In 2017

1,675 510 273

lives transformed by deceased organ donors and living organ donors

The number of organ transplant recipients under Australia's program to increase organ and tissue donation for transplantation surpassed 10,000 in 2017.

Thanks to the generosity of donors and their families, donation and transplantation outcomes have increased substantially since 2009.

Since the program started 3,464 deceased organ donors and their families have benefited 10,096 transplant recipients.

Over this time, the number of deceased organ donors has more than doubled with 510 donors in 2017 compared with 247 in 2009. The number of organ transplant recipients has increased by 75% with 1,402 Australians receiving a life-saving transplant from a deceased donor in 2017 compared with 799 in 2009.
Deceased organ donation and transplantation

While there was only a slight increase in the number of deceased donors in 2017 (510) compared with 2016 (503), the outcome was the highest achieved by Australia.

In Australia organ donation does not proceed unless there is a suitable recipient for transplantation.

In 2017 there was a decrease in the number of transplant recipients, 1,402 compared to 1,447 in 2016.

Donation is an infrequent event. Less than 2% of people in Australia who die in hospital can become an organ donor as particular circumstances must prevail in order for a patient to be medically suitable for organ donation.

By way of example, in 2017, of the estimated 76,817 deaths that occurred in hospitals, approximately 1,192 potential donors were identified. Requests to families for donation were made in 1,093 cases, with 642 families consenting to donation. Of those, in 132 cases donation did not proceed for a variety of medical reasons.

The resulting 510 deceased organ donors saved and transformed the lives of 1,402 organ transplant recipients and their families.

Source:
1 Estimated Resident Population 30 June 2017, ABS 3101.0 Australian Demographic Statistics, (released 14 December 2017)
2 ABS 3302.0 Deaths, Australia, 2016 (released 27 September 2017)
3 AIHW Australian Hospital Statistics 2015–16 (released 17 May 2017)
4 Estimated using DonateLife Audit Data (February 2018)
5 Deceased Organ Donation in Australia, ANZOD, January 2018.
Deceased organ donation and transplantation rates

The donors per million population rate (dpmp) for 2017 was 20.7 dpmp, largely unchanged from 20.8 dpmp in 2016 after adjustment for population growth.

The transplant recipients per million population rate (trpmp) was 57.0, lower than the 2016 outcome (60.0 trpmp).

Further growth in the transplantation rate will require ongoing collaboration with states and territories and professional associations to ensure that all potential donation opportunities are realised and more Australians have access to transplantation.

Deceased organ donors by donation pathway

There are two pathways to deceased donation: Donation after Brain Death (DBD) and Donation after Circulatory Death (DCD).

In 2017, 359 deceased donors (70%) were from the DBD pathway, with 151 (30%) from the DCD pathway.

DonateLife Network staff are embedded in 88 hospitals to ensure that all potential opportunities for donation are identified.
Tasmania was the national leader in donation outcomes, achieving a rate of 36.5 dpmp. Victoria also achieved high outcomes with 23.4 dpmp.

The relatively small populations of the Northern Territory, the Australian Capital Territory and Tasmania can result in significant fluctuations in outcomes and donation rates from year to year.
Deceased organ transplantation

It is possible for a single donor to save and improve the lives of many Australians through organ donation. In 2017 there were 1,469 organ transplant procedures. Kidneys are the predominant organ donated and transplanted.

Living organ donation and transplantation

There were 273 living donors in 2017 comprising 271 living kidney and two living liver donors. This is a slight increase from the total of 268 living donors in 2016 and a decrease of 9% from 2010 (300).

The total living kidney donors in 2017 included 48 through the Australian Paired Kidney Exchange (AKX) program, the highest annual outcome since the program began in 2010.

The AKX program increases live donor kidney transplants by identifying matches for patients who are eligible for a kidney transplant and have a living donor who is willing to donate but is not a suitable match.

The AKX program has resulted in 246 successful live kidney transplants since its establishment in 2010.
Consent rates

National consent rate 2017

Increasing the national consent rate is critical to increasing the donation rate.

Australia needs a consent rate of 70% to be in the top ten donation countries in the world.

State and territory consent rates 2017

Demographics and case mix may impact state and territory consent rates.

Registration and family knowledge of donation decision makes a difference

In Australia, families of potential deceased donors are always asked to confirm their loved one’s donation decision. When the potential donor is registered, this is upheld by the family with nine out of ten families agreeing to donation proceeding. Where the family has prior knowledge of a patient’s wishes relating to donation, consent occurs in seven out of ten cases. When the family is unaware of their loved one’s donation decision, consent occurs in four out of ten cases.

