

TALKING ABOUT TRANSPLANTATION



*Questions and Answers  
for Transplant Candidates about*

# Kidney Allocation

UNITED NETWORK FOR ORGAN SHARING

UNOS<sup>SM</sup>

## Questions and Answers for Transplant Candidates about the Kidney Allocation System

United Network for Organ Sharing (UNOS) is a non-profit charitable organization that serves as the nation's transplant system—known as the Organ Procurement and Transplantation Network (OPTN)—under contract with the federal government. As the OPTN, UNOS helps create and define organ sharing policies that make the best use of donated organs. This process involves continuously evaluating new advances and discoveries so policies can be adapted to best serve patients waiting for transplants.

All transplant programs and organ procurement organizations throughout the country are OPTN/UNOS members and are obligated to follow the policies the OPTN creates for allocating organs.

### How are kidneys classified?

Every kidney offered for a transplant has a Kidney Donor Profile Index (KDPI) score. This is a percentage score that ranges from zero to 100 percent. The score is associated with how long the kidney is likely to function when compared to other kidneys. A KDPI score of 20 percent means that the kidney is likely to function longer than 80 percent of other available kidneys. A KDPI score of 60 percent means that the kidney is likely to function longer than 40 percent of other available kidneys.

### What goes into a KDPI score?

The KDPI is calculated based on facts about the donor that affect how long the kidney is likely to function. These factors include:

- Age
- Height
- Weight
- Ethnicity
- Whether the donor died due to loss of heart function or loss of brain function
- Stroke as cause of death
- History of high blood pressure
- History of diabetes
- Exposure to the hepatitis C virus
- Serum creatinine (a measure of kidney function)

## How are transplant candidates classified?

Each kidney candidate gets an individual Estimated Post-Transplant Survival (EPTS) score. This is a percentage score that ranges from zero to 100 percent. The score is associated with how long the candidate will need a functioning kidney transplant when compared with other candidates. A person with an EPTS score of 20 percent is likely to need a kidney longer than 80 percent of other candidates. Someone with an EPTS score of 60 percent will likely need a kidney longer than 40 percent of other people. Your transplant team can calculate your EPTS score for you.

### What goes into an EPTS score?

The EPTS is calculated based on facts about the candidate that affect how long you are likely to need a kidney.

These factors include:

- *Age*
- *Length of time spent on dialysis*
- *Having received a previous transplant (of any organ)*
- *Current diagnosis of diabetes*

## How are KDPI and EPTS scores used in allocating kidneys?

The 20 percent of kidneys that are expected to last the longest—those with a KDPI score of 20 percent or less—are first offered to patients likely to need a transplant the longest – those with an EPTS of 20 percent or less. If a kidney with a KDPI of 20 percent or less is not accepted for any of these patients, it is then offered to any other person who would match, regardless of their EPTS score.

Kidneys with high KDPI scores are expected to function for a shorter amount of time than others. They may be best used to help candidates who are less able to stay on dialysis for a long time.

The 15 percent of donated kidneys likely to function the shortest time (those with a KDPI greater than 85 percent) will be offered first to a wider area of the country than other kidneys. The goal is to encourage use of these kidneys by finding a suitable patient as quickly as possible.

Your transplant team can discuss with you the best options for matching based on your EPTS score and the types of kidneys that would best meet your need.

### **How are children and teenagers matched?**

There are not many pediatric kidney candidates (those who are younger than age 18), but they risk having growth and developmental issues if they must wait a long time for a transplant. For this reason, they receive priority for the 35 percent of kidneys that are likely to function the longest – those with a KDPI score of 35 percent or lower.

### **How does the system help hard-to-match patients?**

Some patients are hard to match with most kidney offers because they have uncommon blood types. Others are likely to have an immune system rejection for most kidneys. The new system boosts their chances of getting a matching offer.

People with blood type B often wait longer for a kidney than people with other blood types, in part because it is harder to find a donor with type B blood.

Donors with blood type A generally can't donate to a person with blood type B. However, some blood type A donors have a "subtype" that allows them to match a type B candidate. The system gives first priority for these donor kidneys for type B patients. Since blood type A donors are more common than blood type B donors, more offers should be available for type B candidates.

In other cases, people have developed immune system responses that make it very hard to find a kidney their body won't reject. This may happen because of having a previous transplant or blood transfusion, or even from pregnancy. People who are "highly sensitized" often wait five or more years before receiving even one kidney offer.

The system gives immune sensitized candidates more priority for kidneys they aren't likely to reject. People who have a slightly higher sensitivity get slightly more priority. People who are very highly sensitized (98 percent or above) will get much more priority. Kidneys that are offered first to highly sensitized candidates, but don't get accepted for them, are then offered to other patients.

Your transplant team can discuss with you whether you are sensitized and, if so, the additional priority you would receive for matching kidneys.

### **How is waiting time calculated?**

A transplant program may evaluate and list you for a transplant even before you start dialysis. If you are listed early, you can be matched for deceased donor kidneys based on medical matching criteria in the kidney allocation policy. You would not receive additional priority for waiting time until you either start dialysis or have kidney failure (a creatinine clearance below 20 ml/minute).

### **What if I'm not listed for a transplant but want to be?**

Talk to your doctor about your current health and your treatment options. If you want to be considered for a kidney transplant, it would be best to get evaluated and listed by a transplant hospital when, or just before, you start dialysis or reach end-stage kidney failure. This will allow you to be considered as early as possible for a kidney offer.

### **For more information**

Start with your doctor or the medical team at your transplant center. They know the most about your specific medical condition and treatment. Don't be afraid to ask questions. It will help you to have a detailed understanding of all your treatment options.

UNOS' Patient Services phone line (888-894-6361) can provide information about the OPTN and UNOS, allocation policy and other resources available to you. Additional information is available online on the following websites:

<http://www.transplantliving.org>

<http://www.unos.org>

<http://optn.transplant.hrsa.gov>

<http://www.srtr.org>

*Our mission is to advance organ availability and transplantation  
by uniting and supporting its communities for the benefit of patients  
through education, technology and policy development.*



[www.unos.org/social](http://www.unos.org/social)

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