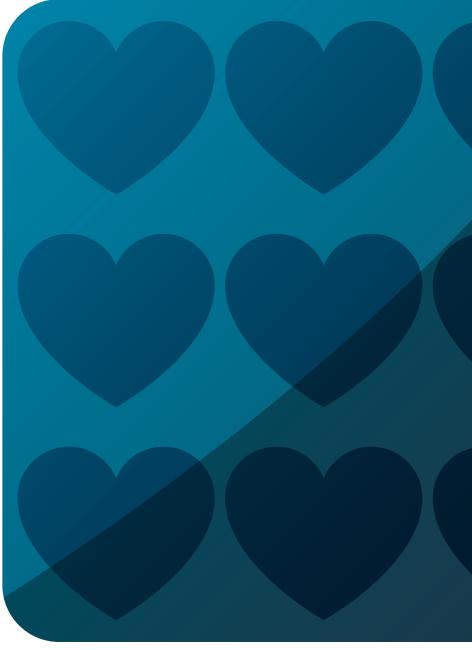




# Australian Donation and Transplantation Activity Report 2024





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# Acknowledgement of Country

The Organ and Tissue Authority acknowledges Traditional Owners of Country throughout Australia and recognises the continuing connection to the land, waters and communities. We pay our respects to Aboriginal and Torres Strait Islander cultures, and to their Elders past and present.



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### We thank all the generous donors, and their families, who have transformed the lives of people needing a transplant through organ and tissue donation.

We also acknowledge the dedication and commitment of DonateLife donation specialist staff, intensive care units and transplant teams. Transplantation is only possible through the donation of organs and tissues, and its life-changing benefits would not be possible without this shared commitment.

# Introduction

# The national program

- For someone who is seriously ill, an organ or tissue transplant can mean the difference between life and death, being healthy or sick, seeing or being blind, or being active or never walking again.
- Transplantation enables people to resume an active role in their family, workplace and community.
- One organ donor can save the lives of up to 7 people and help many more through eye and tissue donation.

#### 2024

~1,800

people on the waitlist for an organ transplant in Australia

~14,000

additional people on dialysis, many of whom could benefit from a kidney transplant

#### Since the national program began in 2009

© 6

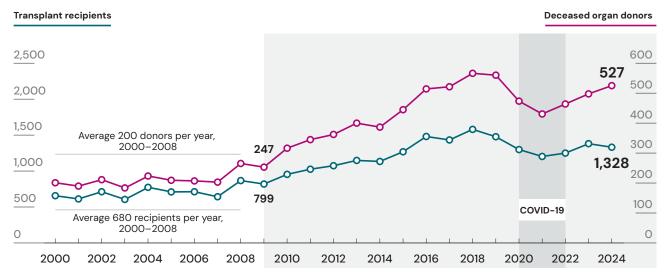
6,944

deceased organ donors



organ transplant recipients

Figure 1: Deceased organ donation and transplant recipients 2000-2024



Note: The DonateLife program commenced in 2009.

- The first decade (2009–2019) of the DonateLife national program saw a 122% increase in deceased donation, resulting in an 81% increase in people receiving an organ transplant.
- Over 2 years (2020 and 2021), there was a 23% reduction in deceased donation activity due to the impacts of COVID-19 (from 2019).
- Since 2021, there has been continued recovery of organ donation rates. With the 25% increase in deceased donation from 2021, donation is only 4% down from pre-COVID-19 rates in 2019.

### Chief Executive Officer's year in review

The 2024 Australian Donation and Transplantation Activity Report provides Australia's annual data on organ, eye and tissue donation and transplantation – both deceased and living – highlighting comparison and trend data from previous years including consent and registration rates.



In 2024 we continued to move towards pre-COVID-19 levels of activity, with a 3% increase in the number of people who became organ donors compared with 2023. Thanks to 527 deceased organ donors and

their families, and 253 living donors, there were 1,581 Australians who received a life-changing organ transplant last year.

Additionally, there was a 3% increase in tissue donors compared with 2023. The lives of 8,192 people were enhanced when they received tissue from both living and deceased donors. There were 2,630 people who had their sight restored through a corneal transplant in 2024, a 6% increase compared with 2023.

I extend my heartfelt gratitude to all donors, and their families, who said yes to donation and gave others a second chance at life.

Despite organ donation rates increasing since the onset of COVID-19 in 2020, Australia's consent rate remains low. In 2024, 53% of families said yes to organ donation in the hospital, a drop from 55% in 2023, and well below the pre-pandemic consent rate of 60%.

Our national program in hospitals saw the highest number of potential donors in 2024. Only 2% of people die in hospital in a way that organ donation can be considered, so increasing the consent rate within this small group of potential donors – around 1,600 in 2024 – is critical for future growth in donation and transplantation.

We know 4 in 5 Australians say they support donation, but only 36% of the population aged over 16 are registered. Registering as a donor and talking to your family about donation has a direct impact on the consent rate. Around 8 in 10 families agree to donation when their family member is registered. This drops to 4 in 10 families when they don't know if their family member wanted to be a donor.

For around 1,800 people on the organ transplant waitlist, and an additional 14,000 people on dialysis, receiving a transplant can be a matter of life or death. Additionally, with the growing prevalence of kidney disease in our community, we need to increase consent to further increase organ donation and transplantation rates.

