Fact sheet

Organ and Tissue Donation and Transplantation

What is organ and tissue donation?

Organ and tissue donation is a life-saving and life-transforming medical process where organs and/or tissues are removed from a donor and transplanted into someone (recipient) who is very ill or dying from organ failure. Tissue donation also provides the opportunity to improve the quality of life for an individual.

Why do people need transplants?

People requiring organ transplants are usually very ill or dying because their own organ is failing. They range from young babies and children through to older people. Some need transplants because they are born with a physical problem or a disease that causes organ failure. Others may have contracted a disease or acquired an injury. Organ transplants can save lives.

People needing tissue transplants can also be of any age. In some cases, tissues can save lives. More often, they greatly improve the recipients’ lives.

Not everyone with organ or tissue failure can have a transplant - people must undergo a range of tests and only those who fit the appropriate criteria and will benefit are placed on the waiting list.

Which organs and tissues can be donated?

Organs that can be transplanted in Australia are:
- kidney
- heart
- lungs
- liver
- pancreas
- intestines

Sometimes people need more than one organ transplant, e.g. a pancreas and a kidney.

Tissues that can be transplanted in Australia are:
- parts of the eye (sclera and cornea)
- bone
- heart valves
- skin
- tendons
- ligaments
Why is organ and tissue donation important?
One donor can save the lives of up to ten people and significantly improve the lives of dozens more. There are currently about 1,500 Australians waiting for a life-saving organ transplant.

The average waiting time ranges from one year for a liver transplant to over three years for a kidney transplant. Australia's organ transplant success rate is among the best in the world. In 2016, 503 generous Australians donated their organs after their death, and gave 1447 individuals a second chance at life.

Who can donate organs and tissues?
Only a few medical conditions prevent organ donation, and each case is assessed individually at the time. Even elderly people and those with chronic health conditions can be donors. People can either become donors when they die (deceased donor), or they can donate a kidney or part of their liver while they are still alive (live donor).

How do I become a donor?
There are two steps to becoming an organ or tissue donor after death:

1. Register on the Australian Organ Donor Register through Medicare. Even if you have ticked ‘yes’ to organ donation on your driver’s licence, make sure you are on the Register.
2. Discuss your decision with your family.

Even if a deceased person had registered their wish on the Australian Organ Donor Register, the senior available next of kin’s consent will always be requested. For this reason, it is important to discuss your decision with your family.

Children under 16 years cannot be registered on the Australian Organ Donor Register. They can be registered as an ‘intent’ until they are 18 years old, though legal consent is sought from their parents or legal guardians when they are under 18. If you are under 18, or have children, discuss donation so your family is prepared if they need to make a decision.

What is the Australian Organ Donor Register?
The Australian Organ Donor Register is the official national register for organ and tissue donation. The Register is managed by Medicare Australia, and keeps a record of a person's wish to be a donor, and of the organs and tissues they agree to donate.

Only authorised medical/healthcare personnel involved in organ and tissue donation have access to the Australian Organ Donor Register, so your privacy is secure.


How does the organ and tissue donation process work?
When someone dies in a situation where they can be an organ or tissue donor, the hospital medical team make a number of assessments and follow a series of steps:

1. The possibility of donation is raised with the family
2. The Australian Organ Donor Register is checked
3. The family is given time to make a decision
4. If they agree to donation a Donation Specialist Coordinator will facilitate the process
5. The organs and/or tissues are donated

When can tissue donation occur?
Tissue donation can occur in a wide range of conditions and death does not have to take place in a hospital. Tissue can be donated up to 24 hours after death. Almost anyone can donate tissue regardless of age and cause of death.
**When can deceased organ donation occur?**

Organ donation requires special conditions and is possible in less than 1% of all hospital deaths. People are around 10 times more likely to need an organ transplant than to become an actual organ donor. The most common type of deceased organ donation is 'donation after brain death'.

Brain death occurs when the brain swells causing a loss of blood flow and oxygen to the brain, and the brain stem stops working. Brain death is death. Swelling of the brain is caused by severe brain injury. Before and after brain death a machine known as a ventilator pushes air into the lungs, which oxygenates the blood as part of circulation. At the point of brain death the ventilator continues this supply of oxygen to ensure the organs remain suitable for transplantation.

A series of special tests is done to confirm that the brain is no longer working and the person has died. Two doctors, who are not involved in transplantation, complete these tests separately to confirm brain death. Brain death can only be diagnosed in a hospital. Brain death is different to a coma. A person in a coma is unconscious but their brain is working and they may recover. People cannot ever recover from brain death.

**Allocation of organs and tissues**

**Can I choose who will get my organs or tissues?**

People who donate their organs or tissues after death cannot choose the transplant recipient. Laws protect the confidentiality of the deceased donor, the donor family and the transplant recipient. It is possible for donor families and transplant recipients to write to each other anonymously if they wish and this can be organised through their state DonateLife team.

