To donate life... know their wishes.

Eye and tissue donation

Each year the lives of thousands of Australians are transformed through the transplantation of donated eye and tissue. About 1% of people die in circumstances in hospital that will enable organ donation. Many more people can become eye and tissue donors as tissues can be donated up to 24 hours after death regardless of where death occurred.

One donor can transform the lives of many people. There are often 20-30 recipients who benefit from one multi-tissue donor. Eye and tissue donation can make the difference between seeing and being blind, mobility and never walking again, or a speedy rather than protracted recovery from trauma, cancer or disease.

How is eye and tissue retrieved?

Eye and tissue retrieval is performed by specially qualified and trained health professionals. Tissue is retrieved through operations with incisions carefully sutured as would follow any normal surgical procedure. There is only a light graze following skin donation. The donor is always treated with the utmost respect and dignity.

Can I become an eye and tissue donor?

Almost anyone can donate eye and tissue. While your age and medical history will be considered, you shouldn’t assume you’re too old or not healthy enough to donate. Eyes and tissues can be retrieved up to 24 hours after a person has died.

You can register your donation decision on the Australian Organ Donor Register at donorregister.gov.au and remember to discuss your decision with your family.

Why do some people need eye and tissue transplants?

Adults and children need eye and tissue transplants for a range of reasons. These include:

- **Eyes/corneas**: Blindness, eye trauma, disease and infection.
- **Bone/tendons**: Bone cancer, trauma, joint surgery or correction of spinal deformities in adolescents.
- **Heart valves**: Valve disease, infection and genetic defects.
- **Skin**: To treat severe burns, unhealed wounds and injuries resulting in large skin loss.
What eye and tissue can I donate?

Eye tissue donation

Donation of eye tissue allows corneal and scleral transplantation. The cornea is the clear tissue which covers the coloured part of the eye. It allows light to pass through to the retina allowing sight. When problems develop in the cornea, people’s vision rapidly deteriorates. Donated eye tissue can prevent blindness and can restore sight to people who are partially or completely blind due to corneal damage following a genetic condition, illness or injury.

The sclera is the white part that surrounds the eye. Scleral grafts are performed to prevent blindness due to injury or in people who have had cancer removed from their eye or to repair integrity of an eye that has had a corneal perforation.

There is no strict age limit for eye donation.

Bone and tendon donation

Bone is the second most commonly used donated tissue in the world. Only blood is more regularly donated and received. Donated bone and tendons can be grafted to replace bone and ligaments that have been lost as a result of disease, tumours or injury.

Donation can save a limb of a person who has developed cancer and would otherwise face limb amputation. It can also aid fracture healing, strengthen hip and knee joint replacements, replace torn ligaments or repair spinal deformities. Recipients’ normal, healthy, professional and active lives would not be possible without these essential transplants.
Skin donation
Skin grafting often saves lives. Skin grafts are the most effective way to treat people with severe burns. Children in particular need skin grafts as a small burn or scald can cover most of their body. Skin grafts are medically recognised as the most effective way to minimise scarring and promote healing of severe burns.

When skin is donated, only a very thin layer (similar to tissue paper) is removed and the area from which it is retrieved looks like a light graze. A burned patient with severe burns may need repeat skin grafting from numerous donors until their burns heal.

Heart tissue donation
Heart tissue donations are often used to repair congenital defects in young children and babies and to replace diseased valves in adults. Heart tissue donation markedly improves quality of life, and can sometimes save lives.

While artificial valves and some animal valves can also be used, human heart tissue is preferable because it is more resistant to infection and can also enable the recipient to lead life without the need for blood thinning medication. This makes human heart valves much safer for women of childbearing age and allows children to lead normal active lives.

How long can tissue be stored before use?
Heart tissue, bone and skin tissue can be safely stored for up to five years. Eye tissue is usually transplanted within one month of donation.
The gift of tissue donation

Dane is our fourth child and a surprise baby! He was born with an infection that attacks the inside lining of the heart called bacterial endocarditis. It’s a very rare illness in new born babes and usually is fatal. We spent five weeks in hospital watching him fight this horrible sickness. There were lots of complications and from day one we were told that Dane was most likely going to die from this condition.

The infection had destroyed Dane’s aortic valve and eaten a hole from the left ventricle to the right atrium of his heart. Dane was dying and needed urgent open heart surgery to replace his valve and repair the hole. When Dane went into surgery he was given a ten per cent chance of surviving.

Six hours later he was the recipient of a donated aortic valve and the hole had been repaired using donated heart tissue. He was pink and warm; it was like he was born all over again. Dane’s recovery has been described as a miracle but the miracle wouldn’t have happened without the donated valve and tissue, regardless of how hard Dane had fought.

There are simply no words in the dictionary that are strong enough to describe the gratitude that I have for our donor and their family. ‘Thank you’ simply doesn’t seem enough!

Eye Banks are the organisations responsible for facilitating and coordinating eye donation, and the provision of safe, quality corneal and other eye tissue for transplantation.

Tissue Banks provide surgeons with safe and effective tissue grafts for transplantation in many areas of orthopaedic, cardiothoracic, reconstructive surgery and burn care.

For contact details: donatelife.gov.au/eye-and-tissue-banks

DISCOVER the facts about organ and tissue donation

DECIDE and register your decision on the Australian Organ Donor Register

DISCUSS your decision with the people close to you.