The OTA Strategy 2022–27 sets the right foundation to increase the consent rate, focused on building support in the community and optimising opportunities for donation in the hospital. While Australia's organ and tissue donation activity has increased, our consent rate of 53% remains a challenge. A return to our pre-COVID-19 consent rate of 60% would have seen an extra 175 life-saving organ transplants in 2024.

The National Strategy for Donation, Retrieval and Transplantation was released in November 2024. It builds on key successes of the DonateLife program and outlines a roadmap for Australia to be a world-leader in organ donation, retrieval and transplantation.

Increasing donation and transplantation in Australia remains our key focus. To achieve this, we need the continued commitment and dedication of all involved, including governments, hospitals, the donation and transplantation sector and the public. Together, we can make a significant difference in saving and improving the lives of more Australians.

**Lucinda Barry AM**Chief Executive Officer

25 February 2025

# 2024 data at a glance

Category	Key metric	Difference to 2023
Deceased organ donation and transplantation	<b>527</b> deceased organ donors	+3%
(0)	1,328 organ transplant recipients	-5%
	53% families agreed to donation	-2%
	7.8 million eligible Australians are registered to be a donor	+2%
Living organ donation and transplantation	253 living kidney donors	0%
	66 donors through the ANZKX¹ program	+20%
Eye and tissue donation and transplantation	1,694 deceased eye donors	+10%
	311 deceased tissue donors	-5%
	2,630 corneal transplant recipients	+6%

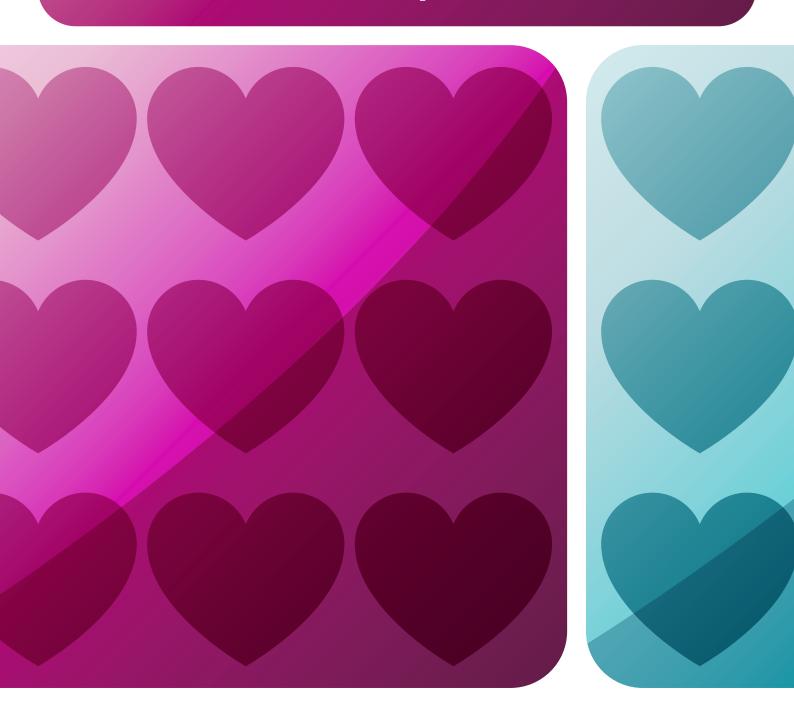
<sup>1</sup> Australian and New Zealand Paired Kidney Exchange (ANZKX) program.

#### State and territory overview

Location	Deceased organ donors	Transplant recipients <sup>1</sup>	Consent rate	New registrations <sup>2</sup>
Australian Capital Territory	13	42	45%	3,549
New South Wales	136	351	50%	42,040
Northern Territory	5	18	33%	993
Queensland	96	273	54%	37,336
South Australia	44	103	55%	36,196
Tasmania	25	68	72%	3,604
Victoria Victoria	162	358	53%	36,651
Western Australia	46	115	51%	14,045
National	527	1,328	53%	174,414

<sup>1</sup> Number of recipients from deceased donors in the relevant state or territory.

 $<sup>2\,\,</sup>$  New registrations on the Australian Organ Donor Register (AODR).



# Deceased organ donation and transplantation

2024	2023	Difference
<b>527</b> deceased organ donors	<b>513</b>	+3%
1,328 organ transplant recipients	<b>1,394</b>	-5%

#### National program 2009-2024



19,469 organ transplant recipients

 In 2024, there was a 3% increase in the number of deceased organ donors compared with 2023, although overall there were fewer organs suitable for transplantation. This resulted in a 5% decrease in the number of transplant recipients compared with 2023.

#### Deceased organ donation and transplant recipients

- In 2024, a total of 527 deceased organ donors saved or transformed the lives of 1,328 people who received an organ transplant.
- There was a 3% increase in deceased organ donors in 2024 compared with 2023. This is the highest number of organ donors since the onset of COVID-19 in 2020.
- The number of people who received a transplant decreased, with 1,328 transplant recipients in 2024, 5% fewer than in 2023.
- Fewer organs from deceased donors were suitable for transplantation compared with 2023. Factors that contribute to this include donor age and the donation pathway, both of which can influence the number of organs suitable for transplantation.

