

Where Will My New Lung Come From?

The Organ Shortage

There is a severe shortage of organs for transplant. This means that the wait for a lung transplant can take years. Patients may die while they wait. The UW Transplant Program has led the way to find new ways to increase the number of good organs for transplant. When you are told you need a lung transplant, you have options about where your new lung will come from. It is vital that you explore these options fully.

Donation After Brain Death (Deceased Donor)

The most common type of organ donor is a person who has suffered a head injury that caused brain death. "Brain death" occurs when someone does not get enough oxygen to the brain and the brain stops working. This is often due to trauma or a stroke. Doctors can do tests to tell when someone is brain dead.

Because the brain controls breathing, people in a hospital that are brain dead are on a breathing machine. The breathing tube and medicines help the person's body to function even after brain death. This allows the heart to keep beating and supply the lung and other organs with blood and oxygen until a transplant team can arrive. Once the lung is removed, it should be transplanted within 12 hours. Lung from these types of donors are called "standard donor lung."

Donation After Circulatory Death (Deceased Donor)

There may be times that a patient's trauma is so bad that doctors can't save their life; but, they are not "brain dead." If this happens, the doctor meets with the patient's family to decide if life support should be stopped. If the family chooses to remove life support,

the machines are turned off, and the patient can die peacefully. These patients may or may not be able to donate.

Transplant teams are on site when the life support is turned off. When the patient's heart stops beating, they are declared dead by the doctor. Once they are declared dead, the transplant teams can remove the organs. This is called donation after circulatory death (DCD).

These lungs may have some damage, due to lack of blood flow when the organs are removed. The increased risks with DCD lungs include:

- Primary graft failure
- Ischemia/reperfusion injury
- Shorter long-term graft survival

Long-term graft survival means how long a lung works. A standard lung has a graft survival of about 50% at 5 years. The graft survival after a DCD lung is not yet well known, but it may be like standard donor lungs.

A DCD lung can help you get a transplant sooner which will increase your chance of staying alive longer. This could be most helpful for patients who have many health concerns and those that may have declining health.

You will be asked if you are willing to accept a DCD lung at your evaluation visit. If you are, you will sign a consent form for this. You can change your mind at any time. If you choose not to accept this type of organ, you will not lose your place on the list. If you accept a DCD lung, you will increase your chance of getting a transplant sooner.

“Increased Risk” Donors

You may be offered an organ from a deceased donor that is at increased risk for spreading some infections.

Donors are an “increased risk” based on the 2013 Public Health Service (PHS) guidelines. Those at “increased risk” may include sex workers, drug users, or those with same sex partners. It is not the norm to accept organs from such donors unless we feel that the good far outweighs the would-be risk. Blood tests are done on potential donors to look for viruses such as HIV, Hepatitis B and Hepatitis C. No test is perfect, and false negative results can happen.

There is a small chance (1 in 60,000 to 1 in 2,000,000) that an infection could be passed on. We believe that the risks of getting this type of lung are very small. We will let you know when the lung is offered if it is from an increased risk donor. You can then decide if you want to accept this type of lung or not. If you choose not to accept the lung, you will not lose your place on the waiting list.

Hepatitis C (HCV) Positive Donors

Hepatitis C is a virus that can damage the liver. Because hepatitis does not affect the lung and we have effective medicines to treat this virus we can often use lungs from donors who have had or have hepatitis C.

Donors that have had hepatitis C and do not have an active infection are very low risk. If you receive a lung from a donor that has had hepatitis C we will draw labs on a schedule to check you for signs of this virus. You likely would not need other medicines.

Donors that have an active hepatitis infection can be safely used because we now have good medicines to treat this virus. Patients who receive a lung from a donor with an active hepatitis C infection will need to take medicine to treat the virus. When you are placed on the waiting list the transplant team will discuss with you if you are willing to accept a hepatitis C donor lung. If you agree you will be required to sign a consent. If you choose not to accept this lung, you will not lose your place on the waiting list.

Hepatitis B Core Antibody + Donors

Rarely we receive lungs from donors who are found to have a possible past Hepatitis B infection. We feel these lungs can safely be given to patients who have been vaccinated and whose blood tests show they are immune to hepatitis B. All patients who receive a lung from a donor with a past infection will still need to take a medicine to protect them from getting hepatitis B.

What will I be told about my donor?

Laws limit how much we can tell you about your donor. We can't tell you the donor's age, gender, or personal or health history. The United Network for Organ Sharing (UNOS) distributes the organs. The Organ Procurement Organization (OPO) informs the UW Transplant Program when a lung is found and who is number one on the UNOS list to get the lung.

The OPO does a thorough screening for all would-be donors to try and find any illness that could affect the transplant organ or the patient who gets it. This screening can be limited by time constraints between the time that the donor was injured, and when the organ is obtained. Your donor's evaluation and screening results may impact your care after transplant. This includes the need for more tests or medicines. We believe the risk

of more treatment outweighs the risk of waiting for another organ. We use our best knowledge and judgment to make sure every organ we transplant will not harm the patient who gets it.

How do I choose?

There are risks and benefits of each type of lung transplant. Members of the transplant team can tell you more about this topic. They can help you choose the type of transplant that may be best for you.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 6/2019. University of Wisconsin Hospital and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8086