

## Lung Transplant

Lung transplantation is a well-established surgical procedure for some individuals with end stage lung disease, including cystic fibrosis (CF). First performed in Australia in 1990; today more than 150 procedures are performed annually. Australia's lung transplant program is highly regarded and has an extremely good survival rate; 70% of those transplanted will live for more than five years.

There are four centres for lung transplantation in Australia:

- The Alfred Hospital, Melbourne, VIC;
- St Vincent's Hospital, Sydney, NSW;
- The Prince Charles Hospital, Brisbane, QLD and
- Fiona Stanley Hospital, Perth, WA.

The Paediatric Lung Transplant Program at the Alfred Hospital is the only paediatric service in Australia.

Lung transplantation does have some risks and not all transplants are successful. It is important to weigh the benefits against the risks and complications of having a transplant, and it is a personal and difficult decision. You are encouraged to have an honest discussion about what your expectations are with your CF team, and it is strongly advised to meet with the transplant team.

### Evaluation for Transplant

Some people do not wish to go through the process of being considered for a lung transplant and wish to live their lives without intervention. It is OK to choose this path.



If you do decide to go through the transplant assessment to see if it is the best option for you, you will be referred to the lung transplant team.

The assessment process for transplant is extensive and involves many tests such as lung, heart and kidney function, bone scans, blood tests, exercise testing and social work consultation and psychiatric assessment. These tests and assessments should ideally be performed prior to your condition deteriorating to the point where transplantation is required. Unfortunately, there is no guarantee that transplant will be found to be the best treatment option for you by the transplant team. If this is the case the team will discuss treatment options with you.

### Waiting

If it is decided transplantation is the best option for you, and when the time is right, you will be placed on the waiting list. The waiting time varies and could be weeks, months or even more than a year. Finding an appropriate donor is not always easy due to strict compatibility criteria which

includes blood type, size, and antibody screening. These tests are important to ensure that the new lungs function well and are not targeted by your immune system.

While you remain on the waitlist you will need to be living within two hours of the transplant centre. You may be eligible for financial assistance to relocate from rural areas or interstate.

It is important to maintain your health, including your weight, while waiting for your transplant. You will have regular appointments with your transplant team, approximately every four to eight weeks, depending on the transplant centre. Some centres require patients to participate in an exercise program. You must attend all your appointments. Patient compliance is an important component in the commitment to the transplant process.

The waiting time can be a very emotional and stressful time for you and your family. You may want to talk with others who have gone through the experience. Cystic Fibrosis WA (CFWA) can refer you to people willing to share their experience. CFWA social work support is also available on request.

## The Transplant Operation

Individuals with CF will have both lungs transplanted; this is known as a bilateral lung transplant. The transplant is performed by an expert team and takes four to ten hours depending on the difficulty of removing your lungs and inserting the new ones. You will wake up in intensive care and be on a ventilator, have chest drains, an epidural and a number of IV lines. Once you are breathing on your own and doctors are happy with your progress, you will be transferred to a ward. Most people are in hospital for approximately three weeks after the operation.

## Post-Transplant Care

After the operation, you will need to take immunosuppressive medications for life to prevent organ rejection. It is important that you develop a routine for taking all your medications at the correct time and dosage, as failing to take medications is a common cause of transplant failure. You will also be on medications and antibiotics to prevent and control the common infections that transplant patients are susceptible to. To identify problems early you will be asked to monitor your temperature and measure your FEV1 at home. It is important to do your daily lung function testing so infection or rejection can be identified and treated early.

It is important to remember that you will still have CF except for in your new lungs and you will need to continue required treatments to minimise risk of CF-related complications. After transplant, many people enjoy a vast improvement in quality of life and enjoy activities they could previously not have done.

## How Can Others Help?

Lung transplant is a treatment and not a cure for CF, but it can save lives. People who need a lung transplant are usually very ill because their lungs are failing. A shortage of suitable donors is an issue that delays lung transplantation. A simple way people can help is by registering with the national donor service.

## Useful Resources

- [Transplant Services Brochure \(CFWA\)](#)
- [Inspirational Transplant Stories \(CFWA\)](#)
- [Lung transplant interviews \(CFSA\)](#)
- [Donate Life](#)
- [Heart and Lung Transplant Foundation](#)
- [CFWA Factsheets](#)

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