Figure 2: Deceased organ donors 2020–2024

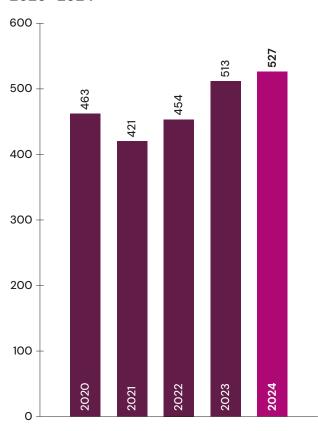
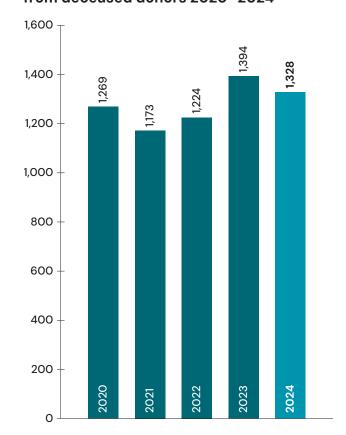


Figure 3: Transplant recipients from deceased donors 2020–2024



#### Notes

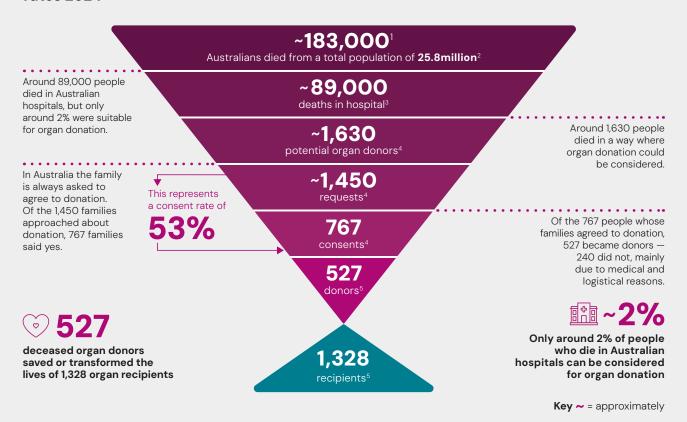
- The number of transplant recipients from deceased donors in Australia includes a small number of recipients from New Zealand who were in urgent need of a life-saving transplant.
- COVID-19 impacted donation and transplantation rates in Australia from 2020–2022. Since 2022, there has been continued recovery
  in the sector.

#### Organ donation in Australia

- Very few people can be an organ donor. Only around 2% of people who die in Australian hospitals meet the criteria required to be an organ donor.
- A person must die in a hospital under specific circumstances, in an ICU or ED, as organs need to be functioning well to be considered for transplantation.
- In 2024, around 1,630 people (of the 89,000 people who died in Australian hospitals) died in a way where organ donation could be considered.
- In Australia, the family is always asked to agree to donation. 1,450 families were asked about donation in the hospital.

- Of these, 767 families said yes to donation representing a national consent rate of 53% – with 527 people becoming organ donors.
- With only a small number of potential donors, increasing consent is critical to increasing our donation rate.
- There are around 1,800 Australians on the waitlist for a transplant and an additional 14,000 people on dialysis – many of whom could benefit from a kidney transplant.

Figure 4: Australia's potential deceased organ donor population and transplantation rates 2024



#### Sources

- 1 Australian Bureau of Statistics. Causes of death, Australia, 2023 (Released 10/10/2024).
- 2 Australian Bureau of Statistics. National, state and territory population, June 2024 (Released 12/12/2024).
- 3 Australian Institute of Health and Welfare 2022. Admitted patient care 2022-23 (Released 31/05/2024).
- 4 Australian Organ and Tissue Donation and Transplantation Authority DonateLife Audit, January 2025.
- 5 Deceased organ donation in Australia, Australia and New Zealand Organ Donation Registry, December 2024.

#### Organ transplants from deceased donors by organ type

Organ type	2024	2023	Difference
Chilo	812	829	-2%
Liver	287	287	0%
Lung	137	164	-16%
Heart	105	129	-19%
Pancreas	44	46	-4%
Intestine	2	1	100%

- While there was an increase in the number of organ donors in 2024, there was a decrease in transplant activity across almost all organs.
- Factors that contribute to the decrease in transplant activity include donor age and the donation pathway, both of which can influence the organ's suitability for transplantation.
- Kidneys make up more than half of organs transplanted, followed by livers, lungs and hearts.

#### Transplant activity by organ type

- 2024 transplant activity varied across organ types and by state compared with 2023.
- In 2024, transplant activity increased for kidneys and livers in some states.
- Victoria reported 282 kidney transplants from deceased donors, the highest in the state since 2018.
- Heart and lung transplants decreased across all states in 2024.
- Liver transplants increased in both New South Wales and Queensland, with Queensland having the highest number of liver transplants in the state since 2019.