In 2017 a streamlined online registration form was launched to enable people to join the Australian Organ Donor Register (AODR). Increasing the number of Australians registered on the AODR will support families in making donation decisions.

State and territory registration rates 2017

Adult Australians (16 years and over) can record their donation decision on the Australian Organ Donor Register.
Involvement of trained donation specialists makes a difference

Consideration of organ and tissue donation comes at an intensely emotional time for families and can be challenging for all involved. Specific knowledge is required to support families and their decision-making at this time, and it is critical that information is provided in a clear and sensitive manner that is appropriate to the needs of individuals. Supporting families during their time of loss and grief is an important part of the provision of care.

In Australia, families consent to donation in seven out of ten cases when they are supported by a trained donation specialist. Families consent to donation in four out of ten cases when there is no trained donation specialist involved.

Specialist communication training is provided to health professionals and donation specialists so that they can support families to make an informed donation decision that is right for them and their family.

The training program continues to build the capacity and expertise in our health system to deliver optimal care and support to all donor families.

Family donation conversations
Each year the lives of thousands of Australians are transformed through the transplantation of donated eye and tissue. Many more people can become eye and tissue donors as donation can occur up to 24 hours after death.

In 2017, over 9,600 Australians benefited from eye and tissue donation. Of the 510 deceased organ donors, 309 also donated eye and/or tissue. In addition there were 4,248 living tissue donations predominantly from patients undergoing joint replacement surgery.

Deceased organ and tissue donors 2017

In 2017 more than half of deceased organ donors were also eye and/or tissue donors.

Eye donors and tissue donors by jurisdiction 2017

[Diagram showing the distribution of eye and tissue donations by jurisdiction.]
Eye donation and transplantation

Eye donors 2009, 2016 and 2017

In 2017 there was a record 1,369 eye donors. This represents a 7% increase in the number of eye donors compared with 2016 (1,281) and a 48% increase since 2009 (922).

Eye donation rates continued to meet demand in 2017.

<table>
<thead>
<tr>
<th>Year</th>
<th>Eye Donors</th>
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<tbody>
<tr>
<td>2017</td>
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<tr>
<td>2016</td>
<td>1,281</td>
</tr>
<tr>
<td>2009</td>
<td>922</td>
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Corneal transplants 2012, 2016 and 2017

There was also a record number of corneal transplants in 2017 (2,175) with a 4% increase compared with 2016 (2,085) and a 12% increase over 2012 (1,942).

Since 2012, over 12,000 Australians have received a corneal transplant.

<table>
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<tr>
<th>Year</th>
<th>Corneal Transplants</th>
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<tr>
<td>2017</td>
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<td>2012</td>
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</tbody>
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Tissue donation and transplantation

The 2017 outcome of 4,521 tissue donors comprised 92% living tissue donors and 8% deceased tissue donors.

Living tissue donations 2013, 2016 and 2017

There were 4,248 living tissue donations in 2017 predominantly from patients undergoing joint replacement surgery. This represents a 10% increase over 2016 (3,867) and 12% increase since 2013.

<table>
<thead>
<tr>
<th>Year</th>
<th>Living Tissue Donations</th>
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<tr>
<td>2017</td>
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<td>2013</td>
<td>3,805</td>
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Deceased tissue donation 2012, 2016 and 2017

The 364 deceased tissue donors in 2017 resulted in 547 tissue donations. This represents a 16% decrease in the number of tissue donations compared with 2016 (650) and a 67% increase over 2012 (327).

There were 227 musculoskeletal, 163 cardiovascular, 148 skin and 9 pancreas islets tissue donations.

Notified tissue transplant recipients 2013, 2016 and 2017

In 2017 there were 7,470 notified tissue transplant recipients (excluding recipients of pancreas islets), largely unchanged from 2016 (7,468) and a 102% increase since 2013 (3,691). These included 7,161 recipients of musculoskeletal tissue, 231 recipients of cardiovascular tissue and 78 recipients of skin tissue.
We thank and acknowledge those Australians who became organ and/or tissue donors during 2017, along with their families who agreed to donation. We also acknowledge the clinicians dedicated to consideration of donation as a routine part of end-of-life care. Without this collective commitment to donation, transplantation and its life-changing benefits would not be possible.