It is also possible to donate an organ while alive, although in Australia this is restricted to kidney and liver donation. Living donors must be over the age of 18 years. They can be genetically related, such as brothers, sisters and parents or emotionally-related, including husbands, wives, in-law relatives or close friends.

Non-directed, living donation is another form of living donation. Someone donates a kidney and allows it to be given to the most suitable recipient on the transplant waiting list. Contact the Kidney Transplant Coordinator in your closest transplant hospital for more information.

**How long has Australia been doing organ and tissue transplantation?**

More than 30,000 people have received transplants in Australia since the first successful kidney transplant was performed in 1965.

90%

Australia currently has one of the highest success rates for organ transplantation in the world, with survival rates exceeding 90% in the first year.

Another form of living donation is referred to as a ‘paired exchange’. This is when there are two potential kidney donor/recipient pairs whose blood types are incompatible (not a match). The two recipients trade donors so that each recipient can receive a kidney with a compatible blood type. People willing to join the Australian Paired Kidney Exchange program (AKX) should discuss this with their kidney specialist.

**Who decides who will receive a donated organ or tissue?**

Australia has strict ethical guidelines for allocation of organs. Allocation depends on a process that includes urgency and organ match. Other considerations include the length of time on the official transplant waiting list. There are national guidelines for deciding who will receive a donated organ or tissue in Australia. These guidelines are available on the Transplantation Society of Australia and New Zealand web site www.tsanz.com.au/organallocationprotocols.
Support for Living Organ Donors Program

If living donor surgery goes ahead, an employed donor will require a significant amount of time off work to recover. Depending on the donor’s leave arrangements, some donors may be required to take this period as leave without pay, or may exhaust their paid leave entitlements. This can lead to financial stress and donors may feel pressured to return to work before they have completely recovered.

**The Support for Living Organ Donors Program** provides support for donors by replenishing leave for up to nine weeks of leave (based on a 38 hour week), at an amount up to the National Minimum Wage. As of 1 July 2017, reimbursement for out-of-pocket expenses (even for donors who are not employed) is also included in the Program. This program ensures that the costs are not a barrier for people deciding to become a living organ donor.


Common questions about organ and tissue donation

**If I register as a deceased donor, will my body be used for research?**

Organ and tissue donation is completely separate from donating your body for research. Your decision to be an organ or tissue donor does not permit the removal of organs or tissues for any other reasons. Donation for medical research requires separate consent and is usually arranged by contacting the Anatomy Department of your local University Medical School.

**Will a donor delay my funeral arrangements?**

Being an organ or tissue donor does not delay funeral arrangements or prevent an open-casket funeral.

**Will my religion support organ and tissue donation?**

The majority of religions support or are not against organ and tissue donation and believe it is an act of charity to save or improve lives. Many religions leave it to the individual to make a choice. If you are unsure of your religion’s position on donation, it is best to discuss it with your spiritual adviser.

**Will my body be disfigured if I become a deceased donor?**

Removal of organs and tissues after death is no different from any other operation and is performed by highly skilled surgeons. The donor’s body is treated with respect and dignity at all times. The donation of organs and tissues does not alter the physical shape and appearance of the person. After the operation, the donor’s family are able to view their relative again if they wish.

**Are there any costs involved in being a deceased donor?**

The family does not pay for any organ donation or transplantation procedures that occur after brain death. This is the same for public and private hospitals.

**Can people buy a donor organ in Australia?**

Trade in human organs and tissue is illegal in Australia. Anyone involved would face criminal charges.
Who should I contact for more information?

If you would like more information about the Australian Organ Donor Register contact Medicare free call: 1800 777 203.

Further information about organ and tissue donation and transplantation, including resources fact sheets, and donor and recipient stories are all available at the DonateLife website www.donatelife.gov.au.

What does that word mean?

**Compatible** - When a donor’s blood type is a good match to the recipient’s blood type.

**Incompatible** - When a donor’s blood type is not a good match to the recipient’s blood type.

**Oxygenates** - When oxygen is provided to the blood for circulation.

**Transplant** - A medical operation in which an organ or tissue is removed from the body of one person (the donor) and put into the body of another person who is very ill (the recipient). Organs that are suitable for donation include kidneys, heart, lungs, liver, intestines and pancreas. Tissues that are suitable for donation include heart valves and tissues, bone and tendons, skin and eye tissues.

**Unconscious** - When a person is unable to respond and unaware of their surroundings.

**Ventilator** - A machine used to move air in out of a person’s lungs to help the patients breathe.

**Confidentiality** - When someone’s personal information is kept private.

For more information about kidney or urinary health, please contact our free call Kidney Health Information Service (KHIS) on 1800 454 363.

Or visit our website kidney.org.au to access free health literature.

This is intended as a general introduction to this topic and is not meant to substitute for your doctor's or Health Professional’s advice. All care is taken to ensure that the information is relevant to the reader and applicable to each state in Australia. It should be noted that Kidney Health Australia recognises that each person’s experience is individual and that variations do occur in treatment and management due to personal circumstances, the health professional and the state one lives in. Should you require further information always consult your doctor or health professional.

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