Figure 5: Heart transplants 2020-2024



Figure 6: Lung transplants 2020-2024



Figure 7: Kidney transplants 2020-2024



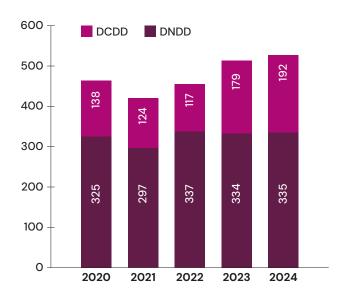
Figure 8: Liver transplants 2020-2024



Figure 9: Pancreas transplants 2020-2024

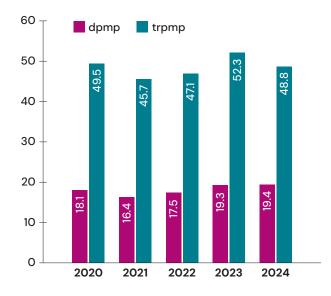


Figure 10: Deceased organ donors by donation pathway 2020–2024



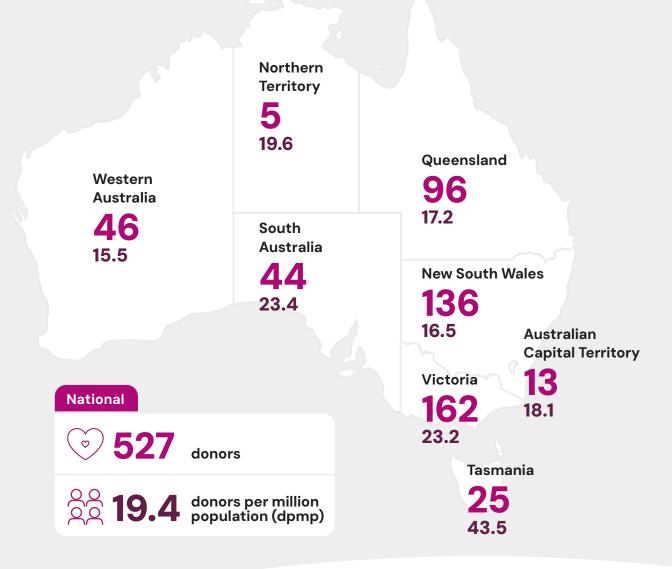
- There are 2 pathways to deceased donation:
  - donation after neurological determination of death (DNDD)
  - donation after circulatory determination of death (DCDD).
- Most donors in Australia are from the DNDD pathway. In 2024, 335 deceased organ donors (64%) came from the DNDD pathway, with 192 (36%) from the DCDD pathway.
- The increase in organ donors in 2024 was primarily due to a higher number of DCDD donors. Typically, DCDD results in a lower number of organs medically suitable for transplantation, compared with DNDD.

Figure 11: Deceased organ donation and transplantation rates 2020-2024



- The national donation target for deceased donation, established in 2009, is 25 donors per million population (dpmp).
- The 527 deceased organ donors in 2024 resulted in a national donation rate of 19.4 dpmp, a slight increase from 2023 (19.3 dpmp).
- In 2024 the transplantation rate was 48.8 transplant recipients per million population (trpmp); a decrease on 2023 (52.3 trpmp).

Figure 12: Deceased organ donors and donation rates by state and territory in 2024

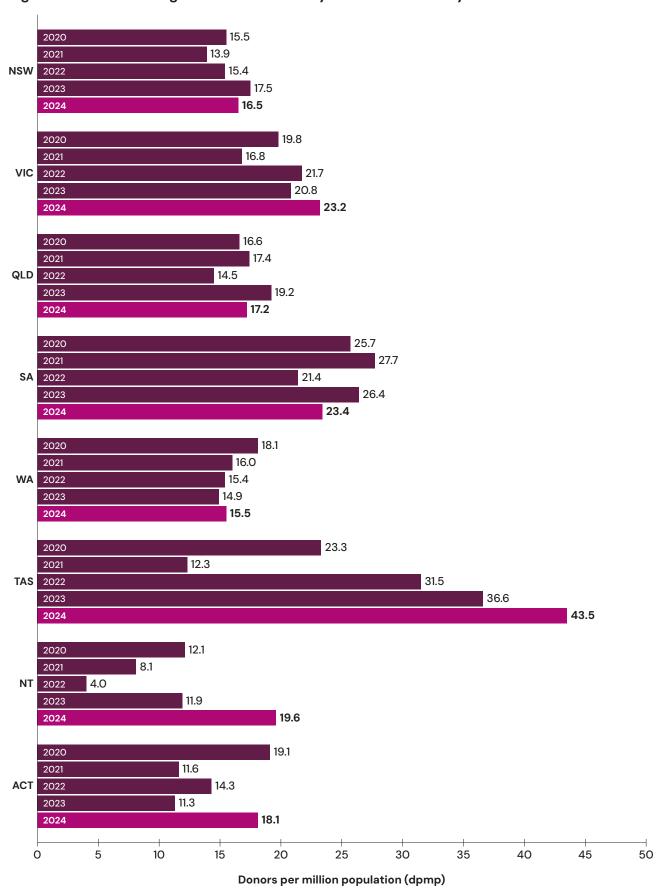


 State and territory rates in 2024 continued to demonstrate variation, with donation rates ranging from 15.5 to 43.5 dpmp.

#### Note

• The relatively small populations of the Australian Capital Territory, the Northern Territory and Tasmania can result in substantial fluctuations in donation rates year-to-year.

Figure 13: Deceased organ donation rates by state and territory 2020-2024



#### **Consent rates**

- In Australia, families of potential donors are always asked to agree to their family member becoming a donor in hospital.
- In 2024, 767 families agreed to donation. This resulted in a national consent rate of 53%, a 2% decrease from 2023 (55%).
- Increasing the number of families who agree and say yes to donation is critical to increasing donation and transplantation rates.
- In 2024, of the 767 people whose families agreed to donation, 527 became donors. 240 did not proceed to donation, mainly due to medical and logistical reasons.

