant

- Closest to normal kidney function
- More "normal" lifestyle
- May live longer
- Least limited diet
- Probably feel better than on dialysis
- Less complex treatment
- No dialysis (still have doctor visits)
- No wait for Medicare if transplanted before 1st dialysis or end of waiting period

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You Can Live a Good Life With a Transplant!



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