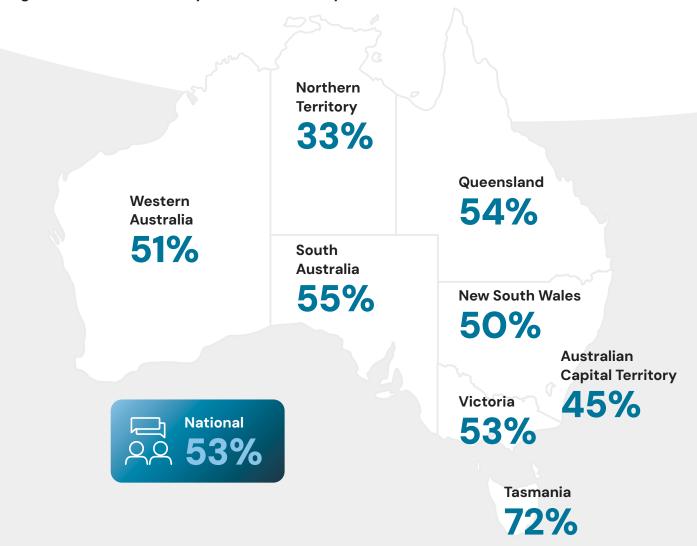
#### **Consent for donation**

767 families agreed to donation

did not proceed to donation

= 527
became donors

Figure 14: Consent rates by state and territory in 2024



#### The impact of DonateLife donation specialist nurses supporting families

Figure 15: The importance of involving a donation specialist nurse in donation discussions with families



families agreed to donation when they were supported by a donation specialist nurse



families agreed to donation when there was no donation specialist nurse involved

Figure 16: Donation specialist nurses involved in family conversations

2024	2023	Difference	
87%	84%	+3%	A donation specialist nurse was involved in 87% of family conversations about donation, compared with 84% in 2023

- There are around 260 DonateLife donation specialist nurses, doctors and support staff who deliver the DonateLife national program across more than 95 hospitals in Australia.
- Donation specialists work with hospital critical care teams to ensure that, when appropriate, the opportunity for organ donation is offered to families.
- Key factors to increasing consent are having donation raised by a donation specialist nurse and providing families with high-quality information and care during the donation process.
- In 2024, 51% of Australian families agreed to donation when they were supported by a donation specialist nurse, compared with only 19% when there was no donation specialist nurse involved.

### The impact of registration on consent rates

- In 2024, 82% of families agreed to donation when their family member was registered to be a donor on the Australian Organ Donor Register (AODR).
- Consent for donation was given in 63% of cases where the family knew if their family member wanted to be a donor.
- Only 38% of families agreed to donation when their family member was not registered, and the family was unaware if they wanted to be a donor.
- While 4 in 5 Australians support organ and tissue donation<sup>1</sup>, only about 1 in 3 (36%) are registered to be a donor on the AODR.

- South Australia has the highest registration rate (74%) of the eligible Australian population (aged 16 or over).
- South Australia is the only state where people can register to be a donor via their drivers licence.
- Consideration of organ and tissue donation comes at an intensely emotional time for families, usually associated with the unexpected death of their family member. When donation is possible, it helps when families know if their family member wanted to be a donor.



8/10 families agreed to donation when their family member was a registered donor



6/10
families agreed to
donation when they knew
if their family member
wanted to be a donor



families agreed to donation when their family member was not registered and the family was not aware

#### **Registration rates**

2024

2023

**Difference** 

174,414

new registrations

**179,813** new registrations

-3%

- In 2024, there were 174,414 new registrations on the AODR, 3% fewer than 2023 (179,813).
- There are close to 7.8 million people registered on the AODR. This is 36% of the eligible Australian population (aged 16 or over).

1 **Source:** Australia Talks Survey, ABC, 2021.

Figure 17: Percentage of population aged 16 and over registered on the AODR in 2024

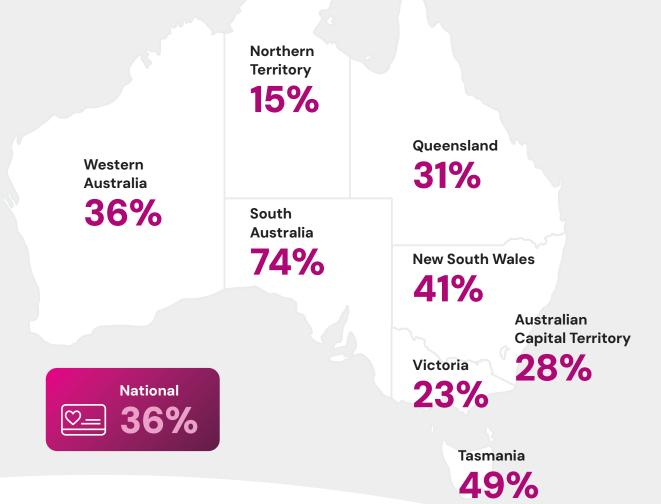


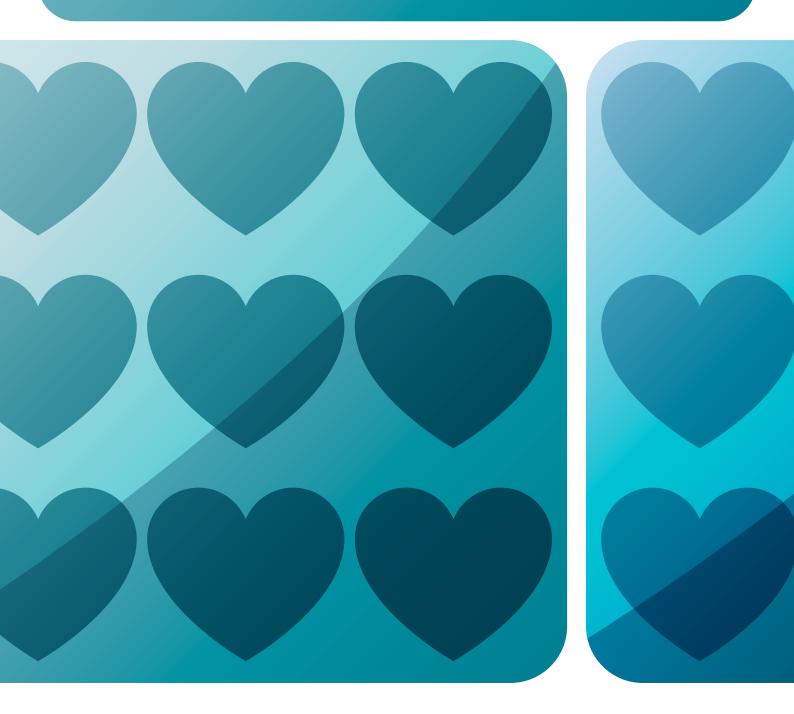
Figure 18: New registrations by state and territory 2020-2024

Year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	TOTAL
2024	42,040	36,651	37,336	36,196	14,045	3,604	993	3,549	174,414
2023	47,132	40,454	35,391	32,399	15,645	3,632	1,205	3,955	179,813
2022	54,769	47,545	44,165	27,435	23,885	4,448	1,634	4,980	208,861
2021	110,331	88,278	73,736	31,244	26,362	7,516	2,616	9,864	349,947
2020	45,683	47,274	39,814	27,857	16,474	3,602	1,352	4,600	186,656

#### Note

- South Australia is the only state with drivers licences as a registration channel.
- In 2021, there was a significant increase in new registrations due to the prevalence of people downloading COVID-19 vaccination certificates through the Medicare app.

# Part 2: Living organ donation and transplantation



# Part 2: Living organ donation and transplantation

### Living kidney donation and transplantation

2024

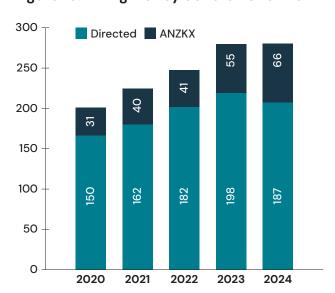
253 living kidney donors 187living kidney donors facilitated by individual

transplant units

66living kidney donors through the ANZKX program

- A living organ donor is someone who donates a kidney, or on rare occasions part of their liver, to another person. Receiving a kidney from a living donor offers an alternative to the national transplant waitlist for a kidney from a deceased donor.
- There were 253 living kidney donors in 2024.
   This result is consistent with 2023.
- Living kidney donation and transplantation is most often from a relative or close friend (directed donation).
- For some patients who require a kidney transplant, and have a living donor who is willing but unable to donate directly because of an incompatible blood or tissue type, donation and transplantation is facilitated through the Australian and New Zealand Paired Kidney Exchange (ANZKX) program.
- The 253 living kidney donors in 2024 included 66 through the ANZKX program in Australia, a 20% increase from 2023 (55) and the highest number of living donor transplants since the commencement of the ANZKX program.
- · There were no living liver donors in 2024.

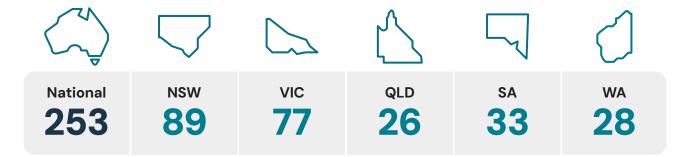
Figure 19: Living kidney donors 2020-2024



**Note:** The above figures reflect the number of donors in Australia facilitated through the ANZKX program.

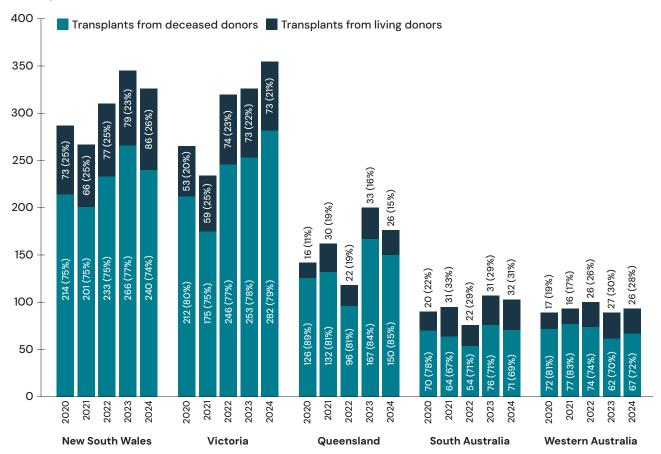
#### Part 2: Living organ donation and transplantation

Figure 20: Living kidney donation by state in 2024



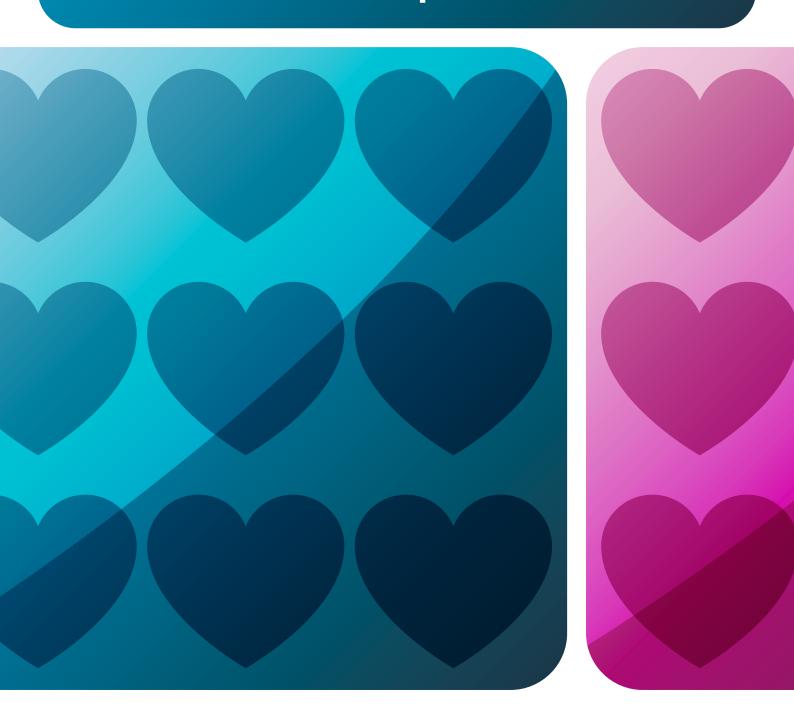
**Note:** As there are no transplant units in the Australian Capital Territory, the Northern Territory or Tasmania, living donations take place in other states.

Figure 21: Kidney transplants from living and deceased donors by state of transplantation 2020–2024



 There continues to be variation across states, with transplants from living donors accounting for 15% to 31% of total kidney transplants.

# Part 3: Eye and tissue donation and transplantation



# Part 3: Eye and tissue donation and transplantation

#### Deceased eye and tissue donors

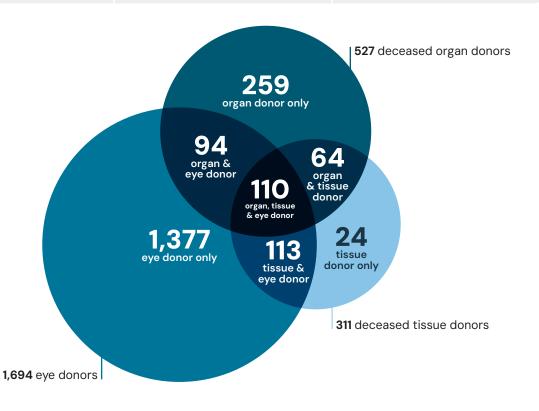
- Each year the lives of thousands of Australians are saved and transformed through the transplantation of donated tissues, including eye tissue.
- The tissues that can be transplanted include heart valves and other heart tissue (cardiovascular tissue), bone, tendons and ligaments (musculoskeletal tissue), skin, pancreas islets and parts of the eye such as the cornea and sclera.
- Unlike organs, many more people can become eye and tissue donors as these can be donated following death outside of hospital and tissue can be stored.
- Tissue banks across Australia collect tissue from deceased and living donors, process and store these tissues and then distribute them to clinicians for transplantation and other surgical uses.
- Eye and tissue donation activity decreased in 2020 due to the impacts of COVID-19, however there has been strong signs of recovery in subsequent years.
- Of the 527 deceased organ donors in 2024, 268 also donated eye and/or other tissue.
- People can donate any combination of organs, eyes and tissue.

Figure 22: Overlap of deceased organ, eye and tissue donors in 2024

1,694 deceased eye donors

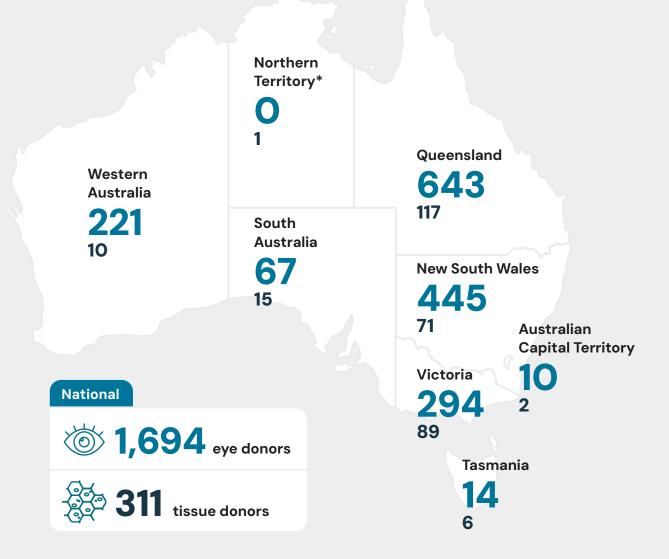
311
deceased tissue donors

527
deceased organ donors



#### Part 3: Eye and tissue donation and transplantation

Figure 23: Deceased eye and tissue donors by state and territory in 2024



**Note:** Eye donation is not undertaken in the Northern Territory.

# Eye donation and transplantation

2024	2023	Difference
1,694 deceased eye donors	1,546	+10%
2,630 corneal transplants	2,486	+6%

- In 2024 there were 1,694 deceased eye donors. This is a 10% increase compared with 2023 (1,546).
- There were 2,630 corneal transplants in 2024, a 6% increase compared with 2023 (2,486).
- Since 2009, more than 33,000 Australians have received a corneal transplant.

Figure 24: Deceased eye donors 2020-2024

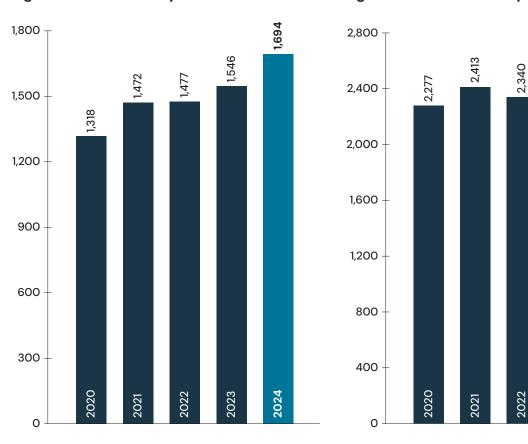


Figure 25: Corneal transplants 2020-2024

2024

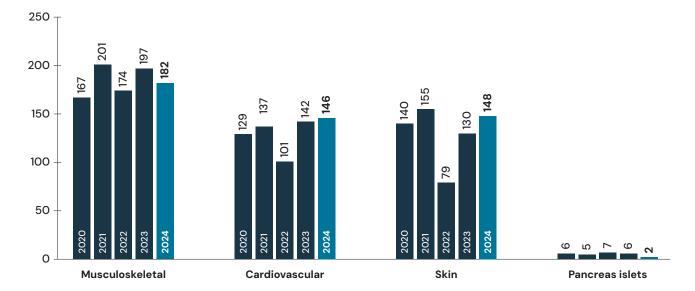
# Tissue donation and transplantation

311
deceased tissue donors
donors

+ 3,081
living tissue donors
= 3,392
tissue donors

- In 2024 there were a total of 3,392 tissue donors, which is a 3% increase compared with 2023 (3,286).
- The number of deceased tissue donors has varied over the past 5 years. There were 311 donors in 2024, 5% lower than 2023 (328).

Figure 26: Deceased tissue donations 2020-2024



 The 311 deceased tissue donors in 2024 resulted in 478 tissue donations (some donated multiple tissues). This represents a similar rate of tissue donation compared with 2023 (475).

2020 2,797 2021 3,056 2022 2,520 3,013 2023 3,133 2024 500 3,500 0 1,000 1,500 2,000 2,500 3,000

Figure 27: Living tissue donations 2020-2024

 The 3,081 living tissue donors in 2024 resulted in 3,133 living tissue donations. This was predominantly from patients undergoing hip joint replacement surgery who donated their femoral head, and also from women post-birth who donated the amnion (part of the placenta). The number of living tissue donations is 4% higher than 2023 (3,013).

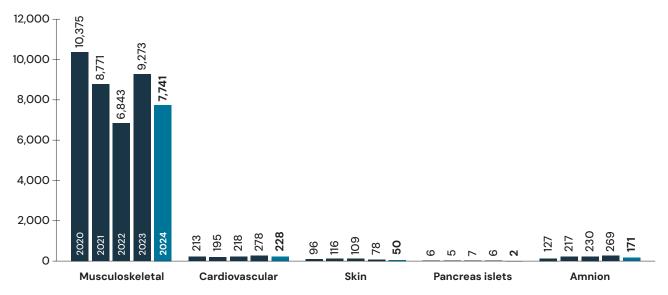


Figure 28: Tissue transplant recipients 2020-2024

Note: Amnion transplants commenced in 2019.

 In 2024 there were 8,192 reported tissue recipients from both living and deceased donors. This is a 17% decrease from 2023 (9,904).

# **Additional information**

# **Acronyms**

ANZKX	Australian and New Zealand Paired Kidney Exchange program
AODR	Australian Organ Donor Register
DNDD	Donation after neurological determination of death
DCDD	Donation after circulatory determination of death
dpmp	Donors per million population
ED	Emergency Department
ICU	Intensive Care Unit
trpmp	Transplant recipients per million population

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Deceased organ donation in Australia, Australia and New Zealand Organ Donation Registry (January 2025).

#### Living kidney donation

Australia and New Zealand Dialysis and Transplant (ANZDATA) Registry (January 2025).

#### **Australian Organ Donor Register**

Services Australia (January 2025).

#### **Consent data**

Australian Organ and Tissue Donation and Transplantation Authority DonateLife Audit (January 2025).

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